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COMMENTS SOUTH PLUM O & M MANUAL

12/04/91

OEPA/DOE-FO

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LETTER

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Southwest District Office

40 South Main Street
Dayton, Ohio 45402-2086
(513) 285-6357
FAX (513) 285-6249

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George V. Voinovich
Governor

December 4, 1991

RE: COMMENTS
SOUTH PLUME O & M MANUAL

Mr. Jack R. Craig
Project Manager
U.S. DOE FEMP
P. O. Box 398705
Cincinnati, Ohio 45239

Dear Mr. Craig:

Listed below are Ohio EPA's comments on the South Plume Groundwater Extraction System Operation and Maintenance Manual. In general, the manual lacks the details necessary to meet the goals of the South Plume Removal Action.

1. Section 3.2 Pumping Test - A step test should be conducted prior to initiating the pump test to determine the appropriate pumping rate. Also, Appendix A should be submitted for review. This document is intended to be a work plan for conducting the pump test and model validation which apparently have not been developed at this time.
2. Section 3.2, p. 3-1: - The single well test should include a monitoring schedule after the pump is turned off to record recovery data. Recovery data may be more useful than pumping data for evaluating aquifer response because effects of the pump and borehole have been removed.
3. Section 3.2, p. 3-2: Collection of water samples for water quality analysis should be limited to the pumping well. Collection from monitor wells, which requires evacuation of borehole water, will interfere with water-level monitoring for the test. Water quality data should be collected as a separate activity after pumping and recovery data observations are completed.
4. Section 4.3 Water Level Measurements - The specifics of the monitoring plan need to be developed and spelled out for groundwater. A draft Figure 4.1 should be prepared and submitted for review. Water level measurements should be collected at a frequency no greater than monthly during the operation of the groundwater extraction system. This is necessary to have an adequate data base for the Evaluation and Response Program (Section 5).
5. Section 4.4. Geochemical Monitoring - VOC's should be analyzed quarterly from the total effluent waste stream along with other parameters required in DOE's NPDES permit.

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6. Section 4.4, p. 4-2 - As stated above, geochemical monitoring should be scheduled to prevent interference with aquifer testing. During testing, samples should be collected from the pumping well(s) only.
7. Section 5.1, p. 5-1: - Certain aspects of the monitoring data should be evaluated immediately to assess potential system problems (see Comment #10) that require rapid response.
8. Section 5.2 System Evaluation - The evaluation of the system's performance should be made on a quarterly basis and not semiannually for subsequent years of operation. This is necessary to ensure the system is meeting the objectives of the removal action throughout different seasons.
9. Section 5 - Monitoring wells around the extraction wells should be analyzed on a regular schedule for the organic and inorganic compounds associated with the Paddys Run Road site.
10. Section 5.3, p. 5-3: - A general timeframe should be added to the System Modification process. A mechanism should be added to at least differentiate system problems (e.g., unacceptable level of VOCs in discharge) from system optimization issues (e.g., pumping cycles). System problems should be addressed on an accelerated basis.

For informational purposes, I have attached the "Table of Contents" from the O and M Manual for the Brandt Pike Site. If you have questions about this or require additional information please contact Rich Bendula at (513) 285-6119.

If you have any questions about these comments please contact me.

Sincerely,



Graham E. Mitchell
Project Manager

GEM/bjb

cc: Rich Bendula, OEPA
Section Manager, DERR, OEPA, CO
Jim Saric, U.S. EPA
Lisa August, Geotrans
Ed Schuessler, PRC
Robert Owen, ODH

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