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**TRANSMITTAL OF MINUTES FROM THE
FEBRUARY 27, 1992 MEETING IN DAYTON, OHIO**

04/29/92

**DOE-1455-92
DOE-FN/EPA
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LETTER**



Department of Energy
Fernald Environmental Management Project
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APR 29 1992

DOE-1455-92

Mr. James A. Saric, Remedial Project Director
U. S. Environmental Protection Agency
Region V - 5HRE-8J
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Graham E. Mitchell, Project Manager
Ohio Environmental Protection Agency
40 South Main Street
Dayton, Ohio 45402-2086

Dear Mr. Saric and Mr. Mitchell:

TRANSMITTAL OF MINUTES FROM THE FEBRUARY 27, 1992 MEETING IN DAYTON, OHIO

Enclosed is a copy of the meeting minutes from the Ohio Environmental Protection Agency (Ohio EPA), United States Environmental Protection Agency (U.S. EPA), the Department of Energy (DOE), and Westinghouse Environmental Management Company of Ohio (WEMCO). The meeting was held in Dayton on February 27, 1992, to resolve issues raised in the Ohio EPA's Notice of Violation dated February 4, 1992.

If there are any questions regarding the meeting summary, please contact Wally Quaider at FTS 774-6160 or (513) 738-6160.

Sincerely,

R. E. Tiller
Manager

FN:Fermaintt

Enclosure: As Stated

bcc w/enc.:

C. J. Fermainntt, DOE-FN
J. R. Craig, DOE-FN
E. P. Skintik, DOE-FN
W. Quaider, DOE-FN

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MINUTES OF MEETING
FEBRUARY 27, 1992
DAYTON, OHIO

Attendees:

Shirley Frush, DOE-HQ
Bill Sidle, DOE-ORO
Carlos Fermaintt, DOE-FN
Ed Skintik, DOE-FN
Wally Quaider, DOE-FN
Jim Saric, USEPA
Rich Bendula, OEPA
Robin Fischer, OEPA
Phil Harris, OEPA
Graham Mitchell, OEPA

Paul Pardi, OEPA
Mike Proffitt, OEPA
Tom Schneider, OEPA
Robert Cohen, GeoTrans
Mark Cherry, WEMCO
Ken Broberg, WEMCO
Dave Brettschneider, WEMCO
Kathleen Nickel, WEMCO
Ellery Savage, WEMCO
Brett Smith, WEMCO

On February 27, 1992, representatives of the Department of Energy (DOE), Westinghouse Environmental Management Company of Ohio (WEMCO), Ohio Environmental Protection Agency (Ohio EPA) and the U.S. Environmental Protection Agency (U.S. EPA) met to resolve the allegations raised in a Notice of Violation (NOV) dated February 4, 1992. The NOV was issued based on the Ohio EPA's review of the 1989 and 1990 RCRA Annual Reports. The Fernald Environmental Management Project (FEMP) presented the following responses to the allegations and sought input from the Ohio EPA:

1. Several comments contained in the February 4, 1992 NOV alleged that due to a lack of site specific hydrogeologic parameters, the rate and extent of contaminant migration could not be properly calculated. The Ohio EPA recommended that the FEMP conducts pump tests and slug tests to identify water bearing units and determine specific aquifer parameters.

FEMP briefly discussed the on-site pump test that was performed in 1962 on the FEMP production wells. This pump test yielded data similar to other tests performed on wells in the vicinity of the FEMP. FEMP also directed the Ohio EPA to the Draft Remedial Investigation (RI) Groundwater Report, which contained slug test data. The report was unavailable at the time the Ohio EPA reviewed the RCRA Annual Reports. FEMP also reported that additional slug tests had been performed since the issuance of the Draft RI Groundwater Report. This information will be supplied to the Ohio EPA. FEMP also informed the Ohio EPA that plans were underway to perform a pump test at the location of the South Plume Recovery System. The test can not be performed, however, until a pipeline that will transport the extracted water to the FEMP's NPDES regulated outfall is completed.

2. The Ohio EPA questioned the technique used by the FEMP to determine the rate of migration because the method did not take into account variability in aquifer properties.

FEMP explained the method used to estimate rate of migration. The method is used to estimate the rate of constituent migration between two monitoring points, in a single flow path, based on the observed rate of water quality degradation in the downgradient well. The rate of water quality degradation is the slope of a best fit line drawn through a plot of observed constituent concentrations versus time. The method assumes that the rate of degradation will remain relatively constant (i.e., the system is in equilibrium). The observed concentration of a constituent of concern in the upgradient well is substituted into the equation of water quality degradation in the downgradient well. The solution of the equation provides an estimate of the time at which the concentration may be expected to reach the downgradient well. The method does take into account aquifer properties in that the estimates are based on field observations. The aquifer properties are inherent in the observation. FEMP does not claim that the method can predict contaminant concentrations over large areas or where no monitoring wells (observation points) exist.

3. The Ohio EPA questioned the FEMP's application of statistics stating that sole reliance on statistics to determine the extent of contamination may result in low levels of constituents being overlooked.

FEMP explained that statistics were not the only tool utilized in the determination of rate and extent of contaminant migration. The statistics are used to define monitoring points that exceed background concentrations of constituents. However, the extent of contamination is illustrated through isoconcentration maps. Contour lines on the maps reflect observed concentrations of constituents at all monitoring wells. The extent of the plume is generally identifiable by the configuration of the contour lines on the maps. FEMP pointed out that the presence and extent of contaminants of concern are determined using both statistics and professional judgement as recommended by the Ohio EPA.

FEMP expressed concern over the Ohio EPA's comment in that the new RCRA Groundwater Monitoring Plan previously discussed with the Ohio EPA and submitted December 20, 1991, does not propose additional determination of the rate and extent of contaminant migration through the RCRA Program. The determination will be accomplished through the FEMP's CERCLA Program. FEMP expressed concern that similar RCRA violations may be issued by Ohio EPA in the future if this information were not presented in the RCRA Annual Reports.

4. The Ohio EPA required that the FEMP identify all waste constituents in Waste Pit 4 and compare this list of constituents to the list of analytes utilized for the assessment monitoring program.

FEMP informed the Ohio EPA that a written response had been prepared, as required. The response included analytical results of samples collected from Pit 4 as part of the Characterization Investigation Study (CIS) conducted in 1987. This data was evaluated while selecting the list of site specific constituents of concern for the assessment program. The site specific list of constituents contains the inorganic

constituents detected in highest concentration during the CIS as well as the mobile organic constituents detected during the CIS. In addition, the groundwater quality has been characterized with respect to Appendix IX parameters and Hazardous Substance List (HSL) parameters. All constituents detected by the HSL and Appendix IX analysis are included in the site specific list.

5. The Ohio EPA commented that the 1989 report stated that selected wells were sampled for selected parameters. Ohio EPA stated that the action was inconsistent with the regulations and that all assessment wells should be sampled for all parameters.

FEMP explained that all assessment wells had been sampled for all parameters specified in the Ground Water Quality Assessment Program Plan (GQAPP). The wording in the annual report was misleading. The phrase "selected wells were sampled for selected parameters" refers to all the RCRA assessment wells, which are a selected subset of all site wells. The "selected parameters" are the site specific parameters specified in the GQAPP.

6. The Ohio EPA commented that upgradient wells 2066 and 3066 yielded "questionable" water quality and may not be suitable for use as upgradient wells.

As required by the February 4, 1992 letter, WEMCO was to evaluate the suitability of the 066 cluster and provide the evaluation to the Ohio EPA. FEMP also pointed out that under the new RCRA GMP, the upgradient to downgradient water quality comparison would be eliminated. Comment from the Ohio EPA and U.S. EPA on the new RCRA GMP would be beneficial in determining the response to concerns regarding the use of wells 2066 and 3066 as upgradient monitoring points.

In conclusion, the Ohio EPA agreed to participate in a series of technical meetings to resolve the issues. It was agreed that the size of the technical meetings should be limited to enhance productivity. It was also agreed that, schedules permitting, the meetings would begin within the two weeks following the February 27, 1992 meeting.

The Ohio EPA requested that the FEMP provide to the Southwest District Office all available pump and slug test data so that the need for additional on-site aquifer testing could be evaluated. Ohio EPA also requested a written evaluation of the adequacy of the 066 well cluster. No response could be given by the Ohio EPA regarding the RCRA GMP or resulting changes in the requirements of the FEMP RCRA Groundwater Monitoring Program. The Ohio EPA had received the document, but had not completed its review.

FEMP contact Mike Proffitt, Ohio EPA, on Friday March 6, 1992, to arrange the first technical meeting. Mr. Proffitt recommended postponing the technical meetings until the Ohio EPA had reviewed the requested data.

cc w/enc.:

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