



Department of Energy

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DEC 15 2000

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0208-01

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF THE INTEGRATED ENVIRONMENTAL MONITORING STATUS REPORT FOR THIRD QUARTER 2000; RESPONSES TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON RESPONSES TO COMMENTS ON THE 1999 INTEGRATED SITE ENVIRONMENTAL REPORT; AND RESPONSES TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE INTEGRATED ENVIRONMENTAL MONITORING STATUS REPORT FOR SECOND QUARTER 2000

This letter transmits the subject documents to the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA). The Quarterly Status Report has been prepared to meet the quarterly reporting obligation defined in the Integrated Environmental Monitoring Plan (IEMP), Revision 1, for the Fernald Environmental Management Project (FEMP). The report will also be posted on the Internet, at www.fernald.gov, under the menu item Cleanup Support and within the project description for Environmental Monitoring. It will be available for viewing by close of business on Monday, December 18, 2000. As agreed to with the U.S. EPA and OEPA, responses to comments on previous IEMP submittals have been addressed through comment response documents, instead of through revision of the reports.

Also included with this transmittal is a CD-ROM containing the data used in the development of the Quarterly Status Report. The following Microsoft Word files are included on the CD-ROM and identify all electronic files associated with each media: GW1200.doc (groundwater and On-Site Disposal Facility information), SW1200.doc (surface water), and

Mr. James A. Saric
Mr. Tom Schneider

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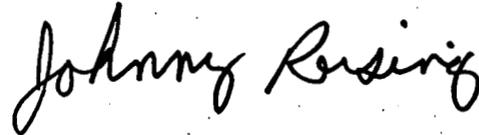
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AIR1200.doc (air and meteorological). In the future, this data disc will no longer be provided since all data that has been included on these discs will be available to the agencies on the IEMP Data Information (i.e., Extranet) Site.

As previously discussed with the U.S. EPA and OEPA and documented in the Draft Final IEMP, Revision 2, this is the final Quarterly Status Report submitted under the existing format. The first quarterly summary will be submitted in April of 2001 as part of the new IEMP reporting format. The Department of Energy (DOE) is committed to working cooperatively with the U.S. EPA and OEPA through several iterations of the new quarterly summaries to achieve a product that satisfies the reporting needs of all parties.

If you have any questions concerning the enclosed documents or the Internet site, please contact Kathleen Nickel at (513) 648-3166.

Sincerely,



Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Nickel

Enclosure

Mr. James A. Saric
Mr. Tom Schneider

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cc w/enclosure:

N. Hallein, EM-31/CLOV (w/CD-ROM)
R. J. Janke, OH/FEMP
G. Jablonowski, USEPA-V, SRF-5J
M. Murphy, USEPA-V, AE-17J
J. Saric, USEPA-V, SRF-5J (w/CD-ROM)
T. Schneider, OEPA-Dayton (three copies of enclosure) (w/CD-ROM)
F. Bell, ATSDR
M. Schupe, HSI GeoTrans (w/CD-ROM)
R. Vandegrift, ODH
F. Hodge, Tetra Tech (w/CD-ROM)
AR Coordinator, Fluor Fernald, Inc./78

cc w/o enclosure:

K. Chaney, EM-31/CLOV
A. Tanner, OH/FEMP
D. Carr, Fluor Fernald, Inc./2
T. Hagen, Fluor Fernald, Inc./65-2
J. Harmon, Fluor Fernald, Inc./90
S. Hinnefeld, Fluor Fernald, Inc./31
M. Jewett, Fluor Fernald, Inc.52-2
U. Kumthekar, Fluor Fernald, Inc./52-2
T. Walsh, Fluor Fernald, Inc./65-2
ECDC, Fluor Fernald, Inc./52-7

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**RESPONSES TO OEPA COMMENTS
ON THE INTEGRATED ENVIRONMENTAL
MONITORING STATUS REPORT FOR
SECOND QUARTER 2000**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO**

DECEMBER 2000

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vessel to fill and overflow, but also filled the Cell 2 LDS manhole to a level high enough so that the leachate backed up into the LDS layer beneath Cell 2. The check valves in Cells 1, 2, and 3 LDS manholes were replaced with more reliable gate valves later in 1999. Also, beginning in May of 1999, the monitoring of the water level in the LDS primary containment vessels of all cells became much more rigorous and quantitative. Data loggers were employed to track the water levels on an hourly basis in conjunction with increasing the frequency of checking the water levels by operators to three times per day.

Since the December 1998/January 1999 back up, the analytical data from the Cell 2 LDS have been suspect because of the known back up and because the Cell 2 data often indicate higher concentrations of contaminants in the Cell 2 LDS than in the Cell 2 leachate collection system (LCS).

Cell 1 LDS Primary Containment Vessel: The leachate back-up into the Cell 1 primary containment vessel occurred in January 2000. Similar to the December 1998/January 1999 Cell 2 back-up, the leachate backed up from the leachate transmission system line through a faulty valve in the Cell 1 LDS manhole. However, the backup was not significant enough to cause an overflow of the Cell 1 LDS primary containment vessel, and no water backed up into the LDS layer beneath Cell 1. The valves in Cells 1, 2, and 3 LDS manholes were replaced with more reliable gate valves later in January/February 2000.

Due to the increased monitoring of the water levels in the primary containment vessel, the January 2000 back up was caught before it overflowed the primary containment vessel. Therefore the cross-contamination was limited to the primary containment vessel of Cell 1. To alleviate cross-contamination concerns regarding future samples, the Cell 1 primary containment vessel was completely drained after the January 25, 2000 pump-out. The February 2000, May 2000, and August 14, 2000 samples from the Cell 1 LDS primary containment vessel all contained uranium at concentrations in the range of those observed prior to the January 2000 back-up indicating cross-contamination from the backup is no longer a concern.

Since the LDS data reported in the IEMP are collected on a quarterly basis and none of the subsequent data appear to have been affected by the January 2000 back up, there is no need to add a footnote to the Cell 1 data table in the IEMP. However, because the December 1998/January 1999 Cell 2 LDS back up still appears to be affecting the Cell 2 LDS data, DOE agrees to add a footnote to the Cell 2 data table.

Action:

As noted in the response, DOE will add a footnote to the Cell 2 data table in future IEMP reports. A footnote will be added as long as the data appear to be affected (i.e., LDS results are greater than LCS results) by the December 1998/January 1999 leachate back-ups into the Cell 2 LDS. The footnote will read: "Cell 2 LDS data from December 1998 to present are suspect due to a December 1998/January 1999 back-up of leachate from the leachate transmission system line into the Cell 2 LDS layer and the resultant residual contamination of the LDS layer from the back-up."

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**RESPONSES TO OEPA COMMENTS ON RESPONSES
TO COMMENTS ON THE 1999 INTEGRATED SITE
ENVIRONMENTAL REPORT**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
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