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**FLUOR**

October 18, 2002

Fernald Environmental Management Project  
Letter No. C:ARWWP:2002-0025

Mr. Thomas A. Winston, District Chief  
Ohio Environmental Protection Agency  
Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402-2911

Dear Mr. Winston:

**NONCOMPLIANCE REPORT – SEPTEMBER 2002 - NPDES PERMIT NUMBER  
11000004\*FD FERNALD ENVIRONMENTAL MANAGEMENT PROJECT (FEMP)**

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Enclosed is the September 2002 Noncompliance Report. If you have any questions,  
please contact Mr. Frank Johnston at (513) 648-5294.

Sincerely,



David J. Brettschneider, Project Manager  
Aquifer Restoration/Wastewater Project

DJB:FLJ  
Enclosure

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File Record Subject NPDES Permit  
Project Number 52700

**NONCOMPLIANCE REPORT  
NPDES PERMIT NO. 11000004\*FD  
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT  
U.S. DEPARTMENT OF ENERGY**

The following table describes the September 2002 noncompliance with the discharge limits specified in the FEMP NPDES Permit.

Date	Location	Parameter	Permit Limit	Actual Measurement
September 27, 2002	11000004001	Total Suspended Solids	473 kg/D	549.7 kg/D
September 27, 2002	11000004002	Total Suspended Solids	50 mg/L	139.6 mg/L

Both incidents are related to the heavy, intense rainfall experienced beginning at 10:00 am on September 26, 2002 and lasting through 11:00 am on September 27, 2002. The FEMP meteorological system measured 5.00 inches of rainfall during this time.

The incident at Location 11000004001 (Parshall Flume) occurred as a direct result of the bypassing of storm water from the Storm Water Retention Basin (SWRB) directly to the Great Miami River (GMR). As allowed by the Operable Unit 5 Record of Decision and implemented by the "Operations and Maintenance Master Plan for the Aquifer Restoration and Wastewater Project", the FEMP initiates a storm water bypass in an attempt to prevent the SWRB from overflowing to Paddys Run. A storm water bypass was initiated at 6:15 am on September 27, 2002 and lasted until 11:59 pm on September 29, 2002. A total of 3,759,000 gallons were bypassed directly to the GMR during this time. (Please note that this amount of storm water bypassed is in addition to the amount of storm water treated. Treatment of storm water at the Advanced Wastewater Treatment Facility Phase 1 and Interim Advanced Wastewater Treatment Facility continue during periods of storm water bypassing.) The resulting concentration for Total Suspended Solids (TSS) on September 27, 2002 was 16.0 mg/L which is below the effluent limit of 20 mg/L. However, because of the large amount of flow measured on September 27 (9.084 MGD) the mass limit for TSS was exceeded. In accordance with the FEMP NPDES Permit, Part II, J., "Other Requirements", storm water bypassing consistent with the "Operations and Maintenance Master Plan for the Aquifer Restoration and Wastewater Project" is considered a satisfactory explanation of a TSS exceedance.

The incident at Location 11000004002 (SWRB Spillway) occurred as a direct result of the aforementioned rainfall event. While a storm water bypass was initiated in an attempt to prevent an overflow of the SWRB, the storm water bypass was not successful in preventing an overflow due to the intensity of the rainfall experienced. In a five-hour period between 2:00 am and 7:00 am on September 27, the FEMP meteorological system recorded 3.53 inches of rainfall. The SWRB began overflowing at approximately 8:00 am on September 27 and lasted until approximately 7:00 pm the same evening. The intensity of the rainfall and corresponding rapid rise in the storm water level within the SWRB did not allow for sufficient time for an adequate settling of solids. While the storm water bypass was unable to prevent an overflow of the SWRB, the bypass did mitigate the amount and duration of the overflow.

The FEMP will continue to manage the operation of the SWRB and associated storm water treatment systems in accordance with existing commitments. No further action is contemplated at this time.