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FLUOR

September 21, 2006

Fernald Closure Project
Letter No. C:CPD:2006-0192

Mr. Johnny W. Reising, Director
U. S. Department of Energy
Ohio Field Office – Fernald Closure Project
175 Tri-County Parkway
Cincinnati, Ohio 45246

Dear Mr. Reising:

CONTRACT DE-AC24-01OH20115, TRANSMITTAL OF STATEMENT OF COMPLETION FOR THE WASTE PITS AREA AND PADDYS RUN NATURAL RESOURCE RESTORATION PROJECT

This letter documents completion of the Waste Pits Area and Paddys Run Restoration Project at the Fernald Closure Project. The project is divided into two areas, the Waste Pits Area project, which encompasses approximately 39 acres in the northwest corner of the Former Production Area and additional acreage along Paddys Run, and the Paddys Run project, which includes work in various sections along Paddys Run from the Waste Pits Area to the Southern Waste Units.

The objectives for the Waste Pits Area project included the establishment of additional wetlands and ponds, expansion of the Paddys Run floodplain and the enhancement of the riparian corridor along Paddys Run. Surrounding areas were to be seeded as prairie, which would be contiguous with the prairies established in the Former Production Area. Restoration work started in spring 2006 and was completed in summer 2006.

The Objectives for the Paddys Run project included the expansion of the floodplain in two areas (one near the Waste Pits and one near the Silos), and the installation of gradient control structures to reduce the rate of down cutting in the streambed. The floodplain expansion and the gradient control structure installation were designed to increase the stream stability and quality. Some sections of Paddys Run were restored earlier. The former Paddys Run streambed within the Oxbow Area was re-connected to the present day channel in 2005. Floodplain expansion also occurred in 2002 as part of the Southern Waste Units restoration effort.

This completion report discusses the activities as described in the Waste Pits Area and Paddys Run Natural Resource Restoration Design Plan. The sequence of restoration activities is as follows:

Spring 2006:
- Initiated Waste Pits Area grading
- Planted trees and shrubs within the expanded Paddys Run riparian corridor adjacent to the Waste Pits Area

Summer 2006:
- Completed the Waste Pits area grading
- Constructed a cross-vane grade control structure in Paddys run west of the Waste Pits
- Expanded the Paddys Run floodplain by removing the berm west of the Waste Pits thereby re-connecting Paddys Run with its former steam channel
- Incorporated soil amendments and seeded the Waste Pits Area
- Planted tree and shrub patches in the Waste Pits Area
- Installed erosion matting and culverts in spillways where necessary
- Constructed two Newbury Riffle grade control structures in Paddys Run at locations down stream of the Waste Pits
- Installed wildlife amenities across the Waste Pits area

Deviations from the original design:
- Enhanced the grading design in order to maximize wetland and floodplain acreage across the Waste Pits area. Enhancements included placing clean ballast and fill in former Pits 5 and 6 in order to make the basins more shallow; creating a shallow marsh east of former pit 1, and lowering the Paddys Run inlet elevation in order to increase the frequency of floods into the Waste Pits expanded floodplain.
- Replaced the designed culvert between Pit 5 and Pit 3 with a coir-mat spillway.
- Revised the Paddys Run grade control design at the downstream location by converting the Oxbow Area access crossing into a Newbury Riffle.
- Revised the Silos Area Newbury Riffle to account for slope protection along the excavated east bank behind the Silos 1 and 2 footprints.
- Conducted slope stabilization and re-seeding at the Oxbow Area contaminated excavation.
- Enhanced the types of wildlife amenities within the Waste Pits Area to include several raptor platforms and bat boxes.

Mortality counts and herbaceous cover estimates for the project areas will be conducted in 2007. Attached please find two annotated aerial photos. The DOE Office of Legacy Management will ensure the necessary maintenance and monitoring in this area following Site Closure.

Any questions on this matter should be directed Jyh-Dong Chiou at (513) 738-2834 or John Homer at (513) 484-2313.

Sincerely,

Cornelius M. Murphy
Closure Project Director

CMM:JDC:LM:ldt
Enclosure

c: With Enclosure
Joe Desormeau, DOE-OH/FCP, MS2
John J. Homer, MS12
Frank Johnston, MS 12
Timothy L. Jones, DOE Contracting Officer, DOE/EMCBC
Lisa McHenry, MS12
Gary Stegner, DOE-OH
Harold Swiger, MS12
Tammy Terry, MS1
DOE Records Center
File Record Subject – Waste Pits & Paddys Run
Project Number 20911.2.22 & 20611.2.22
Letter Log Copy, MS1
Administrative Record (2 w/enclosure), MS6

Without Enclosure

Rich Abitz, MS88
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Uday A. Kumthekar, MS88
Donna Metzler, Stoller, MS2
Frank L. Miller, MS60
Garner Powell, MS60
Dennis Sizemore, Fluor Fernald, Inc. Prime Contract, MS1

Figure 1

Waste Pits Area / Paddys Run Completion Report
Natural Resource Restoration Project

JULY 24, 2006 PHOTO

LEGEND

- DEER EXCLOSURE FENCING
- WILDLIFE BOX
- RAPTOR PLATFORM
- BAT BOX

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FIGURE 2

Waste Pits Area / Paddys Run Completion Report
Natural Resource Restoration Project

JULY 24, 2006 PHOTO