



Department of Energy

Ohio Field Office
 Fernald Closure Project
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February 7, 2006

Mr. James A. Saric, Remedial Project Manager
 United States Environmental Protection Agency
 Region V, SR-6J
 77 West Jackson Boulevard
 Chicago, Illinois 60604-3590

DOE-0069-06

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

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF STATEMENT OF COMPLETION FOR THE SOUTHERN WASTE UNITS NATURAL RESOURCE RESTORATION PROJECT

This letter documents completion of the Southern Waste Units (SWU) Natural Resource Restoration Project. The SWU consisted of several contaminated areas encompassing approximately 25 acres. Impacted areas included the Active and Inactive Flyash Piles, the South Field, and the Carolina Area. The SWU was the first extensive soil remediation project completed at the Fernald Closure Project (FCP). Ecological restoration commenced following remediation and certification of the area.

The restoration goals for the SWU were to expand the riparian corridor along Paddys Run, create several open water areas, and establish the early stages of an upland forest community. An accelerated Natural Resource Restoration Design Plan (NRRDP) was submitted to the Fernald Natural Resource Trustees and the agencies in April 2002. Fieldwork commenced in spring 2002 and continued in several stages until spring 2003. The sequence of restoration activities is provided below:

- Soil amendment and seeding of the Active Flyash Pile was conducted in spring 2002. The Carolina Area and a portion of the Active Flyash Pile were planted as well.

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- Slope stabilization, surface water control, and access paths were established in summer 2002.
- Planting in the Active Flyash Pile and riparian areas continued in fall 2002.
- Floodplain expansion activities, installation of wildlife amenities and all planting and seeding efforts were completed in spring 2003.
- Additional seeding was conducted in 2004 following the installation of groundwater remediation infrastructure within a portion of the project area.

Floodplain expansion required the construction of an earth berm, installation of two water control structures, and the removal of a riprap berm in order to permit Paddys Run to flood the riparian area one or two times a year. An expanded floodplain along Paddys Run allows for some dissipation of water during periods of high flow, thereby potentially reducing the amount of incitement and bank erosion downstream and upstream of the SWU project area. A one to two-year flood interval was chosen because this is the "channel forming flow" that has the biggest impact on stream channels. Paddys Run has overflowed into the SWU floodplain area three times since grading was completed in 2003.

Implementation monitoring of the SWU restoration project was conducted in summer 2003. Data were presented in the 2003 Consolidated Monitoring Report. In general, woody vegetation survival was between 66 and 79 percent, with mortality attributed primarily to deer browsing. Plant survival within fenced areas was over 90 percent, while plants protected by plastic deer tubes showed higher rates of mortality. These findings have led to the expanded use of deer exclosure fencing in ecological restoration projects at the FCP.

Herbaceous cover data showed that native vegetation is successfully establishing across the SWU project area. All seeded areas had greater than 50 percent native species composition and relative frequency. Cover estimates were similar to findings in other restoration projects across the FCP. Acceptable cover was achieved only in slope stabilization and erosion control areas. This was attributed to increased seeding rates and extensive use of jute and coir mats, which serve as a mulch cover for seeded areas. It is expected that herbaceous cover will increase in the next several years once the extensive root systems of native grasses and forbs establish.

Attached please find a current photograph of the SWU project areas with the final topography overlaid. Although the requirements of the NRRDP have been completed, Fluor Fernald will continue to conduct necessary maintenance in this area until Site Closure. Additional seeding may be required following a road upgrade along the northern portion of the project area. In addition, forest restoration components of the SWU will be monitored as part of the functional monitoring program in 2005.

Mr. James A. Saric
Mr. Tom Schneider

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If you have any questions or require additional information, please contact me at (513) 648-3139.

Sincerely,



Johnny W. Reising
Director

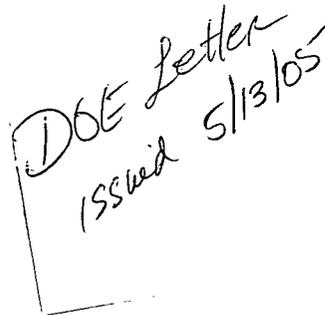
Enclosure

cc:

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FERNALD CLOSURE PROJECT
SOUTHERN WASTE UNITS
NATURAL RESOURCE RESTORATION PROJECT

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