



Department of Energy

Ohio Field Office
Fernald Closure Project
175 Tri-County Parkway
Springdale, Ohio 45246
(513) 648-3155
MAR 18 2005



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

DOE-0193-05

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

Dear Mr. Saric and Mr. Schneider:

**PLUGGING AND ABANDONMENT OF FORTY-SIX GROUNDWATER
MONITORING WELLS, AQUIFER RESTORATION, FERNALD CLOSURE PROJECT**

The purpose of this letter is to request your agency's concurrence on plans to plug and abandon 46 Fernald Closure Project (FCP) Groundwater Monitoring Wells. To assist in meeting program objectives, the DOE requests your concurrence by April 1, 2005.

The intent to plug and abandon the identified 46 Groundwater Monitoring Wells was discussed during the March 8, 2005 TIE Meeting. The USEPA provided verbal concurrence during the meeting to proceed with the plugging and abandonment of the wells. Ohio EPA asked that a formal request to plug and abandon the Groundwater Monitoring Wells be submitted to the agencies, along with a description of the rationale used to identify the wells to be plugged and abandoned. Attached to this letter is a brief narrative of the rationale supporting the decision to plug and abandon the identified forty six groundwater monitoring wells, along with a map that shows the locations of the identified wells, which addresses the OEPA's request.

Mr. James A. Saric
Mr. Thomas Schneider

-2-

DOE-0193-05

If you have any questions or comments, please contact Dave Lojek at (513) 648-3127.

Sincerely,


William J. Taylor
Director

FCP:Lojek

cc w/ enclosure:

D. Lojek, OH/FCP

T. Schneider, OEPA-Dayton (three copies of enclosure)

G. Jablonowski, USEPA-V, SR6J

M. Cullerton, Tetra Tech

F. Bell, ATSDR

M. Shupe, HSI GeoTrans

R. Vandegrift, ODH

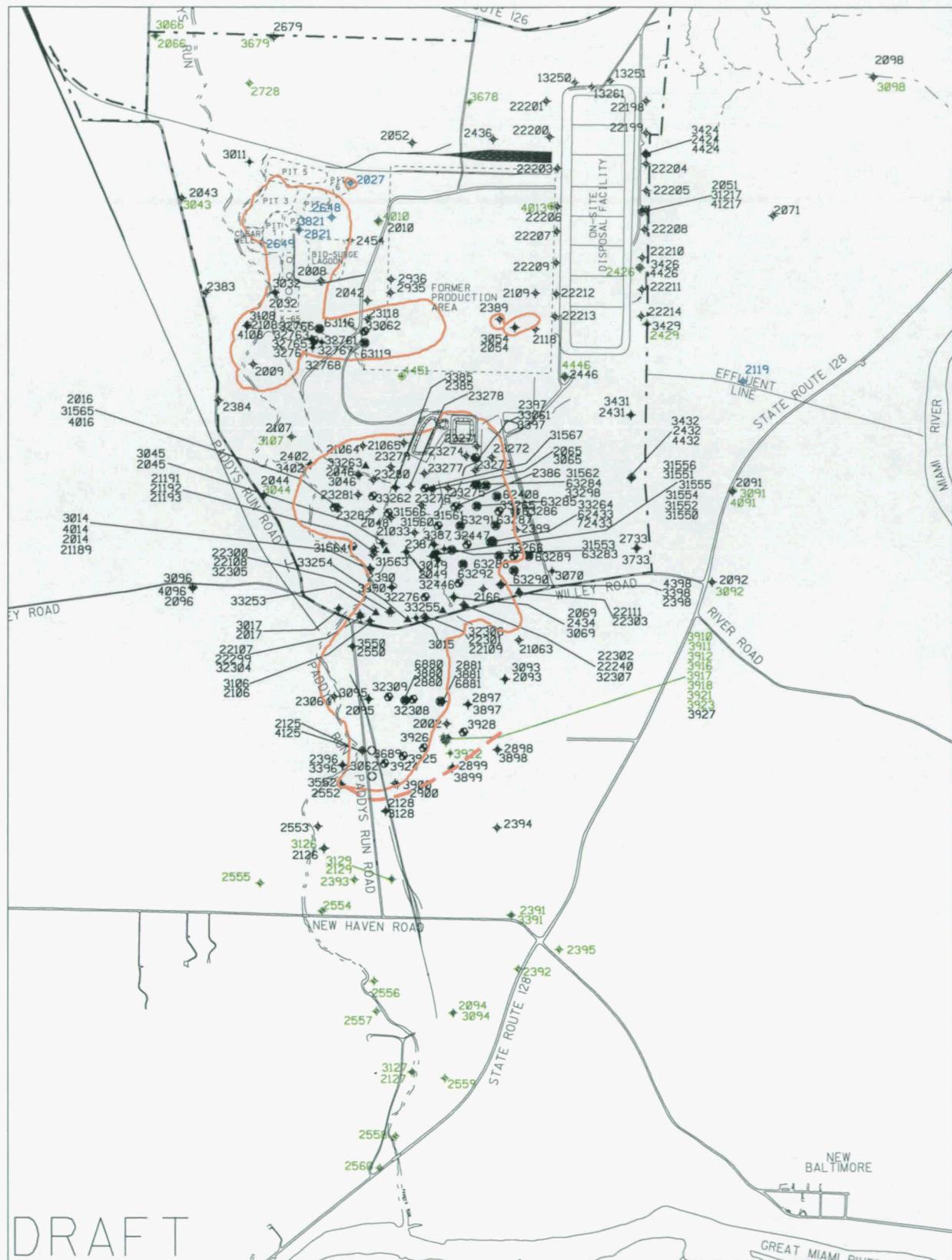
AR Coordinator, Fluor Fernald, Inc./MS78



g:\5877\2\gfm\EN-Bk\en00162.dgn

STATE PLANNING COORDINATE SYSTEM 1927

17-MAR-2005



DRAFT

LEGEND:

- 2559 ◆ CURRENTLY IN 2005 P & A PLAN
- 2560 ◆ ADDITIONAL WELLS PROPOSED FOR P & A PRIOR TO SITE CLOSURE
- ADMINISTRATIVE BOUNDARY FOR AQUIFER RESTORATION
- FERNALD SITE BOUNDARY
- IMPACTED AREA OF AQUIFER

SCALE

WELLS IDENTIFIED FOR PLUGGING AND ABANDONMENT

**RATIONALE BEHIND THE DECISION TO PLUG AND ABANDON FORTY-SIX
GROUNDWATER MONITORING WELLS**

The attached map shows the location of forty-six (46) additional groundwater-monitoring wells that have recently been identified for plugging and abandonment, because the wells are not needed to support continuation of the groundwater remediation and certification past site closure in 2006. An explanation as to how these 46 wells were identified is provided below.

The FCP currently has 257 groundwater monitoring wells completed in the Great Miami Aquifer. An assessment of the current and future need for each of these monitoring wells was based on the following criteria:

- Current use of the monitoring well for routine monitoring per the Integrated Environmental Monitoring Plan, Rev. 4, Final, including OSDF Monitoring Wells.
- Location of the monitoring well relative to the Impacted Area of the Aquifer
- Future anticipated use of the monitoring wells located outside of the Impacted Area of the Aquifer to support the groundwater remediation.

Of the 257 FCP groundwater-monitoring wells, 183 are currently involved in either water quality monitoring or water level measurements as part of the ongoing Integrated Environmental Monitoring Plan, Rev. 4, Final. None of the 183 wells currently utilized for the IEMP were identified for plugging and abandonment.

The Impacted Area of the Aquifer is conservatively defined as the area of the aquifer contained within a composite of all previous 20 ug/L maximum uranium plume interpretations through the year 2000, and 30 ug/L maximum uranium plume interpretations subsequent to the year 2000. The Impacted area through 12/31/2003 is shown on the attached map. All available monitoring locations inside of the Impacted Area will be used to certify the aquifer clean at the end of the groundwater remediation. Therefore only monitoring wells located outside of the Impacted Area of the Aquifer were considered for plugging and abandonment, and as explained below, not all of the monitoring wells located outside the Impacted Area were identified for plugging and abandonment.

A few of the inactive monitoring wells outside of the Impacted Area will be maintained because they provide access to background data, or are located close enough to the Impacted Area of the Aquifer that could possibly be used to support remediation efforts in the future.

Plugging and abandoning the 46 selected groundwater monitoring wells is considered to be protective of the aquifer as it will eliminate potential cross contamination pathways without impacting current or future aquifer remediation plans.