



## Department of Energy

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



MAR 24 2005

Mr. James M. Raab  
 Ohio Department of Natural Resources  
 Division of Water  
 Water Resources Section  
 1939 Fountain Square  
 Columbus, Ohio 43224-1385

DOE-0200-05

Dear Mr. Raab:

### **TRANSMITTAL OF WELL PLUGGING AND ABANDONMENT INFORMATION FOR 2004**

- Reference:
- 1) Letter, J. Raab (ODNR) to K. Nickel (DOE-FN), dated March 4, 1996
  - 2) Letter, James A. Saric (U.S. EPA) to Johnny Reising (DOE-FEMP), "Well Abandonment," dated June 28, 1996
  - 3) Letter, Thomas A. Schneider (OEPA) to Johnny Reising (DOE-FEMP), "DOE FEMP MSL 531-0297 Hamilton County Approval: Well Abandonment Letter," dated May 30, 1996

This letter transmits to the Ohio Department of Natural Resources (ODNR) well plugging and abandonment information for actions taken at the Fernald Closure Project (FCP) during the 2004 calendar year. The enclosed plugging and abandonment information has been prepared based on correspondence (Reference 1) and subsequent follow-up conversations with Mr. James Raab of the ODNR. The information fulfills Ohio Revised Code 1521.05(B) requirements for submittal of well abandonment documentation information for monitoring wells abandoned at the Fernald Closure Project during 2004. Abandonment methods were chosen based on previously approved well-specific abandonment methods (References 2 and 3).

The wells abandoned during this period were selected for abandonment based on their location with respect to excavation activities, and wells that are no longer needed. A careful review was performed for each well scheduled for abandonment to evaluate any potential future use. Enclosure I includes a list of the abandoned wells grouped by abandonment method. Enclosure II includes a completed ODNR Water Well Sealing Report for the deepest well abandoned for each method used during 2004.

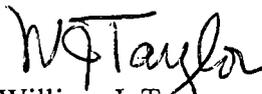
Mr. James Saric  
Mr. Tom Schneider

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DOE-0200-05

Additional plugging and abandonment information will continue to be sent on an annual basis.  
If you have any questions regarding this matter, please contact Dave Lojek at 513-648-3127.

Sincerely,

  
William J. Taylor  
Director

FCP:Lojek

Enclosures: As stated

cc:

With Enclosures

D. Lojek, DOE-OH/FCP  
M. Proffitt, OEPA, Dayton  
J. Saric, USEPA-V, SR-6J  
T. Schneider, OEPA (total of 3 copies of enclosures)  
R. Vandergrift, ODH  
M. Cullerton, Tetra Tech  
AR Coordinator, Fluor Fernald, Inc./MS78

Without Enclosures

C. Carr, BTAS/OH  
B. Everson, DOE-OH/FCP  
W. Quaider, DOE-OH  
J. Reising, DOE-OH/FCP  
E. Skintik, DOE-OH/FCP  
B. Hertel, Fluor Fernald, Inc./MS52-5  
F. Johnston, Fluor Fernald, Inc./MS52-5  
K. Voisard, Fluor Fernald, Inc./MS12  
ECDC, Fluor Fernald, Inc./MS52-7

**Enclosure I**

Well	Reason for Abandonment	Coordinates NAD83N	Coordinates NAD83E	Dia-meter (In)	Depth (ft)	Riser Material	Date Abandoned
<b>Method 1<sup>1</sup></b>							
2097	Well no longer used	480313.09	1355466.97	4	35.0	Stainless Steel	9/2/04
3097	Well no longer used	480320.42	1355474.14	4	92.5	Stainless Steel	9/2/04
2053	Planned excavation	479964.50	1348883.24	4	69.8	Stainless Steel	6/10/04
3053 <sup>2</sup>	Planned excavation	479961.31	1348874.54	4	122.7	Stainless Steel	6/14/04
2006	Planned excavation	480382.82	1349094.67	4	69.7	Stainless Steel	3/8/04
2007	Planned excavation	480634.89	1349169.53	4	71.7	Stainless Steel	1/22/04
2055	Planned excavation	481517.48	1349234.96	4	79.7	Stainless Steel	10/8/04
<b>Method 2</b>							
3055	Planned excavation	481494.21	1349233.52	4	120.8	Stainless Steel	10/8/04
4103 <sup>2</sup>	Planned excavation	479958.37	1348381.99	38	210.0	Carbon Steel	1/21/04
63121	Planned excavation	480194.17	1348580.84	4	81.0	Polyvinyl Chloride	3/9/04
63122	Planned excavation	479757.73	1348454.13	4	90.0	Polyvinyl Chloride	7/1/04
83120	Planned excavation	480022.35	1348312.42	1.7	130.5	Polyethylene	7/27/04
83123	Planned excavation	480010.95	1348757.68	1.7	131.5	Polyethylene	6/30/04
33063	Planned excavation	480001.75	1348464.13	16	105.0	Stainless Steel	7/21/04
4097	Well no longer used	480327.45	1355480.92	4	142.5	Stainless Steel	9/2/04

<sup>1</sup> Method 1: Removed well riser, screen, and sump. Allowed sand and gravel formation to collapse. Fill remaining borehole with bentonite.

Method 2: Filled well with sand and/or bentonite sealing material. Cut or broke well below the base of glacial till and remove. Filled remaining borehole with bentonite.

<sup>2</sup> Water Well Sealing Report included in Enclosure 2.

**Enclosure II**

WATER WELL SEALING REPORT  
OHIO DEPARTMENT OF NATURAL RESOURCES  
Division of Water  
1939 Fountain Square Drive  
Columbus, Ohio 43224-1385  
Voice: (614) 265-6739 Fax: (614) 265-6767

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FCP# 3053

LOCATION

County Hamilton Township Crosby Section/Lot Number 6  
Owner/Builder U.S. Dept of Energy Fernald Closure Project  
Address of Well Location 7400 Willey Rd.  
City Hamilton Zip Code +4 45013-9402  
Property Location Description on the N side of Willey Rd.  
Location of Well in State Plane coordinates, if available N  S  X 1348874.54 +/- ft. or m Y 479961.31 +/- ft. or m  
Elevation of Well 578.51 +/- ft. or m Datum Plain:  NAD27  NAD83  
Source of Coordinates:  GPS  Survey  Other

ORIGINAL WELL ODNR Well Log Number FCP# 3053 NA Copy attached? Yes  No

MEASURED CONSTRUCTION DETAILS Date of measurements 5/25/87  
Depth of Well 122.7 ft. Static Water Level 122.7 ft. UNK 54.3 ft.  
Size of Casing 4 in. Length of casing 122.7 ft.  
Well Condition Well was abandoned in place on 1/22/93

SEALING PROCEDURE Method of Placement Gravity  
Placement: From 0 To 34.5 Sealing Material Bentonite chips Volume 13.3 ft<sup>3</sup>  
From 34.5 To 94 Sealing Material Sand Volume 29 ft<sup>3</sup>  
From 94 To 122.7 Sealing Material Natural Collapse Volume NA  
Was Casing Removed?  Yes  No  
Condition of Casing Good  
Perforations: From 112.7 To 122.7  
Date Sealing Performed 8/12/04  
Reason(s) for Sealing Well removed and sealed prior to excavation

CONTRACTOR Name Moodie of Dayton Inc ODH Registration # 636  
Address 4359 Infirmary Rd. PO Box 509  
City/State/Zip Miamisburg, OH 45343  
Signature [Signature]  
I hereby certify the information given is accurate and correct to the best of my knowledge.

**WATER WELL SEALING REPORT**  
**OHIO DEPARTMENT OF NATURAL RESOURCES**  
 Division of Water  
 1939 Fountain Square Drive  
 Columbus, Ohio 43224-1385  
 Voice: (614) 265-6739 Fax: (614) 265-6767

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FCP#4103

**LOCATION**

County Hamilton Township Crosby Circle One or Both Section/Lot Number 6

Owner/Builder U.S. Dept of Energy Fernald Closure Project  
Circle One or Both

Address of Well Location 7400 Willey Rd.  
Number Street Name

City Hamilton Zip Code +4 45013-9402  
1 miles NW of Willey Rd. and S.R. 128  
n, e, s, w nearest intersection

Property Location Description on the N side of Willey Rd.  
n, e, s, w road name

Location of Well in State Plane coordinates, if available  N  S X 11348381.99 +/-          ft. or m Y 479958.37 +/-          ft. or m

Elevation of Well 578.77 +/-          Datum Plain:  NAD27  NAD83

Source of Coordinates:  GPS  Survey  Other         

ORIGINAL WELL ODNR Well Log Number FCP#4103 993122 Copy attached?  Yes  No (circle one)

MEASURED CONSTRUCTION DETAILS Date of measurements 4/14/03

Depth of Well 210 ft Static Water Level 62 ft.  
 Size of Casing 38" to 130ft 26" to 210 ft Length of casing 210 ft  
 Well Condition fair

**SEALING PROCEDURE**

Method of Placement Gravity

Placement:	From	To	Sealing Material	Volume lbs
	<u>0</u>	<u>8.5</u>	<u>Sand</u>	<u>unk</u>
	<u>8.5</u>	<u>34</u>	<u>Bentonite</u>	<u>31,700</u>
	<u>34</u>	<u>210</u>	<u>Sand</u>	<u>770,000</u>

Was Casing Removed?  Yes  No (circle one) \* Partial removal Removed 36.77' of outer 38" casing  
 Removed 34.12' of riser 26" casing

Condition of Casing fair to poor  
 Perforations: From 190 ft To 210 ft  
 From          To         

Date Sealing Performed 11/21/04  
 Reason(s) for Sealing Well no longer in service and located in area to be excavated.

**CONTRACTOR**

Name Moody's of Dayton Inc. ODH Registration # 636  
 Address 4359 Infirmary Rd P.O. Box 509  
 City/State/Zip Miamisburg, OH 45343

Signature [Signature]  
 I hereby certify the information given is accurate and correct to the best of my knowledge.