

**R-009-208.29**

**3279**

**APPLICATION FOR APPROVAL - SOUTH  
GROUNDWATER CONTAMINATION PLUME  
REMOVAL ACTION ALTERNATIVE WATER  
SUPPLY SYSTEM - WELL DEVELOPMENT DATA  
- FERNALD ENVIRONMENTAL**

**05/12/92**

**DOE-1540-92  
DOE-FN/OEPA  
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LETTER  
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**Department of Energy**  
**Fernald Environmental Management Project**  
P.O. Box 398705  
Cincinnati, Ohio 45239-8705  
(513) 738-6357

MAY 1 2 1992

DOE-1540-92

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Thomas A. Winston, District Chief  
Southwest District Office  
Ohio Environmental Protection Agency  
40 South Main Street  
Dayton, Ohio 45402-2086

Dear Mr. Winston:

**APPLICATION FOR APPROVAL - SOUTH GROUNDWATER CONTAMINATION PLUME REMOVAL ACTION ALTERNATE WATER SUPPLY SYSTEM - WELL DEVELOPMENT DATA - FERNALD ENVIRONMENTAL MANAGEMENT PROJECT (FEMP)**

- Reference:
1. DOE letter, R. E. Tiller to T. A. Winston, "Application for Approval - South Groundwater Contamination Plume Removal Action Alternative Water Supply System - Final Report for Pumping Test Results - Fernald Environmental Management Project (FEMP)," dated February 14, 1992
  2. DOE letter, R. E. Tiller to T. A. Winston, "Application for Approval - Installation of an Alternate Water Supply System - Fernald Environmental Management Project (FEMP)," dated February 3, 1992

The above referenced letters transmitted the application for approval of the Alternate Water Supply System for the South Groundwater Contamination Plume Removal Action to Ohio Environmental Protection Agency (Ohio EPA). On April 13, 1992, we received from Mr. Mike Joseph, of your office, a facsimile requesting the completion of well development data forms. Submission of this data should complete this application. A brief explanation of some of the changes that have occurred since the original submittal is included, although this information has been provided to your CERCLA staff.

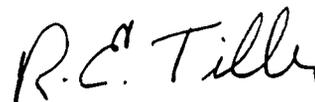
In the Release and Settlement Agreement, the Department of Energy (DOE) agreed to supply Albright & Wilson Americas (AWA) two production wells with a 250 gallons per minute combined flow capacity. A test well was installed in September 1991 to confirm the computer prediction that the proposed well field location at Crosby and Willey Roads could produce sufficient water quantity and quality to AWA and to Delta Steel. After its installation and testing, the test well's casing and screen were left in place. This well is designated as AWA-1, which will be converted to the first AWA production well. The second AWA production well, AWA-2 has yet to be installed. The information provided in the enclosed well production data sheets are design specifications based on the pump tests.

A means to supply both AWA and Delta Steel with an alternate water supply was identified as Part 1 of preferred alternative listed in the South Plume Removal Action Engineering Evaluation/Cost Analysis. Other well design information necessary to complete the Certified for Construction (CFC) drawings for the alternate water supply system that had been previously sent to Ohio EPA (reference 2) were compiled in a Draft Final report prepared by ASI/IT dated February 1992 (reference 1).

The third production well with a 150 gallons per minute capacity was planned and designated for Delta Steel, DS-1, as described in the Work Plan for the alternate water supply (Part 1 of the South Plume Removal Action). But due to Delta Steel's rejection of DOE's proposal to provide them with an alternate source of water, the well and its designated system were removed from the latest revision of CFC drawings and specifications (Revision 1 dated February 4, 1992). This latest revision includes the information contained in the ASI/IT Draft Final report to complete the design for AWA-1 and AWA-2.

If you or your staff have any questions, please contact Edward Skintik at (513) 738-6660.

Sincerely,



R. E. Tiller  
Manager

FN:Skintik

Enclosure: As Stated

cc w/enc.:

J. A. Saric, USEPA-HRE-8J  
G. E. Mitchell, OEPA-Dayton  
S. M. Beckman, WEMCO  
AR Coordinator, WEMCO

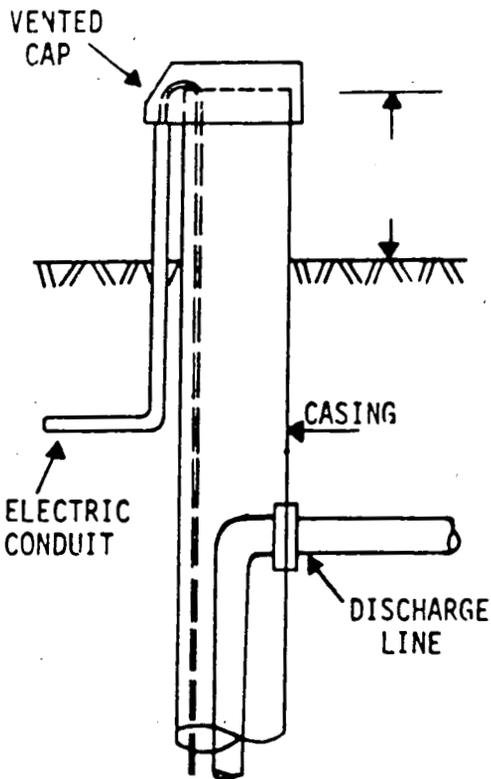
cc w/o enc.:

K. A. Hayes, EM-424, TREV II  
J. Garties, OEPA-Dayton  
M. Proffitt, OEPA-Dayton  
T. Schneider, OEPA-Dayton  
D. J. Brettschneider, WEMCO  
T. L. Crawford, WEMCO

Well AWA-1 (Former Test Well)

WELL DEVELOPMENT

3279



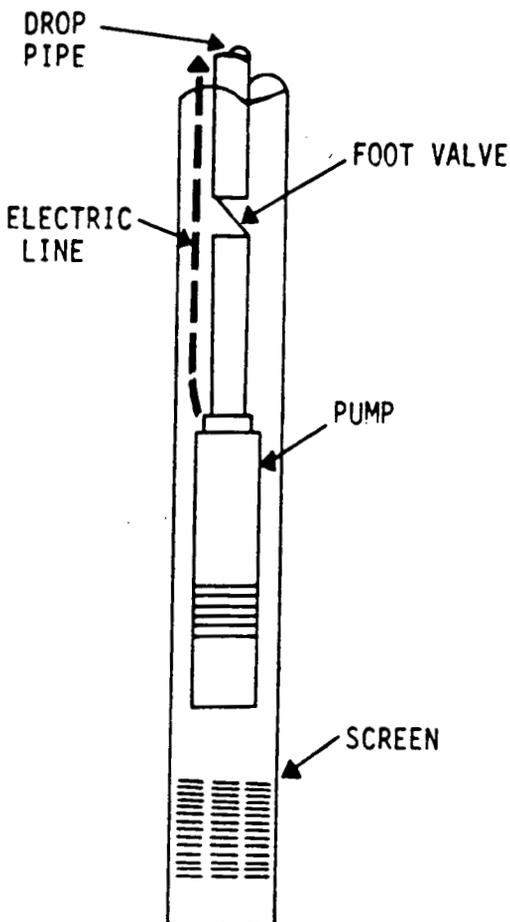
WELL  
 Aquifer \_\_\_\_\_  
 Depth 219.5'  
 CASING  
 Material Schedule 40 Carbon Steel  
 Size 10" Depth 149.5'  
 PITLESS INSTALLATION DEVICE  
 Make Baker (or equal)  
 Model "Monitoring PS"  
 Approval Type: NSF \_\_\_\_\_ WSC X

DISCHARGE LINE  
 Material PE 3408 Polyethylene Pipe  
 Size 4"  
 Foot Valve: Yes X No \_\_\_\_\_

ELECTRICAL  
 Volts 230 Hertz 60  
 Phases 3  
 Lightning Protection: Yes X No \_\_\_\_\_

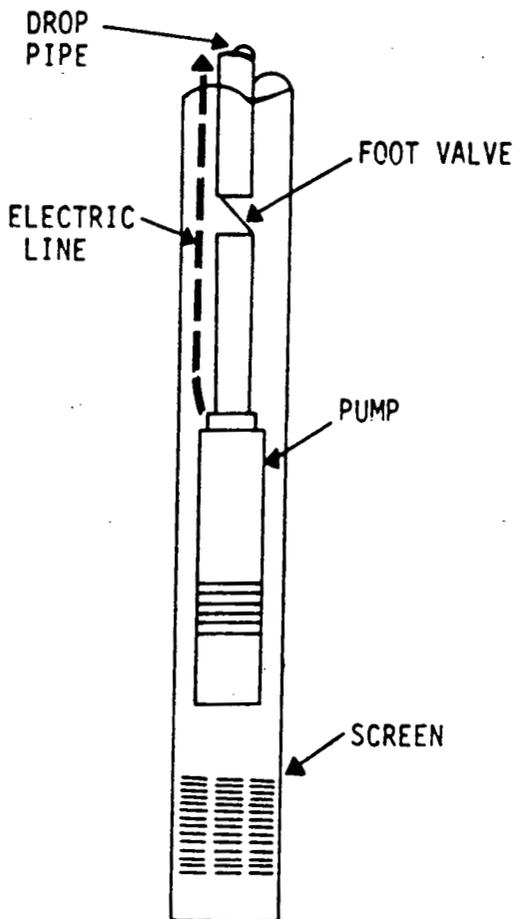
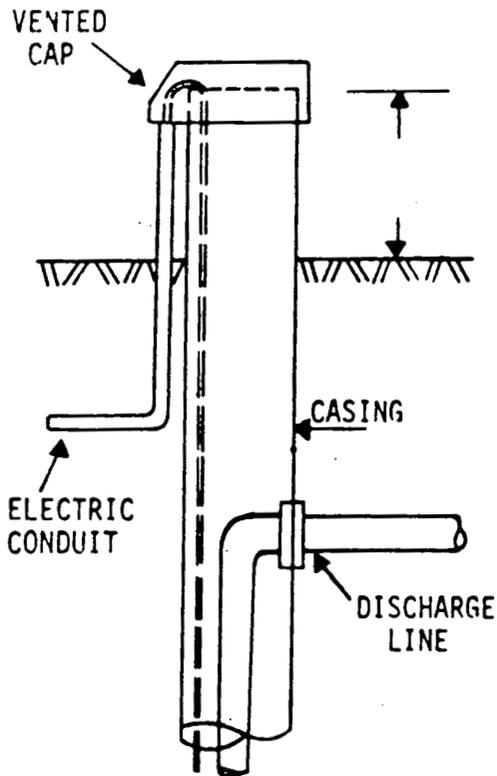
PUMP  
 Make Peerless Model (or equal)  
 Model 6 LB  
 Capacity 125 gpm at 300' TDH  
 (motor)  
 Horsepower 20 Depth 92.5'

SCREEN  
 Type 0.020" slot, continuous wire-wrapped  
302/304  
 Material Stainless Steel  
 Length 70' Size 9½"



WELL AWA-2  
WELL DEVELOPMENT

3279



WELL

Aquifer \_\_\_\_\_

Depth 130.0'

CASING

Material Schedule 40 Carbon Steel

Size 10" Depth 110.0'

PITLESS INSTALLATION DEVICE

Make Baker (or equal)

Model "Monitor PS"

Approval Type: NSF \_\_\_\_\_ WSC

DISCHARGE LINE

Material PE 3408 Polyethylene Pipe

Size 4"

Foot Valve: Yes  No \_\_\_\_\_

ELECTRICAL

Volts 230 Hertz 60

Phases 3

Lightning Protection: Yes  No \_\_\_\_\_

PUMP

Make Peerless Model (or equal)

Model 6 LB

Capacity 125 gpm at 300 ft.TDH  
(motor)

Horsepower 20 Depth 92.5 ft.

SCREEN

Type 0.020" continuous slot type

Material 302/304 stainless steel

Length 20' Size 9½"