

6226

G-000-601 .12

**DRILLING PROCEDURES, FERNALD ENVIRONMENTAL MANAGEMENT  
PROJECT (FEMP)**

07/02/92

DOE-2043-92  
DOE-FN        OH HIS PRES OFF  
6  
RESPONSE



Department of Energy  
Fernald Environmental Management Project  
P.O. Box 398705  
Cincinnati, Ohio 45239-8705  
(513) 738-6357

6226

JUL 02 1992  
DOE-2043-92

Julie Quinlan  
Technical and Review Services  
Ohio Historic Preservation Office  
1982 Velma Avenue  
Columbus, Ohio 43211-2497

Dear Ms. Quinlan:

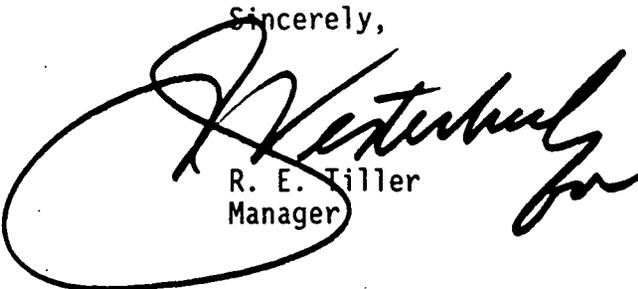
**DRILLING PROCEDURES, FERNALD ENVIRONMENTAL MANAGEMENT PROJECT (FEMP)**

In response to your letter of June 10, 1992, we are submitting a revised drilling procedures document (enclosed). Changes have been made to the text to address all your comments and a figure has been provided.

Once you approve the document, we request a letter from your office concurring with the procedure. With this agreement we can more quickly accomplish the remedial activity without repetitious formal consultation on each off-property project.

If you or your staff have any questions, please contact Behram Shroff at (513) 738-6003.

Sincerely,



R. E. Tiller  
Manager

FN:Shroff

Enclosure: As Stated

cc w/enc.:

D. Ball, COE  
C. Brown, WEMCO  
C. Brown, ASI-IT

DEPARTMENT OF ENERGY  
DRILLING PROCEDURES  
AND UNEXPECTED DISCOVERY OF CULTURAL RESOURCES

1.0 PURPOSE

Section 106 of the National Historic Preservation Act (16 USC 470f) requires Federal agencies to take into account the effects of their actions on properties on or eligible for listing on the National Register of Historic Places, or other undiscovered resources. Federal regulation 36 CFR 800.11 of this act is concerned with properties discovered during implementation of a federal or federally funded project.

To comply with Section 106 and due to the large number of historic and archaeological resources existing in the area, assistance was requested by DOE from the Ohio Historic Preservation Officer (OHPO) concerning proposed remedial activity at the Fernald Environmental Management Project (FEMP). As indicated in a letter from the OHPO, of July 26, 1990, any major activity to be completed beyond the boundaries of the FEMP must be preceded by an archaeological survey to determine the existence of potentially significant historic or archaeological resources.

At the recommendation of the OHPO, this document was prepared in lieu of a Memorandum of Agreement between the DOE and OHPO for remedial activity beyond the boundaries of the FEMP. This agreement shall be in effect for five years and will be reviewed for possible modification on an annual basis. At the request of either party, this agreement may be reviewed for possible modification at any time.

2.0 SCOPE

This procedure addresses drilling activities designed to detect the presence of subsurface contamination. The methodology pertains to drilling procedures to minimize disturbance or destruction of cultural resources during ground-disturbing activities, and to effectively handle unexpected discoveries of these properties. Figure 1 indicates locations of known archaeological sites, drilling is to be avoided at these locations.

3.0 DEFINITIONS

Unexpected Discovery: Previously unknown historic or archaeological properties discovered after a project has begun, usually as a result of ground-disturbing activity, such as excavation.

Historic Properties: Any historic or prehistoric site, structure, or object included in or eligible for inclusion in the National Register of Historic Places. Not included in this category are artifacts lying on the surface of previously disturbed earth, such as arrowheads.

Archaeological Resources: Material remains of past human life having retrievable scientific information and over 50 years old. Also included are human remains or the remains of prehistoric biota associated with human occupation.

#### 4.0 PREREQUISITES

4.1 This procedure assumes that the ground-disturbing activity is part of an approved field program and that standard field procedures are followed.

4.2 It is also assumed that under standard field procedures, all vehicles and drilling rigs will use existing roads to reach the sites whenever possible and only small areas of land are disturbed, as follows:

- Installation of Groundwater Monitoring and/or Extraction Wells - This usually involves the installation of a permanent well casing and a concrete pad three feet square with a total surface area of approximately 30 feet by 30 feet disturbed during installation. The borehole will be a maximum of approximately 14 inches and will not be at a depth beyond bedrock.
- Hydropunch Sampling and Soil Vapor Surveys - These activities usually result in temporary disturbance of an area approximately 30 feet square and a hole of 8 to 9 inches in diameter. The hole is refilled and no permanent structure is installed.

4.3 The average size of the truck used for ground-disturbing activities will be 10 tons.

4.4 Except under emergency conditions, ground-disturbing activities will take place only in dry weather.

#### 5.0 PROCEDURE

5.1 Upon the report of discovery of any artifacts, including human remains by the Site Operating Contractor or a subcontractor, DOE shall notify the OHPO of the discovery and discuss the available options, including mitigation.

5.3 Per Section 106, contact the Advisory Council, if: (1) the OHPO refuses to make a determination in a reasonable amount of time, (2) the OHPO defers the decision to the Council, or (3) the DOE disagrees with the determination of the OHPO and desires a second opinion.

5.3 Per 36 CFR 800.11, decide whether or not to proceed with the activity which resulted in the discovery. If the decision is to proceed, DOE must determine the necessary mitigation to avoid further disturbance. An option which must be considered is relocation of the ground-disturbing activity.

- 5.4 Consult with the OHPO and/or the Advisory Council on mitigation.
- 5.5 Notify the contractor of the decision to continue or stop field work in the affected area, and any mitigation measures to be implemented if it is determined to proceed.
- 5.6 Implement mitigation.

6.0 RECORDS

Records resulting from this procedure shall be submitted for maintenance and shall include, at a minimum: copies of correspondence with the SOC and/or subcontractors, and copies of the Field Activity Daily Log from the affected area.

An annual summary of these records is to be sent to the OHPO.

7.0 REFERENCES

Federal Register, September 29, 1983, "Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation," Vol. 48, Number 190, Part IV, pp. 44716-44740, Washington, DC.

Federal Register, September 2, 1986, "Protection of Historic Properties," Vol. 51, Number 169, Washington, DC.

36 CFR 800 "Protection of Historic Properties", October 1, 1986.

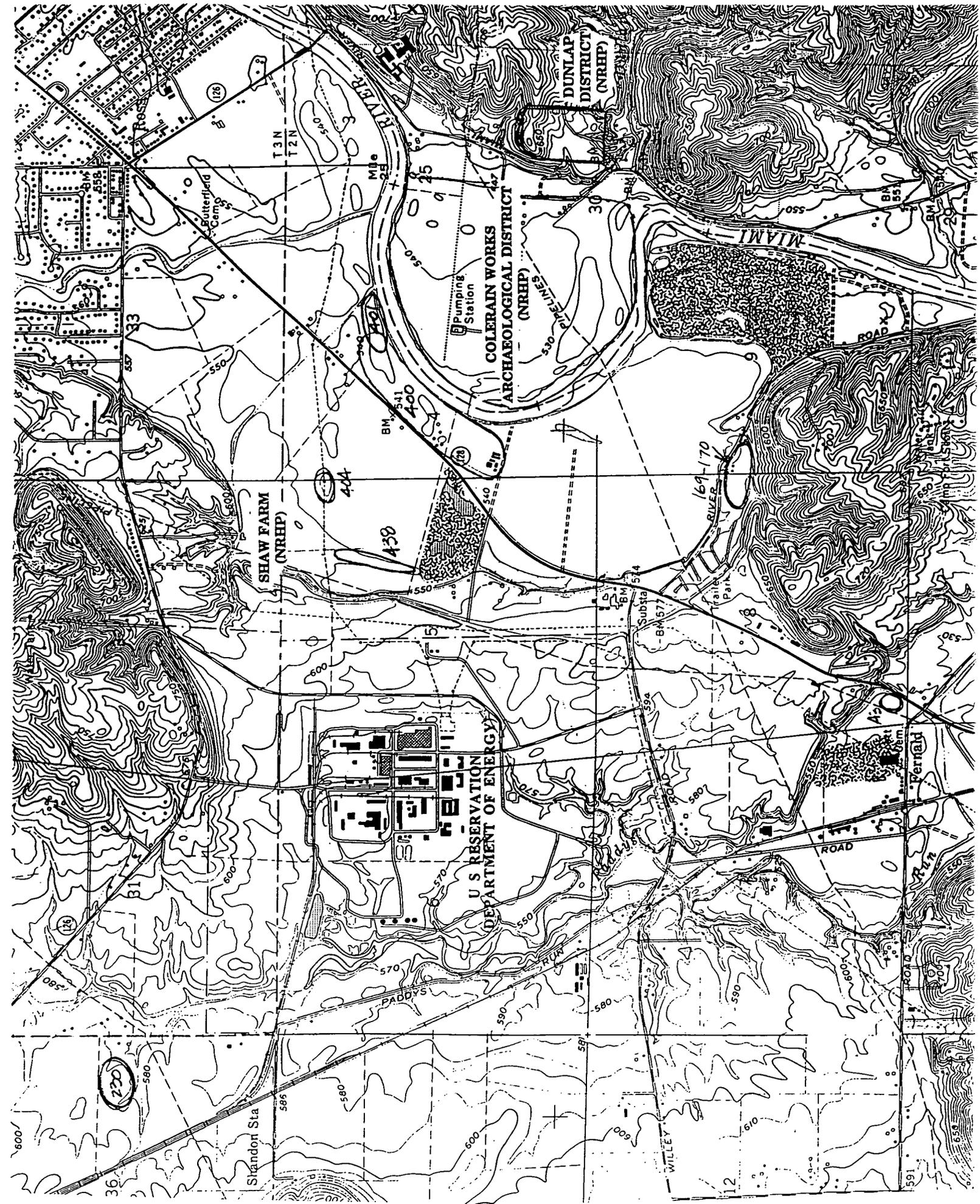


FIGURE 1. ARCHAEOLOGICAL STUDY LOCATIONS

000005

6226 - 4