

**4089**

**PERMITS TO OPERATE**

**01/29/93**

**OEPA/DOE-FN  
10  
LETTER**



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149  
(614) 644-3020  
FAX (614) 644-2329

G-01940  
AR

4089

George V. Voinovich  
Governor

Donald R. Schregardus  
Director

1431110128  
U.S. DEPT OF ENERGY-FERNALD E  
BEHRAM SHROFF  
P.O. BOX 398705  
CINCINNATI OH 45239

CERTIFIED MAIL

January 29, 1993

Enclosed are Permit(s) to Operate which allow you to operate the described air contaminant source(s) in the manner indicated in the permit(s). Because these permits contain several conditions and restrictions, I urge you to read them carefully.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review  
236 East Town Street  
Room 300  
Columbus, Ohio 43215

If you have any questions, please contact the air pollution control agency to which you submitted your application.

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

TGR/tkb

Submit FEE

**PERMIT TO OPERATE AN AIR CONTAMINANT SOURCE****4089**Date of Issuance **01/29/93**Application No. **1431110128P261**Effective Date **01/29/93**Permit Fee **\$210**

This document constitutes issuance to:

**U. S. DEPT OF ENERGY-FERNALD ENVR MANAGEM  
WILLEY ROAD  
FERNALD OHIO 45239**

of a permit to operate for:

**GRIT BLAST SYSTEM  
78-001**

The following terms and conditions are hereby expressly incorporated into this permit to operate:

1. This permit to operate shall be effective until **01/29/96**  
You will be contacted approximately six months prior to this date regarding the renewal of this permit. If you are not contacted, please write to the appropriate Ohio EPA field office.
2. The above-described source is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.
3. Prior to any modification of this source, as defined in rule 3745-31-01 of the Ohio Administrative Code (OAC), a permit to install must be granted by the Ohio EPA pursuant to OAC Chapter 3745-31.
4. The Director of the Ohio EPA or an authorized representative may, subject to the safety requirements of the permit holder, enter upon the premises of this source at any time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal air pollution laws and regulations and the terms and conditions of this permit.
5. A permit fee in the amount specified above must be remitted within 15 days from the issuance date of this permit.
6. Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA field office must be notified in writing of any transfer of this permit.
7. This source and any associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices in order to minimize air contaminant emissions. Any malfunction of this source or any associated air pollution control system(s) shall be reported immediately to the appropriate Ohio EPA field office in accordance with OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of this source.
8. Any unauthorized or emergency release of an air contaminant from this source which, due to the toxic or hazardous nature of the material, may pose a threat to public health, or otherwise endanger the safety or welfare of the public, shall be reported immediately to the appropriate Ohio EPA field office (during normal business hours) or to the Ohio EPA's Emergency Response Group (1-800-282-9378). (Additional reporting may be required pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act.)
9. The appropriate Ohio EPA field office is:  
**SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY  
1632 CENTRAL PKWY. CINCINNATI OH, 45210  
(513) 651-9437**
10.  If this term and condition is checked, the permit holder is subject to the attached special terms and conditions:

OHIO ENVIRONMENTAL PROTECTION AGENCY

*Donald R. Scheyndus*

Director

EPA 3834  
Revised 9-90

02

APPLICATION NUMBER: 1431110128 P261  
FACILITY NAME: U.S. Dept. of Energy -  
EQUIPMENT DESCRIPTION: Fernald Environmental Management Project  
Grit Blast System  
COMPANY ID: 78-001

4089

## SPECIAL TERMS AND CONDITIONS

### 1. Applicable Rules:

The following rules of the Ohio Administrative Code and the Code of Federal Regulations establish the applicable emission limitations and/or control requirements for this source: 3745-15-07, 3745-17-07, 3745-17-11, 3745-31-05, 40 CFR Part 61 - Subpart H, and the terms and conditions specified in Permit to Install 14-1696.

(This condition in no way limits the applicability of other requirements of the Ohio Administrative Code to this source.)

### 2. Mass Emission Limitations, Operating Restrictions and Monitoring Requirements:

- A. The mass emissions from this source shall not exceed 1.62 pounds of particulate per hour.
- B. The maximum process weight rate for the grit blaster shall not exceed 283 pounds of grit per hour.
- C. The grit blaster shall not operate more than five thousand four hundred (5,400) hours per year.
- D. All radionuclide monitoring, testing and reporting shall be performed in accordance with the procedures specified in Sections 61.93 and 61.94 of 40 CFR, Part 61, Subpart H. Particulate testing shall be performed in accordance with OAC rule 3745-17-03 or through the use of an alternative testing procedure approved by the Ohio EPA.

- 1. A monitoring system designed to detect radionuclide activity, particulates and differential pressure shall be installed in exhaust stack EP78-1, downstream of all control devices. The monitoring system shall be operated and maintained in accordance with the procedures specified by the manufacturer. The monitoring system shall be operated continuously when emissions are exhausted through stack EP78-1.
- 2. The monitoring system shall have five (5) components: an isokinetic stack sampler, a radiation monitor (Geiger-Mueller or equivalent) differential pressure sensors and strip chart recorders to record the instantaneous radionuclide activity readings from the radiation monitor counter and for recording the differential pressure readings across the control device(s).

3. The recorder charts documenting the instantaneous differential pressure across the control device(s), and the instantaneous radionuclide activity readings, in addition to the laboratory results from the radionuclide and particulate emission rate analyses shall be kept on-site, available for inspection by representative of the Ohio EPA, for a minimum of five (5) years.
4. The monitoring system shall be designed to sound an alarm and initiate a manual shutdown of the system(s) generating and emitting radionuclides through stack EP78-1 when either the radionuclide activity level, as indicated by the radiation monitor, exceeds a predetermined level approved by the Ohio EPA that ensures the health and safety of the public; or when the differential pressure across the control device(s), as indicated by the differential pressure sensors, fall below predetermined level(s) approved by the Ohio EPA that represents an abnormal condition such as a malfunction of the control device(s).

E. Visible emissions of particulates from exhaust stack EP78-1 shall not exceed zero (0%) percent opacity.

F. Radiation survey equipment will be provided in a designated room to expedite health physics survey operations.

3. Reporting Requirements:

The Fernald Environmental Management Project shall provide the Southwestern Ohio Air Pollution Control Agency (SWOAPCA) with an annual report which includes the results of the monitoring as recorded by the Department of Energy's (DOE) Effluent Information System and the close calculations required by 40 CFR 61.93(a). This report shall also contain a list of the radioactive materials used by the Decommissions and Decontamination Facility, a description of the emission controls and control efficiencies employed by these sources, and a brief description of all modifications made to these sources during the calendar year for which this report is prepared. This report shall be submitted to the SWOAPCA by June 30 of each year.

**PERMIT TO OPERATE AN AIR CONTAMINANT SOURCE****4089**Date of Issuance **01/29/93**Application No. **1431110128P263**Effective Date **01/29/93**Permit Fee **\$210**

This document constitutes issuance to:

**U.S. DEPT OF ENERGY-FERNALD ENVR MANAGEM  
WILLEY ROAD  
FERNALD OHIO 45239**

of a permit to operate for:

**HIGH PRESSURE WATER WASH SYSTEM  
78-002**

The following terms and conditions are hereby expressly incorporated into this permit to operate:

1. This permit to operate shall be effective until **01/29/96**  
You will be contacted approximately six months prior to this date regarding the renewal of this permit. If you are not contacted, please write to the appropriate Ohio EPA field office.
2. The above-described source is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.
3. Prior to any modification of this source, as defined in rule 3745-31-01 of the Ohio Administrative Code (OAC), a permit to install must be granted by the Ohio EPA pursuant to OAC Chapter 3745-31.
4. The Director of the Ohio EPA or an authorized representative may, subject to the safety requirements of the permit holder, enter upon the premises of this source at any time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal air pollution laws and regulations and the terms and conditions of this permit.
5. A permit fee in the amount specified above must be remitted within 15 days from the issuance date of this permit.
6. Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA field office must be notified in writing of any transfer of this permit.
7. This source and any associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices in order to minimize air contaminant emissions. Any malfunction of this source or any associated air pollution control system(s) shall be reported immediately to the appropriate Ohio EPA field office in accordance with OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of this source.
8. Any unauthorized or emergency release of an air contaminant from this source which, due to the toxic or hazardous nature of the material, may pose a threat to public health, or otherwise endanger the safety or welfare of the public, shall be reported immediately to the appropriate Ohio EPA field office (during normal business hours) or to the Ohio EPA's Emergency Response Group (1-800-282-9378). (Additional reporting may be required pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act.)
9. The appropriate Ohio EPA field office is:  
**SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY  
1632 CENTRAL PKWY. CINCINNATI OH, 45210  
(513) 651-9437**
10.  If this term and condition is checked, the permit holder is subject to the attached special terms and conditions.

OHIO ENVIRONMENTAL PROTECTION AGENCY

*Donald R. Schreyer*

Director

EPA 3834  
Revised 9-90

05

APPLICATION NUMBER: 1431110128 P263  
FACILITY NAME: U.S. Dept. of Energy - 4089  
Fernald Environmental Management Project  
EQUIPMENT DESCRIPTION: High Pressure Water Wash System  
COMPANY ID: 78-002

### SPECIAL TERMS AND CONDITIONS

1. Applicable Rules:

The following rules of the Ohio Administrative Code and the Code of Federal Regulations establish the applicable emission limitations and/or control requirements for this source: 3745-15-07, 3745-17-07, 3745-17-11, 3745-31-05, 40 CFR Part 61 - Subpart H, and the terms and conditions specified in Permit to Install 14-1696.

(This condition in no way limits the applicability of other requirements of the Ohio Administrative Code to this source.)

2. Mass Emission Limitations, Operating Restrictions and Monitoring Requirements:

A. The mass emissions from this source shall not exceed 1.62 pounds of particulate per hour.

B. The maximum process weight rate for the grit blaster shall not exceed 283 pounds of grit per hour.

C. The grit blaster shall not operate more than five thousand four hundred (5,400) hours per year.

D. All radionuclide monitoring, testing and reporting shall be performed in accordance with the procedures specified in Sections 61.93 and 61.94 of 40 CFR, Part 61, Subpart H. Particulate testing shall be performed in accordance with OAC rule 3745-17-03 or through the use of an alternative testing procedure approved by the Ohio EPA.

1. A monitoring system designed to detect radionuclide activity, particulates and differential pressure shall be installed in exhaust stack EP78-1, downstream of all control devices. The monitoring system shall be operated and maintained in accordance with the procedures specified by the manufacturer. The monitoring system shall be operated continuously when emissions are exhausted through stack EP78-1.

2. The monitoring system shall have five (5) components: an isokinetic stack sampler, a radiation monitor (Geiger-Mueller or equivalent) differential pressure sensors and strip chart recorders to record the instantaneous radionuclide activity readings from the radiation monitor counter and for recording the differential pressure readings across the control device(s).

3. The recorder charts documenting the instantaneous differential pressure across the control device(s), and the instantaneous radionuclide activity readings, in addition to the laboratory results from the radionuclide and particulate emission rate analyses shall be kept on-site, available for inspection by representative of the Ohio EPA, for a minimum of five (5) years.
  4. The monitoring system shall be designed to sound an alarm and initiate a manual shutdown of the system(s) generating and emitting radionuclides through stack EP78-1 when either the radionuclide activity level, as indicated by the radiation monitor, exceeds a predetermined level approved by the Ohio EPA that ensures the health and safety of the public; or when the differential pressure across the control device(s), as indicated by the differential pressure sensors, fall below predetermined level(s) approved by the Ohio EPA that represents an abnormal condition such as a malfunction of the control device(s).
- E. Visible emissions of particulates from exhaust stack EP78-1 shall not exceed zero (0%) percent opacity.
- F. Radiation survey equipment will be provided in a designated room to expedite health physics survey operations.

3. Reporting Requirements:

The Fernald Environmental Management Project shall provide the Southwestern Ohio Air Pollution Control Agency (SWOAPCA) with an annual report which includes the results of the monitoring as recorded by the Department of Energy's (DOE) Effluent Information System and the close calculations required by 40 CFR 61.93(a). This report shall also contain a list of the radioactive materials used by the Decommissions and Decontamination Facility, a description of the emission controls and control efficiencies employed by these sources, and a brief description of all modifications made to these sources during the calendar year for which this report is prepared. This report shall be submitted to the SWOAPCA by June 30 of each year.

**PERMIT TO OPERATE AN AIR CONTAMINANT SOURCE**

Date of Issuance 01/29/93

Application No. 1431110128P264

Effective Date 01/29/93

Permit Fee \$210

This document constitutes issuance to:

U. S. DEPT OF ENERGY-FERNALD ENVR MANAGEM  
 WILLEY ROAD  
 FERNALD OHIO 45239

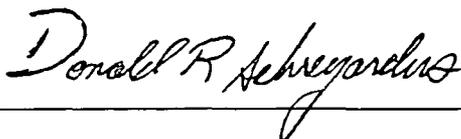
of a permit to operate for:

ULTRA HIGH PRESSURE WATER WASH SYSTEM  
 78-003

The following terms and conditions are hereby expressly incorporated into this permit to operate:

1. This permit to operate shall be effective until 01/29/96  
 You will be contacted approximately six months prior to this date regarding the renewal of this permit. If you are not contacted, please write to the appropriate Ohio EPA field office.
2. The above-described source is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.
3. Prior to any modification of this source, as defined in rule 3745-31-01 of the Ohio Administrative Code (OAC), a permit to install must be granted by the Ohio EPA pursuant to OAC Chapter 3745-31.
4. The Director of the Ohio EPA or an authorized representative may, subject to the safety requirements of the permit holder, enter upon the premises of this source at any time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal air pollution laws and regulations and the terms and conditions of this permit.
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8. Any unauthorized or emergency release of an air contaminant from this source which, due to the toxic or hazardous nature of the material, may pose a threat to public health, or otherwise endanger the safety or welfare of the public, shall be reported immediately to the appropriate Ohio EPA field office (during normal business hours) or to the Ohio EPA's Emergency Response Group (1-800-282-9378). (Additional reporting may be required pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act.)
9. The appropriate Ohio EPA field office is:  
 SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY  
 1632 CENTRAL PKWY. CINCINNATI OH, 45210  
 (513) 651-9437
10.  If this term and condition is checked, the permit holder is subject to the attached special terms and conditions.

OHIO ENVIRONMENTAL PROTECTION AGENCY



Director

APPLICATION NUMBER: 1431110128 P264

4089

FACILITY NAME: U.S. Dept. of Energy -  
Fernald Environmental Management Project  
EQUIPMENT DESCRIPTION: Ultra High Pressure Water Wash System  
COMPANY ID: 78-003

### SPECIAL TERMS AND CONDITIONS

1. Applicable Rules:

The following rules of the Ohio Administrative Code and the Code of Federal Regulations establish the applicable emission limitations and/or control requirements for this source: 3745-15-07, 3745-17-07, 3745-17-11, 3745-31-05, 40 CFR Part 61 - Subpart H, and the terms and conditions specified in Permit to Install 14-1696.

(This condition in no way limits the applicability of other requirements of the Ohio Administrative Code to this source.)

2. Mass Emission Limitations, Operating Restrictions and Monitoring Requirements:

A. The mass emissions from this source shall not exceed 1.62 pounds of particulate per hour.

B. The maximum process weight rate for the grit blaster shall not exceed 283 pounds of grit per hour.

C. The grit blaster shall not operate more than five thousand four hundred (5,400) hours per year.

D. All radionuclide monitoring, testing and reporting shall be performed in accordance with the procedures specified in Sections 61.93 and 61.94 of 40 CFR, Part 61, Subpart H. Particulate testing shall be performed in accordance with OAC rule 3745-17-03 or through the use of an alternative testing procedure approved by the Ohio EPA.

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E. Visible emissions of particulates from exhaust stack EP78-1 shall not exceed zero (0%) percent opacity.

F. Radiation survey equipment will be provided in a designated room to expedite health physics survey operations.

3. Reporting Requirements:

The Fernald Environmental Management Project shall provide the Southwestern Ohio Air Pollution Control Agency (SWOAPCA) with an annual report which includes the results of the monitoring as recorded by the Department of Energy's (DOE) Effluent Information System and the close calculations required by 40 CFR 61.93(a). This report shall also contain a list of the radioactive materials used by the Decommissions and Decontamination Facility, a description of the emission controls and control efficiencies employed by these sources, and a brief description of all modifications made to these sources during the calendar year for which this report is prepared. This report shall be submitted to the SWOAPCA by June 30 of each year.

4089

**STATEMENT OF**  
**THE OHIO ENVIRONMENTAL PROTECTION AGENCY**

1431110128P261  
**APPLICATION NUMBER**

\$210.00  
**AMOUNT DUE**

**U.S. DEPT OF ENERGY-FERNALD ENVR MANAGEM**  
**FACILITY NAME**

PURSUANT TO SEC.3745.11 OF THE OHIO REVISED  
CODE, FULL AMOUNT OF THIS PERMIT FEE IS DUE  
WITHIN FIFTEEN (15) DAYS OF THIS PERMIT.  
MAKE CHECKS PAYABLE TO:

**THE TREASURER OF THE STATE OF OHIO.**

RETURN THIS STATEMENT WITH YOUR REMITTANCE USING  
THE ENCLOSED ENVELOPE TO:

GENERAL ACCOUNTING  
OHIO EPA  
P.O. BOX 1049  
COLUMBUS, OH 43266-0149

ALL QUESTIONS REGARDING THIS FEE SHOULD INCLUDE  
THE APPLICATION NUMBER SHOWN ABOVE.

**STATEMENT OF**

**4089**

**THE OHIO ENVIRONMENTAL PROTECTION AGENCY**

1431110128P263  
**APPLICATION NUMBER**

\$210.00  
**AMOUNT DUE**

U.S. DEPT OF ENERGY-FERNALD ENVR MANAGEM  
**FACILITY NAME**

PURSUANT TO SEC.3745.11 OF THE OHIO REVISED  
CODE, FULL AMOUNT OF THIS PERMIT FEE IS DUE  
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MAKE CHECKS PAYABLE TO:

**THE TREASURER OF THE STATE OF OHIO.**

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THE ENCLOSED ENVELOPE TO:

GENERAL ACCOUNTING  
OHIO EPA  
P.O. BOX 1049  
COLUMBUS, OH 43266-0149

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THE APPLICATION NUMBER SHOWN ABOVE.

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STATEMENT OF  
THE OHIO ENVIRONMENTAL PROTECTION AGENCY

1431110128P264  
APPLICATION NUMBER

\$210.00  
AMOUNT DUE

U.S. DEPT OF ENERGY-FERNALD ENVR MANAGEM  
FACILITY NAME

PURSUANT TO SEC.3745.11 OF THE OHIO REVISED  
CODE, FULL AMOUNT OF THIS PERMIT FEE IS DUE  
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THE APPLICATION NUMBER SHOWN ABOVE.