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**PERMIT TO INSTALL HAMILTON COUNTY  
APPLICATION NO: 14-2808 NESHAPS TOXIC  
REVIEW**

**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

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George V. Voinovich  
Governor  
Donald R. Schregardus  
Director

Re: Permit to Install  
Hamilton County  
Application No: 14-2808  
NESHAPS  
TOXIC REVIEW

CERTIFIED MAIL

March 17, 1993

US DEPT OF ENERGY-FERNALD ENV MGMT PROJ  
BEHRAM SHROFF  
P O BOX 398705  
CINCINNATI, OH 45239

You are hereby notified that the Ohio Environmental Protection Agency has made a preliminary staff determination recommending that the Director issue a Permit to Install for the source(s) shown on the enclosed draft permit. This preliminary determination is not an authorization to begin construction or modification of your source(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the source(s) will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to: Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A permit to install may be issued in proposed or final form based on the preliminary determination, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting.

Upon issuance of a final permit to install a fee of \$200 will be due. Please do not submit any payment now.

If you have any questions about this draft permit, please contact the field office where you submitted your application, or Clara Dailey, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

cc: US EPA  
SW OHIO AIR POLLUTION CONTROL AGENCY  
Ohio-Kentucky-Indiana Regional Council of Govts.  
Kentucky Dept of Natural Resources & Env. Protection  
Indiana Office of Air Management

## Permit to Install Terms and Conditions

Application No. 14-2808  
APS Premise No. 1431110128  
Permit Fee:

Name of Facility: US DEPT OF ENERGY-FERNALD ENV MGMT PROJ

Person to Contact: BEHRAM SHROFF

Address: P O BOX 398705  
CINCINNATI, OH 45239

Location of proposed source(s): 7400 WILLEY RD  
FERNALD, OHIO

Description of proposed source(s):  
VACUUM SYSTEM WITH CYCLONE, CARTRIDGE FILTER & MEPA/HEPA FILTER-MODIFICATION OF PTI 14-1696.

Date of Issuance:

Effective Date:

The above named entity is hereby granted a permit to install for the above described source(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

\_\_\_\_\_  
Director

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TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months, if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCE(S)

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application and a \$15 application fee must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for US DEPT OF ENERGY-FERNALD ENV MGMT PROJ located in Hamilton County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

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<u>Ohio EPA Source Number</u>	<u>Source Identification/Description</u>	<u>BAT Determination</u>	<u>Applicable Federal and OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control &amp; Usage Requirements</u>
P285	Building 78 Vacuum System	Cyclone, Cartridge Filter, and MEPA/HEPA Filters	3745-31-05 3745-15-07 3745-17-07 3745-17-11 40 CFR Part 61 Subpart H	1.14 x 10 <sup>-5</sup> lbs/hr PM <sup>-6</sup> 1.14 x 10 <sup>-6</sup> lbs/hr Uranium, No Visible Emissions

SUMMARY  
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PM	4.99 x 10 <sup>-5</sup>
Uranium	4.99 x 10 <sup>-6</sup>

NESHAP REQUIREMENTS

The following source(s) are subject to the applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 61.

<u>Source No.</u>	<u>Source Description</u>	<u>NESHAP Regulation</u>
P285	Building 78 Vacuum System	40 CFR Part 61 Subpart H

The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 61 are also federally enforceable.

Pursuant to the NESHAP, the source owner/operator is required to report the following milestones:

1. Date of commencement of construction (no later than 30 days after such date);
2. Anticipated date of initial start-up (not more than 60 days or less than 30 days prior to such date);
3. Actual date of initial start-up (within 15 days after such date); and

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4. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
Division of Air Pollution Control  
Permit Management Unit  
P.O. Box 1049  
Columbus, OH 43266-0149

and

Department of Environmental Services  
Air Quality Program  
1632 Central Parkway  
Cincinnati, OH 45210

#### RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than two years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any authorized representative of the Director, for review during normal business hours.

#### REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to SW Ohio Air Pollution Control Agency 1632 Central Parkway, Cincinnati, Ohio 45210.

#### WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

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MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC Rule 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the SW Ohio Air Pollution Control Agency, 1632 Central Parkway, Cincinnati, Ohio 45210.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.



ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. 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.
  - a. 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 continuously when emissions are exhausted through stack EP78-1.
  - b. 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 devices.
  - c. The recorder charts documenting the instantaneous radionuclide activity readings and the differential pressure across the control devices 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.
  - d. The Fernald Environmental Management Project shall provide the Hamilton County Department of Environmental Services Air Quality Programs with an annual report which includes the results of the monitoring as recorded by the Department of Energy's effluent information system and the close calculations required by 40 CFR 61.93(A).
  - e. 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 devices, as indicated by the differential pressure sensors, falls below predetermined levels approved by the Ohio EPA that represents an abnormal condition such as malfunctions of the control devices.

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2. Visible emissions of particulates from exhaust stack EP78-1 shall not exceed zero (0%) percent opacity.
3. Radiation survey equipment shall be provided in a designated room to expedite health physics survey operations.

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