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**RECOMMENDATION TO ISSUE PERMIT TO  
INSTALL APPLICATION NO. 14-1785 (NORTH &  
EAST COLD SAWS)**

**09/07/89**

**OEPA/DOE-FMPC**

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**LETTER**



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149

Original File Copy

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Richard F. Celeste  
Governor

Re: Permit to Install  
HAMILTON County  
Application No. 14-1785  
NESHAPS

SEPTEMBER 7, 1989

U.S. DEPT OF ENERGY, FEED MATERIALS PRODUCTION CENTER  
P.O. BOX E  
OAK RIDGE, TN 37831

Attention: MARY STONE

Dear Sir:

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.

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 \$780.00 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 Section at (614) 481-4317.

Very truly yours,

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

Date Rec'd SEP 12 1989  
Log C-2597  
File 5470.5b  
Library \_\_\_\_\_

cc: US EPA  
SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY  
OHIO-KENTUCKY-INDIANA REGIONAL COUNCIL OF GOVERNMENTS  
INDIANA OFFICE OF AIR MANAGEMENT  
KENTUCKY DEPT. NATL. RESOURCES & ENVIRONMENTAL PROTECTION

## Permit to Install Terms and Conditions

Application No. 14-1785  
APS Premise No. 1431110128  
Permit Fee:

Name of Facility: U.S. DEPT OF ENERGY, FEED MATERIALS PRODUCTION CENTER

Person to Contact: MARY STONE

Address: P.O. BOX E  
OAK RIDGE, TN 37831

Location of proposed source(s): 7400 WILLEY ROAD, PLANT 5  
CROSBY TWP, OHIO

Description of proposed source(s): NORTH & EAST COLD SAWS CONTROLLED CARTRIDGE FILTER (95% EFF) AND HEPA FILTER (99.9% EFF).

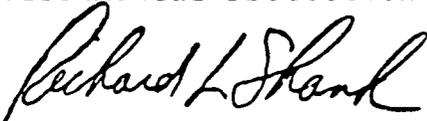
Date of Issuance:

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 these 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

EPA 3156

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Substantial construction for installation must take place within eighteen months of the effective date of this permit. This deadline may be extended by up to twelve 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.

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, examining records or reports pertaining to the construction, modification or installation of the above described source of environmental pollutants.

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.

The specified permit fee must be remitted within 15 days of the effective date of this permit to install.

If the construction of the proposed source 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 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.

#### EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for U.S. DEPT OF ENERGY FEED MATERIALS PRODUCTION CENTER located in HAMILTON County. The sources listed below shall not exceed the emission limits/control requirements contained in the following table:

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<u>Ohio EPA Source #</u>	<u>Source Identification</u>	<u>BAT Determination</u>	<u>Applicable Ohio EPA Rule</u>	<u>Allowable Emissions (lb/hr, lb/MMBTU, gr/DSCF, etc.)</u>
P054	East Cold Saw (5-055), rated @3,500 lbs./hr. max.	Use of a high efficiency cart-ridge filter (95% eff.) and HEPA filter (99.9% eff.)	3745-15-07 3745-17-07 3745-17-11 (B)(1) 3745-31-05 (A)(3)	$1.5 \times 10^{-6}$ lb. Part./hr.; $7.725 \times 10^{-8}$ lb. uranium/hr.; and no visible emissions from the control device
P054	North Cold Saw (5-057), rated @1,600 lbs./hr. max.	Same as above	Same as above	$1.49 \times 10^{-6}$ lb. Part./hr.; $7.67 \times 10^{-8}$ lb. uranium/hr.; and no visible emissions from the control device

SUMMARY  
 TOTAL NEW SOURCE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulate (PM-10)	$8.97 \times 10^{-6}$
Uranium	$4.62 \times 10^{-7}$

This condition in no way limits the applicability of any other state or federal regulation.

APPLICABILITY

This Permit to Install is applicable only to the air contaminant sources listed and does not include the installation or modification of wastewater disposal systems or solid waste disposal facilities. Separate application must be made to the Director for the installation or modification of any such wastewater disposal systems or solid waste disposal facilities.

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.

PERMIT TO OPERATE APPLICATION

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

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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.

MALFUNCTION/ABATEMENT

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.

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 <FIELD>. 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 said equipment, must be accompanied by the shutdown of the associated air pollution sources.

RADIONUCLIDES 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>
P054	East Cold Saw (5-055) rated @3,500 lbs/hr max.	Subpart H
P054	North Cold Saw (5-057) rated @1,600 lbs/hr max.	

The application and enforcement of these standards are performed by the United States Environmental Protection Agency.

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

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Reports are to be sent to:

United States Environmental Protection Agency  
David Kee  
Air & Radiation Branch (5AR-26)  
230 S. Dearborn St.  
Chicago, IL 60604

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and Ohio Environmental Protection Agency  
Division of Air Pollution Control  
Authorization and Compliance Unit  
P. O. Box 1049  
Columbus, Ohio 43266-0149

and SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY  
2400 Beekman Street  
Cincinnati, OH 45214

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. The East and North Cold Saws shall not be operated more than 6,000 hours per year.
2. The maximum process weight rate for the East Cold Saw shall not exceed 3,500 pounds per hour.
3. The maximum process weight rate for the North Cold Saw shall not exceed 1,600 pounds per hour.
4. The emissions from the operation of the East Gold Saw shall not exceed  $1.5 \times 10^{-6}$  pound of particulate per hour,  $4.5 \times 10^{-6}$  ton of particulate per year; and  $7.725 \times 10^{-8}$  pound of uranium per hour,  $2.3175 \times 10^{-7}$  ton of uranium per year.
5. The emissions from the operations of the North Cold Saw shall not exceed  $1.49 \times 10^{-6}$  ton of particulate per year; and  $7.67 \times 10^{-8}$  pound of uranium per hour,  $2.301 \times 10^{-7}$  ton per year.
6. The visible emissions of particulate from the operation of the sources described in this permit shall not exceed zero (0%) percent opacity.
7. These sources will be operated and maintained so that the emissions from the sources shall not be in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property, per OAC rule 3745-15-07.

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8. Any unauthorized or emergency release of an air contaminant from these sources 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 use of a cartridge filter (95% efficiency) and HEPA filter (99.9% efficiency) represents the use of Best Available Technology for these sources.
10. A monitoring system designed to detect radionuclides, particulates and differential pressure shall be installed in exhaust stack EP5-15, 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 EP5-15.
  - a. The monitoring system shall have five (5) components: an isokinetic stack sampler, a Geiger-Mueller counter, differential pressure sensors and device(s) for recording the instantaneous radionuclide emission readings from the Geiger-Mueller counter and for recording the differential pressure readings across the control device(s).
  - b. Samples obtained by the monitoring system shall be collected [specify frequency; i.e., hourly, daily, weekly, etc.] for laboratory analysis to determine both the radionuclide and particulate emission rates from stack EP5-15. The analyses for radionuclides and particulates shall be performed using procedures approved by the Ohio EPA.
  - c. The recorder charts documenting the instantaneous differential pressure across the control device(s), and the instantaneous radionuclide emission readings, in addition to the laboratory results from the radionuclide and particulate emission rate analyses, shall be submitted to the SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY (SWOAPCA) on a quarterly basis, and copies of both the recorder charts and the laboratory analyses shall be kept on-site, available for inspection, for a minimum of two (2) years.
  - d. On an annual basis the Feed Material Production Center shall provide the SWOAPCA with an Environmental Monitoring Report. This annual report will be submitted by June 15 of each operational year.
  - e. The monitoring system shall sound an alarm and initiate a shutdown of the system(s) generating and emitting radionuclides through stack EP5-15 when either the radionuclide emission

level, as indicated by the Geiger-Mueller counter, exceeds a predetermined level approved by the Ohio EPA that ensures the health and safety of the public; or the differential pressure across the control device(s), as indicated by the differential pressure sensors, falls below predetermined level(s) approved by the Ohio EPA that represent an abnormal condition such as a malfunction of the control device(s).

11. The facility shall maintain records which indicate the total number of hours that the East and North Cold Saws operate each year and the hourly production rate. These records shall be retained in the company's files for a period of not less than two years and shall be made available to the Director or any authorized representative of the Director for review during normal business hours.

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