

5278

**RECOMMENDATION TO ISSUE PERMIT TO
INSTALL APPLICATION NO. 14-1511 (METAL
DISSOLVER)**

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

- 5278

Richard F. Celeste
Governor

Re: Permit to Install
HAMILTON County
Application No. 14-1511
NESHAPS

SEPTEMBER 7, 1989

U.S. DEPT OF ENERGY, FEED MATERIALS PRODUCTION CENTER
P.O. BOX 398705
CINCINNATI, OHIO 45239-8705

Attention: MRS. 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 \$200.00 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 13 1989
Log C-2607
File 5472.501
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

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Permit to Install Terms and Conditions

Application No. 14-1511
APS Premise No. 1431110128
Permit Fee:

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

Person to Contact: MRS. MARY STONE

Address: P.O. BOX 398705
CINCINNATI, OHIO 45239-8705

Location of proposed source(s): 7400 WILLEY RD, PLT 2/3
CROSBY TWP, OHIO

Description of proposed source(s): METAL DISSOLVER CONTROLLED W/VENTURI SCRUBBER, CONDENSER & NAR TOWER.

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

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:

<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>
P234	Metal Dissolver	Venturi scrubber condenser, and NAR tower	3745-31-05 (A) (3)	1.13 lb/hr nitrogen oxides 3.69x10 ⁻⁵ lb/hr uranium

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SUMMARY
TOTAL NEW SOURCE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Nitrogen Oxides	4.75
Uranium	1.55×10^{-4}

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.

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>
P234	Metal Dissolver	40CFR, Part 61, Subpart H

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

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

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.

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.

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.

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 SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY. 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.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. The operation of this source shall not exceed 8,400 hours per year.
2. The concentration of NO_x in the exhaust gas stream, directly exiting the nitric acid^x recovery tower (bubble cap tower), shall not exceed 100 ppm.
3. The mass emissions from the operation of the Metal Dissolver shall not exceed 1.13 pounds per hour of nitrogen oxides and 3.69×10^{-5} pound per hour of uranium.
4. The use of an existing off gas condenser, venturi scrubber and nitric acid recovery (NAR) system which limits NO_x emission to 100 parts per million or less represents the use of Best Available Technology for the source.
5. A monitoring system designed to detect nitrogen oxides, radionuclides, particulates and differential pressure shall be installed in exhaust stack EP2-001, 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 EP2-001.
 - a. The monitoring system shall have six (6) components: an isokinetic stack sampler, a Geiger-Mueller counter, a nitrogen oxides monitor, differential pressure sensors and device(s) for recording the instantaneous radionuclide and nitrogen oxides emissions 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 EP2-001. 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), the instantaneous nitrogen oxide emission readings, 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 EP2-001 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).

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