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Facility Name: **United States Enrichment Corporation (USEC)**

Application Number: **06-5682**

Date: **Draft PTI (Date will be entered upon final issuance)**

**GENERAL PERMIT CONDITIONS**

**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 SOURCES**

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 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

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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 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 30 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.

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**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 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 filed no later than thirty days after commencement of operation.

**SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION**

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **United States Enrichment Corporation (USEC)** located in **Pike** County. The emissions units 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.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P466	XT-847 Glove Box	Two HEPA filters with prefilter (99.97% control)	40 CFR 61, Subparts A & H  3745-31-05	See Additional Special Terms and Conditions  See Additional Special Terms and Conditions

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	Facility total (USEC & DOE) effective dose equivalent (ede) <u>mrem/year</u>
RADIONUCLIDES	10.0 mrem/year

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**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.

<b><u>Source Number</u></b>	<b><u>Source Description</u></b>	<b><u>NESHAP Regulation (Subpart)</u></b>
P466	XT-847 Glove Box	40 CFR 61 Subparts A & 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:

- a. date of commencement of construction ( no later than 30 days after such date);
- b. anticipated date of initial start-up (not more than 60 days or less than 30 days prior to such date);
- c. actual date of initial start-up (within 15 days after such date); and
- d. date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P.O. Box 163669  
Columbus, OH 43216-3669

and **Ohio EPA Southeast District Office**  
**2195 Front Street**  
**Logan, Ohio 43138**

**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 three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

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#### **REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA Southeast District Office, 2195 Front Street, Logan, Ohio 43138.**

#### **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.

#### **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 **Ohio EPA Southeast District Office, 2195 Front Street, Logan, Ohio 43138.**

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.

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**CONSTRUCTION COMPLIANCE CERTIFICATION**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**ADDITIONAL SPECIAL TERMS AND CONDITIONS**

**A. Applicable Emissions Limitations and/or Control Requirements  
(also see Air Emissions Summary)**

1. The permittee shall comply with all the requirements of the National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61, including Subparts A and H.
2. Pursuant to 40 CFR 61, Subparts A and H, the permittee shall not emit radionuclides into the ambient air from any buildings, structures and operations on the contiguous site (including both DOE and USEC operations) in an amount that would cause any member of the public to receive in any year an effective dose equivalent of 10 mrem/yr or greater.

**B. Operational Restrictions**

1. During operation of this emissions unit, the permittee shall operate and maintain all associated air pollution control devices for this emissions unit.
2. This emissions unit shall not exceed 168,000 grams per day (7,000 grams/hour or 20 cans maximum throughput per hour multiplied by the maximum U<sup>235</sup> content per can - 350 grams) of U<sup>235</sup> material throughput.
3. This emissions unit shall not exceed 1,241,100 grams of U<sup>235</sup> material throughput per rolling 12-month period.

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4. In order to ensure federal enforceability for the first 12 months of operation after the effective date of this permit, this emissions unit shall not exceed the following operational limits:

MONTH(s)	Cumulative grams U <sup>235</sup> material throughput
1	306,100
1-2	391,100
1-3	476,100
1-4	561,100
1-5	646,100
1-6	731,100
1-7	816,100
1-8	901,100
1-9	986,100
1-10	1,071,100
1-11	1,156,100
1-12	1,241,100

**C. Monitoring and/or Recordkeeping Requirements**

1. The Permittee shall maintain records which list the following information:
- a. The permittee shall operate and maintain emissions monitoring systems for radionuclides in accordance with NESHAPs, 40 CFR 61, Subparts A and H.
  - b. The permittee shall maintain sufficient records to show compliance with the standard, radionuclide emissions, by determining the effective dose equivalent values to members of the public calculated using EPA approved sampling procedures, computer models CAP-88 or AIRDOS-PC, or other procedures for which EPA has granted prior approval. DOE facilities for which the maximally exposed individual lives within 3 kilometers of all sources of emissions in the facility, may use EPA's COMPLY model and associated procedures for determining dose for purposes of compliance.
  - c. The daily total number of grams of U<sup>235</sup> processed through this emissions unit.

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- d. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of grams of  $U^{235}$  processed through this emissions unit.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative monthly summation of grams of  $U^{235}$  processed through this emissions unit.

2. All facilities must maintain records documenting the source of input parameters including the results of all measurements upon which they are based, the calculations and/or analytical methods used to derive values for input parameters, and the procedure used to determine effective dose equivalent. This documentation should be sufficient to allow an independent auditor to verify the accuracy of the determination made concerning the facility's compliance with the standard. These records must be kept at the site of the facility for at least five years and, upon request, be made available for inspection by the Administrator, or an authorized representative.

#### **D. Reporting Requirements**

1. The permittee shall annually submit an emissions report that indicates the total annual maximum (ede) of radionuclide emissions from the Portsmouth facilities (DOE & USEC), in accordance with an approved method under NESHAPs, 40 CFR 61, Subparts A and H. The report shall be submitted by June 30 of each year and shall cover the previous calendar year.

In addition to the requirements of this permit, the annual report shall include the following information:

- a. The name and location of the facility.
- b. A list of the radioactive materials used at the facility.
- c. A description of the handling and processing that

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the radioactive materials undergo at the facility.

- d. A list of the stacks, vents, other points or release events where radioactive materials are released to the atmosphere.
- e. A description of the effluent controls that are used on each stack, vent, or other release point and an estimate of the efficiency of each control device.
- f. Distances from the points of release to the nearest residence, school, business or office and the nearest farms producing vegetables, milk, and meat.
- g. The values used for all other user-supplied input parameters for the computer models (e.g., meteorological data) and the source of this data.
- h. A brief description of all construction and modifications which were completed in the calendar year for which the report is prepared, but for which the requirement to apply for approval to construct or modify was waived under 40 CFR 61.96 and associated documentation developed by USEC/DOE to support the waiver. EPA reserves the right to require that USEC/DOE send to EPA all the information that normally would be required in an application to construct or modify, following receipt of the description and supporting documentation.
- i. Each report shall be signed and dated by a corporate officer or public official in charge of the facility and contain the following declaration immediately above the signature line: "I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the

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possibility of fine and imprisonment."

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2. If the annual report under Section D.1 above shows an exceedance of any emissions limitation under this permit, then the permittee shall commence and maintain monthly reporting in accordance with 40 CFR 61.94. See Section F.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month summation of grams of U<sup>235</sup> processed through this emissions unit and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative summation of grams of U<sup>235</sup> processed through this emissions unit.
4. The permittee shall immediately notify the Ohio EPA Southeast District Office of any exceedance (including exceedances from the monitored emissions units ) of operation of this permit.
5. In the event of a malfunction of any emissions unit, the Director or his representative may request, in writing, that the permittee submit a dose evaluation using approved methods. The purpose of the dose evaluation will be to calculate the maximum equivalent dose resulting from the malfunction to any member of the public.

These reports shall be submitted to the Ohio EPA Southeast District Office within 45 days of when the exceedance occurred.

6. Copies of all reports, submissions and correspondence required by or relating to this permit and the National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61, shall be sent to:
  - a. Michael Murphy  
USEPA Region V  
Air and Radiation Division  
AE-17J  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

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- b. APC Supervisor  
Ohio EPA  
Southeast District Office  
2195 Front Street  
Logan, OH 43138
  
- c. Air Quality Modeling and Planning Section  
Ohio EPA  
Lazarus Government Center  
Division of Air Pollution Control  
P.O. Box 1049  
Columbus, OH 43216-1049

**E. Compliance Determination / Testing Requirements**

- 1. Compliance with the emissions limitations in this permit shall be determined in accordance with the following methods:

Emissions Limitation: effective dose equivalent (ede) of 10 mrem/yr, facility wide total (USEC & DOE combined)

Applicable Compliance Method: Compliance with this standard shall be determined by calculating, based on emissions data from that period, the greatest effective dose equivalent to any member of the public at any offsite point where there is a residence, school, business or office. The owners or operators of each facility (DOE & USEC) shall submit an annual report to both EPA headquarters and the appropriate regional EPA office by June 30 which includes the results of the monitoring as recorded in DOE's Effluent Information System and the dose calculations required by 40 CFR 61.93(a) for the previous calendar year. See D.1 above.

Compliance with the emission rates from individual emissions unit(s) in this permit shall be determined by the records kept in accordance with the Monitoring and Recordkeeping Requirements for the emissions unit.

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**F. Miscellaneous Requirements**

1. If the facility is not in compliance with the emissions limitations of 40 CFR 61.92 in the calendar year covered by the report, then the facility must commence reporting to the Administrator on a monthly basis the information listed in section D.1., for the preceding month. These reports will start the month immediately following the submittal of the annual report for the year in noncompliance and will be due 30 days following the end of each month. This increased level of reporting will continue until the Administrator has determined that the monthly reports are no longer necessary. In addition to all the information required in Section D.1. of this permit, monthly reports shall also include the following information:
  - a. All controls or other changes in operation of the facility that will be or are being installed to bring the facility into compliance.
  - b. If the facility is under a judicial or administrative enforcement decree, the report will describe the facilities performance under the terms of the decree.
2. In those instances where the information requested is classified, such information will be made available to EPA separate from the report and will be handled and controlled according to applicable security and classification regulations and requirements.