



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
PIKE COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 06-07388

Fac ID: 0666000063

DATE: 10/5/2004

Depleted Uranium Hexafluoride Conversion
Don Grace
PO Box 610
Piketon, OH 45661

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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 within thirty (30) days after the notice of the Directors 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 Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: USEPA

SEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 10/5/2004
Effective Date: 10/5/2004**

FINAL PERMIT TO INSTALL 06-07388

Application Number: 06-07388
Facility ID: 0666000063
Permit Fee: **\$800**
Name of Facility: Depleted Uranium Hexafluoride Conversion
Person to Contact: Don Grace
Address: PO Box 610
Piketon, OH 45661

Location of proposed air contaminant source(s) [emissions unit(s)]:
**3930 US 23 Perimeter Rd.
Piketon, Ohio**

Description of proposed emissions unit(s):
Conversion of UF6 to uranium oxide.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(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 emissions unit(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 emissions unit(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

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable 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 air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of 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 the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

9. Construction of New Sources(s)

The proposed emissions unit(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 cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(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 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 cannot meet the requirements of this permit or cannot meet applicable standards.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. 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.

13. Source Operation and Operating Permit Requirements 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, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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Depleted Uranium Hexafluoride Conversion

PTI Application: 06-07388

Issued: 10/5/2004

Facility ID: 0666000063

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Depleted Uranium Hexafluoride Conversion

PTI Application: 06-07388

Issued: 10/5/2004

Facility ID: 0666000063

14. 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.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
Hydrogen fluoride	0.063
Radionuclides	Emissions of radionuclides to the ambient air from any buildings, structures and operations on the contiguous site shall not exceed those amounts that would cause any member of the public to receive in any year an effective dose equivalent of 10 mrem/yr.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Depleted Uranium Hexafluoride Conversion Process Line 1 with 2 primary parallel scrubbers which are vented to the secondary scrubber. (The secondary scrubber is also shared with P002, and P003.)	OAC rule 3745-31-05(A)(3)	Hydrogen fluoride (HF) emissions shall not exceed 0.0048 lb/hr. HF emissions shall not exceed 0.021 TPY. See A.2.c. and d. below for emission control requirements. The requirements of this rule include compliance with the requirements of 40 CFR Part 61, Subparts A & H. See A.2.a
	OAC rule 3745-31-05(a)(2)(d)	See A.2.b and e

2. Additional Terms and Conditions

- 2.a This facility is subject to be in compliance with all parts of 40 CFR 61, Subparts A and H, as applicable, with the understanding that these regulations are directly enforceable by US EPA.
- 2.b OAC rule 3745-31-05(A)(2)(d) provides that the director shall issue a permit on the basis that the new installation shall be in compliance with "National Emission Standards for Hazardous Air Pollutants" adopted by the administrator of the United States environmental protection agency pursuant to section 112 of the Clean Air Act and the

regulations promulgated thereunder (including 40 CFR Part 61 and 40 CFR Part 63). Due to the information supplied by Uranium Disposition Services, LLC (UDS) and the cited rule, the permittee and any additional facility or organization entering into a contractual agreement with UDS for work at this site shall comply with all the requirements of 40 CFR Part 61, Subparts A and H.

- 2.c** The secondary scrubber serving this emissions unit is shared with P002 and P003. This permit requires said secondary scrubber to be tested for HF. During the emission testing, P001, P002, and P003 shall be operated at maximum capacity, in order to load the scrubber as heavily as possible.

To determine compliance with the hourly HF limitation, the allowable emission rate for P002 and P003 shall be added to the allowable emission rate from P001. If the tested hourly HF rate is less than this calculated figure, all three emissions units shall be deemed to be in compliance. If the tested hourly HF emissions rate exceeds this figure, all three emissions units shall be deemed to be out of compliance.

- 2.d** All the HF emissions from all the equipment comprising this emissions unit shall be vented to the primary parallel scrubbers and then vented to the secondary scrubber.

2.e Facility Specific Terms and Conditions

- i. The permittee shall submit to Ohio EPA a copy of the annual compliance report of the radio nuclide emissions from all the emissions units at the facilities (UDS & DOE & USEC) as submitted to U.S. EPA and required under 40 CFR Part 61, Subparts A and H.

All copies of reports required by or relating to 40 CFR Part 61, shall be sent to:

DAPC Supervisor
Ohio Environmental Protection Agency
Southeast District Office
2195 Front Street
Logan, OH 43138

Assistant Chief Permitting
Ohio Environmental Protection Agency
Division of Air Pollution Control
Lazarus Government Center
122 South Front Street

Columbus, Ohio 43216-1049

Electronic reporting is an acceptable alternative to paper reporting with prior approval from Ohio EPA.

- ii. In those instances where the information requested in the annual report is classified, such information will be made available to the Ohio EPA Southeast District Office separate from the report, and will be handled and controlled according to applicable security and classification regulations and requirements.

B. Operational Restrictions

1. The scrubber liquor recirculation flow rate to the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new minimum scrubber liquor recirculation flow rate based upon the operation of the scrubbers during the emissions test.
2. The pH of the scrubbing liquor in the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new minimum pH value based upon the operation of the scrubbers during the emissions test.
3. The pressure drop across the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the scrubbers manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new pressure drop range based upon the operation of the scrubber during that emissions test.
4. The conversion building shall be maintained under negative pressure while the emission unit is operating to assure that all of the HF emissions from all the equipment comprising this emissions unit is vented to the primary parallel scrubbers and then vented to the secondary scrubber.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the primary parallel scrubbers and the secondary scrubber liquor recirculation flow rate, the pH of the scrubber liquor in the primary parallel scrubbers and the secondary scrubber, the static pressure drop across the primary parallel scrubbers and the secondary scrubber, and the monitoring of the negative pressure in the conversion building while the emissions unit is in operation. The monitoring

devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day for each scrubber and the conversion building:

- a. The scrubber liquor recirculation, in gpm, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- b. The scrubber liquor pH, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- c. The pressure drop across the scrubber, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- d. The conversion building pressure, on a twice-per-shift basis, but not less than 3 hours apart during each shift; and
- e. The downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the following primary parallel scrubbers, the secondary scrubber, and the conversion building operating parameters were not maintained within the required levels:
 - a. The scrubber liquor recirculation flow rate;
 - b. The pH of the scrubber liquor;
 - c. The pressure drop across the scrubber; and
 - d. The conversion building pressure
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
3. The quarterly deviation reports shall be submitted in accordance with the General Terms and

Depleted Uranium Hexafluoride Conversion

PTI Application: 06-07288

Issued

Facility ID: 0666000063

Emissions Unit ID: P001

Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Hydrogen fluoride (HF) emissions shall not exceed 0.0048 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 26 or 26A as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources") .

b. Emission Limitation:

HF emissions shall not exceed 0.021 TPY

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$\text{TER} * 8,760 \text{ hours of operation per year} * 0.0005 \text{ ton/lb} = \text{tpy}$$

where:

TER = tested emission rate per the most recent performance test.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 60 days after startup of the emissions unit;
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for HF;
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 26 or 26A for HF; and
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result

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Deplet

PTI A

Issued: 10/5/2004

Emissions Unit ID: **P001**

in the Ohio EPA Southeast District Office's refusal to accept the results of the emission test(s).

Deplet**PTI A****Issued: 10/5/2004**Emissions Unit ID: **P001**

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Depleted Uranium Hexafluoride Conversion Process Line 2 with 2 primary parallel scrubbers which are vented to the secondary scrubber. (The secondary scrubber is also shared with P001, and P003.)	OAC rule 3745-31-05(A)(3)	Hydrogen fluoride (HF) emissions shall not exceed 0.0048 lb/hr. HF emissions shall not exceed 0.021 TPY. See A.2.c. and d. below for emission control requirements. The requirements of this rule include compliance with the requirements of 40 CFR Part 61, Subparts A & H. See A.2.a
	OAC rule 3745-31-05(a)(2)(d)	See A.2.b and e

2. Additional Terms and Conditions

- 2.a This facility is subject to be in compliance with all parts of 40 CFR 61, Subparts A and H, as applicable, with the understanding that these regulations are directly enforceable by US EPA.
- 2.b OAC rule 3745-31-05(A)(2)(d) provides that the director shall issue a permit on the basis that the new installation shall be in compliance with "National Emission Standards for Hazardous Air Pollutants" adopted by the administrator of the United States

Depleted Uranium Hexafluoride Conversion

PTI Application: 06-07288

Issued

Facility ID: 0666000063

Emissions Unit ID: P002

environmental protection agency pursuant to section 112 of the Clean Air Act and the regulations promulgated thereunder (including 40 CFR Part 61 and 40 CFR Part 63). Due to the information supplied by UDS and the cited rule, the permittee and any additional facility or organization entering into a contractual agreement with UDS for work at this site shall comply with all the requirements of 40 CFR Part 61, Subparts A and H.

- 2.c** The secondary scrubber serving this emissions unit is shared with P001 and P003. This permit requires said secondary scrubber to be tested for HF. During the emission testing, P001, P002, and P003 shall be operated at maximum capacity, in order to load the scrubber as heavily as possible.

To determine compliance with the hourly HF limitation, the allowable emission rate for P001 and P003 shall be added to the allowable emission rate from P002. If the tested hourly HF rate is less than this calculated figure, all three emissions units shall be deemed to be in compliance. If the tested hourly HF emissions rate exceeds this figure, all three emissions units shall be deemed to be out of compliance.

- 2.d** All the HF emissions from all the equipment comprising this emissions unit shall be vented to the primary parallel scrubbers and then vented to the secondary scrubber.

2.e Facility Specific Terms and Conditions

- i. The permittee shall submit to Ohio EPA a copy of the annual compliance report of the radio nuclide emissions from all the emissions units at the facilities (UDS & DOE & USEC) as submitted to U.S. EPA and required under 40 CFR Part 61, Subparts A and H.

All copies of reports required by or relating to 40 CFR Part 61, shall be sent to:

DAPC Supervisor
Ohio Environmental Protection Agency
Southeast District Office
2195 Front Street
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Assistant Chief Permitting
Ohio Environmental Protection Agency
Division of Air Pollution Control
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Electronic reporting is an acceptable alternative to paper reporting with prior approval from Ohio EPA.

- ii. In those instances where the information requested in the annual report is classified, such information will be made available to the Ohio EPA Southeast District Office

separate from the report, and will be handled and controlled according to applicable security and classification regulations and requirements.

B. Operational Restrictions

1. The scrubber liquor recirculation flow rate to the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new minimum scrubber liquor recirculation flow rate based upon the operation of the scrubbers during the emissions test.
2. The pH of the scrubbing liquor in the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new minimum pH value based upon the operation of the scrubbers during the emissions test.
3. The pressure drop across the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the scrubbers manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new pressure drop range based upon the operation of the scrubber during that emissions test.
4. The conversion building shall be maintained under negative pressure while the emission unit is operating to assure that all of the HF emissions from all the equipment comprising this emissions unit is vented to the primary parallel scrubbers and then vented to the secondary scrubber.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the primary parallel scrubbers and the secondary scrubber liquor recirculation flow rate, the pH of the scrubber liquor

in the primary parallel scrubbers and the secondary scrubber, the static pressure drop across the primary parallel scrubbers and the secondary scrubber, and the monitoring of the negative pressure in the conversion building while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day for each scrubber and the conversion building:

- a. The scrubber liquor recirculation, in gpm, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- b. The scrubber liquor pH, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- c. The pressure drop across the scrubber, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- d. The conversion building pressure, on a twice-per-shift basis, but not less than 3 hours apart during each shift; and
- e. The downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the following primary parallel scrubbers, the secondary scrubber, and the conversion building operating parameters were not maintained within the required levels:
 - a. The scrubber liquor recirculation flow rate;
 - b. The pH of the scrubber liquor;
 - c. The pressure drop across the scrubber; and
 - d. The conversion building pressure
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.

3. The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

Hydrogen fluoride (HF) emissions shall not exceed 0.0048 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 26 or 26A as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

- b. Emission Limitation:

HF emissions shall not exceed 0.021 TPY

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$\text{TER} * 8,760 \text{ hours of operation per year} * 0.0005 \text{ ton/lb} = \text{tpy}$$

where:

TER = tested emission rate per the most recent performance test.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 60 days after startup of the emissions unit;

- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for HF;
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 26 or 26A for HF; and
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Southeast District Office's refusal to accept the results of the emission test(s).

Depleted Uranium Hexafluoride Conversion

PTI Application: 06-07288

Issued**Facility ID: 0666000063**Emissions Unit ID: **P002**

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Depleted Uranium Hexafluoride Conversion Process Line 3 with 2 primary parallel scrubbers which are vented to the secondary scrubber. (The secondary scrubber is also shared with P001, and P002.)	OAC rule 3745-31-05(A)(3)	<p>Hydrogen fluoride (HF) emissions shall not exceed 0.0048 lbs/hr.</p> <p>HF emissions shall not exceed 0.021 TPY.</p> <p>See A.2.c. and d. below for emission control requirements.</p> <p>The requirements of this rule include compliance with the requirements of 40 CFR Part 61, Subparts A & H. See A.2.a</p>
	OAC rule 3745-31-05(a)(2)(d)	See A.2.b and e

2. Additional Terms and Conditions

- 2.a This facility is subject to be in compliance with all parts of 40 CFR 61, Subparts A and H, as applicable, with the understanding that these regulations are directly enforceable by US EPA.
- 2.b OAC rule 3745-31-05(A)(2)(d) provides that the director shall issue a permit on the basis that the new installation shall be in compliance with "National Emission Standards for Hazardous Air Pollutants" adopted by the administrator of the United States environmental protection agency pursuant to section 112 of the Clean Air Act and the

regulations promulgated thereunder (including 40 CFR Part 61 and 40 CFR Part 63). Due to the information supplied by UDS and the cited rule, the permittee and any additional facility or organization entering into a contractual agreement with UDS for work at this site shall comply with all the requirements of 40 CFR Part 61, Subparts A and H.

- 2.c** The secondary scrubber serving this emissions unit is shared with P001 and P002. This permit requires said secondary scrubber to be tested for HF. During the emission testing, P001, P002, and P003 shall be operated at maximum capacity, in order to load the scrubber as heavily as possible.

To determine compliance with the hourly HF limitation, the allowable emission rate for P001 and P002 shall be added to the allowable emission rate from P003. If the tested hourly HF rate is less than this calculated figure, all three emissions units shall be deemed to be in compliance. If the tested hourly HF emissions rate exceeds this figure, all three emissions units shall be deemed to be out of compliance.

- 2.d** All the HF emissions from all the equipment comprising this emissions unit shall be vented to the primary parallel scrubbers and then vented to the secondary scrubber.

2.e Facility Specific Terms and Conditions

- i. The permittee shall submit to Ohio EPA a copy of the annual compliance report of the radio nuclide emissions from all the emissions units at the facilities (UDS & DOE & USEC) as submitted to U.S. EPA and required under 40 CFR Part 61, Subparts A and H.

All copies of reports required by or relating to 40 CFR Part 61, shall be sent to:

DAPC Supervisor
Ohio Environmental Protection Agency
Southeast District Office
2195 Front Street
Logan, OH 43138

Assistant Chief Permitting
Ohio Environmental Protection Agency
Division of Air Pollution Control
Lazarus Government Center
122 South Front Street
Columbus, Ohio 43216-1049

Electronic reporting is an acceptable alternative to paper reporting with prior approval from Ohio EPA.

- ii. In those instances where the information requested in the annual report is classified, such information will be made available to the Ohio EPA Southeast District Office separate from the report, and will be handled and controlled according to applicable security and classification regulations and requirements.

B. Operational Restrictions

1. The scrubber liquor recirculation flow rate to the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new minimum scrubber liquor recirculation flow rate based upon the operation of the scrubbers during the emissions test.
2. The pH of the scrubbing liquor in the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new minimum pH value based upon the operation of the scrubbers during the emissions test.
3. The pressure drop across the primary parallel scrubbers and the secondary scrubber shall be maintained in accordance with the scrubbers manufacturer's specifications. After the initial emissions testing which demonstrates that the emissions unit was operating in compliance with the applicable requirements, the permittee shall establish a new pressure drop range based upon the operation of the scrubber during that emissions test.
4. The conversion building shall be maintained under negative pressure while the emission unit is operating to assure that all of the HF emissions from all the equipment comprising this emissions unit is vented to the primary parallel scrubbers and then vented to the secondary scrubber.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the primary parallel scrubbers and the secondary scrubber liquor recirculation flow rate, the pH of the scrubber liquor in the primary parallel scrubbers and the secondary scrubber, the static pressure drop across the primary parallel scrubbers and the secondary scrubber, and the monitoring of the negative pressure in the conversion building while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's

recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day for each scrubber and the conversion building:

- a. The scrubber liquor recirculation, in gpm, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- b. The scrubber liquor pH, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- c. The pressure drop across the scrubber, on a twice-per-shift basis, but not less than 3 hours apart during each shift;
- d. The conversion building pressure, on a twice-per-shift basis, but not less than 3 hours apart during each shift; and
- e. The downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the following primary parallel scrubbers, the secondary scrubber, and the conversion building operating parameters were not maintained within the required levels:
 - a. The scrubber liquor recirculation flow rate;
 - b. The pH of the scrubber liquor;
 - c. The pressure drop across the scrubber; and
 - d. The conversion building pressure
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the emissions unit was in operation and the capture (collection) system and/or control device were not in operation.
3. The quarterly deviation reports shall be submitted in accordance with the General Terms and

Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Hydrogen fluoride (HF) emissions shall not exceed 0.0048 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 26 or 26A as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources") .

b. Emission Limitation:

HF emissions shall not exceed 0.021 TPY

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$\text{TER} * 8,760 \text{ hours of operation per year} * 0.0005 \text{ ton/lb} = \text{tpy}$$

where:

TER = tested emission rate per the most recent performance test.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 60 days after startup of the emissions unit;
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for HF;
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 26 or 26A for HF; and
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result

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in the Ohio EPA Southeast District Office's refusal to accept the results of the emission test(s).

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Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Depleted Uranium Hexafluoride Conversion Facility Building HVAC System	OAC rule 3745-31-05(A)(3)	The requirements of this rule include compliance with the requirements of 40 CFR Part 61, Subparts A & H. See A.2.a
	OAC rule 3745-31-05(a)(2)(d)	See A.2.b and Part II.A.1 and 2

2. Additional Terms and Conditions

- 2.a This facility is subject to be in compliance with all parts of 40 CFR 61, Subparts A and H, as applicable, with the understanding that these regulations are directly enforceable by US EPA.
- 2.b OAC rule 3745-31-05(A)(2)(d) provides that the director shall issue a permit on the basis that the new installation shall be in compliance with "National Emission Standards for Hazardous Air Pollutants" adopted by the administrator of the United States environmental protection agency pursuant to section 112 of the Clean Air Act and the regulations promulgated thereunder (including 40 CFR Part 61 and 40 CFR Part 63). Due to the information supplied by UDS and the cited rule, the permittee and any additional facility or organization entering into a contractual agreement with UDS for work at this site shall comply with all the requirements of 40 CFR Part 61, Subparts A and H.

B. Operational Restrictions

None

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C. Monitoring and/or Record keeping Requirements

None

D. Reporting Requirements

None

E. Testing Requirements

None

F. Miscellaneous Requirements

None