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State of Ohio Environmental Protection Agency

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Street Address:

Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Ohio Environmental
Protection Agency
Southeast District

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

02/26/08

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

**P474 (X-627 Groundwater)X-627 Ground Water
Treatment Facility**

US DOE - Portsmouth Gaseous Diffusion Plant (06-66-00-0050)

Robert Anderson
P.O. Box 385
Waverly, OH 45690

Dear Robert Anderson:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them 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 Compliance Assistance and Pollution Prevention at (800) 329-7518. For more information related to air pollution control in Ohio, visit www.epa.state.oh/dapc.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. 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, OH 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 02/26/08

Expiration Date: 02/26/13

This document constitutes issuance to:

Facility ID: 06-66-00-0050
US DOE - Portsmouth Gaseous Diffusion Plant
3930 U.S. Route 23 South
Piketon/Scioto Township, OH 45661

of a permit to operate for:

P474 (X-627 Groundwater)
X-627 Ground Water Treatment Facility

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

A handwritten signature in cursive script that reads "Chris Korleski".

Chris Korleski
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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 and federal 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 a need 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
X-627 Ground Water Treatment Facility, air stripper with liquid phase carbon absorption unit, vapor-phase carbon adsorption unit, and ancillary filtration and recovery equipment.	OAC rule 3745-31-05(A)(3) (PTI # 06-07283)	Emissions of Organic Compounds (OC) shall not exceed 0.27 lb/hr. Emissions of OC shall not exceed 1.18 TPY. The requirements of this rule also 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 F.1.

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 USEPA.
- 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 DOE and the cited rule, the permittee and any additional facility or organization entering into a contractual agreement with DOE for work at this site shall comply with all the requirements of 40 CFR Part 61, Subparts A and H.

B. Operational Restrictions

1. The permittee shall operate the liquid phase carbon absorption unit, and the vapor-phase carbon adsorption unit system whenever this emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit P474 was evaluated based on the groundwater data from engineering report design submittal and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Trichloroethylene (TCE)

TLV (mg/m³): 269

Maximum Hourly Emission Rate (lbs/hr): 0.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 10.49

MAGLC (ug/m³): 6,405

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. Changes in groundwater data, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. Changes in groundwater data, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

2. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
3. The permittee shall maintain daily records that document any time periods when the liquid phase carbon absorption unit, and/or the vapor-phase carbon adsorption unit systems were not in service when the emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Ohio EPA Southeast District Office, in writing, of any daily record showing that the liquid phase carbon absorption unit and/or the vapor-phase carbon adsorption unit systems were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 45 days after the exceedance occurs.

E. Testing Requirements

1. Emission Limitation:

Emissions of Organic Compounds (OC) shall not exceed 0.27 lb/hr.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 25 or 25A.

2. Emission Limitation:

Emissions of OC shall not exceed 1.18 TPY.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum hourly emission rate (0.27 lbs/hr) by the maximum annual hours of operation (8,760 hours) and then dividing by 2,000 lbs/ton.

F. Miscellaneous Requirements

1. State and Federally Enforceable Facility Specific Terms and Conditions

- 1.a The permittee shall submit to Ohio EPA a copy of the annual compliance report of the radionuclide emissions from all the emissions units at the facilities (DOE, USEC, & UDS) 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
50 West Town Street, Suite 700
Columbus, Ohio 43215

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

- 1.b 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.

