**Synthetic Minor Determination and/or ☐ Netting Determination**
Permit To Install: "06-08290"

A. Source Description

United States Enrichment Corp.'s (USEC) American Centrifuge Plant (ACP) is proposing to install a 78.8 MMBtu/hr Johnston Boiler (B043) firing either natural gas or low-sulfur distillate oil (0.05% S content) at the USEC facility near Piketon, Ohio, Pike County. The boiler will supply hot water to the recirculating hot water loop that provides heat to most of the buildings in the ACP. USEC has requested restrictions in the use of distillate oil to avoid PSD for NOx, to comply with Ohio EPA modeling policy for NOx per Engineering guide 69.

B. Facility Emissions and Attainment Status

The boiler has the potential to emit 66.66 tons per year of NOx if distillate oil were used exclusively.

C. Source Emissions

USEC has requested federally enforceable limits on the amount and type of fuel to be burned in the boiler. By limiting distillate oil usage to no more than 2,000,000 gallons per 12-month rolling period annual emissions of NOx shall not exceed 27.42 tons, and emissions of SO2 shall not exceed 7.10 tons.

D. Conclusion

By restricting the type and amount of distillate oil used in the boiler, the terms and conditions of this permit to install will allow the facility to avoid using more than half of the allowable PSD increment for NOx and comply with the requirements of Ohio EPA's Engineering Guide #69. Excursion reports will be required for B043 to ensure compliance.

State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL** **CERTIFIED MAIL**
**PIKE COUNTY**

Street Address: Mailing Address: Lazarus Gov. Center
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329

**Application No:** 06-08290
**Fac ID:** 0666000000

**DATE:** 7/10/2007

United States Enrichment Corp
Robert Blythe
3930 US Route 23 South
Piketon, OH 45661-0628

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(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 facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed of final form based on the draft action, 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** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

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

**CC:** **USEPA** **SEDO** **KY** **WV**

**PIKE COUNTY**

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **06-08290** FOR AN AIR CONTAMINANT SOURCE
FOR **United States Enrichment Corp**

On 7/10/2007 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **United States Enrichment Corp**, located at **3930 US Rte 23 S, Piketon**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 06-08290:

**ACP Boiler No 3.**

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Bruce Weinberg, Ohio EPA, Southeast District Office, 2195 Front Street, Logan, OH 43138
[(740)385-8501]

# DRAFT PERMIT TO INSTALL 06-08290

| | |
|---|---|
| Application Number: | 06-08290 |
| Facility ID: | 0666000000 |
| Permit Fee: | **To be entered upon final issuance** |
| Name of Facility: | United States Enrichment Corp |
| Person to Contact: | Robert Blythe |
| Address: | 3930 US Route 23 South<br>Piketon, OH 45661-0628 |

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

Description of proposed emissions unit(s):
**ACP Boiler No 3.**

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

_____

Chris Korleski
Director

## A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

### 1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. 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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

**2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

**3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

**6. General Requirements**

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the

permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

**7. 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

**10. Permit-To-Operate Application**

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be <u>obtained before</u> the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit.

**11. 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.

**12. 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.

**13. Permit-To-Install**

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

## B. State Only Enforceable Permit-To-Install General Terms and Conditions

### 1. Compliance Requirements

The emissions unit(s) identified in this Permit 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 of state-only enforceable 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 state-only required 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 (i.e., postmarked) quarterly, 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. 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.

### 4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

**5. Construction of New Sources(s)**

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.

**6. 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.

**7. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**8. Construction Compliance Certification**

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

**9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**United States Enrichment Corp** **Facility ID: 0666000000**
**PTI Application: 06-08290**
**Issued: To be entered upon final issuance**

**C. 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

| Pollutant | Tons Per Year w/NG | Tons Per Year w/Distillate Oil |
|---|---|---|
| NOx | 12.42 | 27.42 |
| OC | 1.86 | 1.37 |
| SO2 | NA | 7.10 |
| CO | 28.41 | 5.50 |
| PE | 2.57 | 3.30 |

## A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

## B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Emissions Unit ID: B043

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. 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.

**Operations, Property, and/or Equipment - B043 - 78.8 mmBTU/Hr Johnston Boiler Model PFTS2000-3LG125W firing Natural Gas or Low-Sulfur Distillate Oil. (Rated at 76.1 mmBTU on fuel oil.) ACP Boiler No. 3, with Low-NOx burners and Flue-gas recirculation (for natural gas firing only).**

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|
| OAC rule 3745-31-05(A)(3) Boiler Utilizing either Natural Gas or Distillate Oil. | Nitrogen oxides (NOx) emissions shall not exceed 0.036 lb/mmBtu and 12.42 TPY using natural gas and 0.20 lb/mmBtu using distillate oil.<br><br>Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu and 28.41 TPY using natural gas.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 40 CFR 63.7500 and 40 CFR 63 Subpart DDDDD, and 40 CFR, Part 60, Subpart Dc. |
| 40 CFR Part 60 Subpart Dc | Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity. |
| OAC rule 3745-17-10(B)(1) | Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input. |
| OAC rule 3745-18-06(D) | Sulfur dioxide (SO2) emissions shall not exceed 0.05 lb/mmBtu of actual heat input using distillate oil. |
| OAC rule 3745-21-07(B) | See section A.I.2.d. |
| OAC rule 3745-21-08(B) | See section A.I.2.e. |

Emissions Unit ID: B043

| | |
|---|---|
| OAC rule 3745-31-05(C) (To avoid PSD and comply with state modeling policy for NOx) | This emissions unit shall not use more than 2,000,000 gallons of distillate oil per rolling, 12-month period.<br><br>Emissions of NOx shall not exceed 27.42 tons per rolling 12-month period using distillate oil.<br><br>Emissions of SO2 shall not exceed 7.10 tons per rolling 12-month period. See section A.I.2.g. |
| ORC 3704.03.(T)(4) | See section A.I.2.h. |
| OAC rule 3745-17-07(A)(1) | The emission limitation specified by this rule is equivalent to the emission limitation specified in 40 CFR Part 60 Subpart Dc. |

**2. Additional Terms and Conditions**

**2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or distillate oil, fuel sulfur content limitation, and the emission limitations listed in term A.I.1 above.

**2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).

**2.c** The lb/mmBtu actual heat input and tons per year emission limitations using natural gas, are based on the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emission limitations.

**2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B).

**2.e** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B).

**2.f** The permittee shall meet the requirements of 40 CFR 63, Subpart DDDDD when they become effective.

**2.g** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)do not apply to the SO2 emissions from this air contaminant source since the calculated controlled restricted annual emission rate for SO2 emissions is less than ten tons per year taking into account the federally enforceable limitation on potential established per OAC rule 3745-31-05(C).

**2.h** The Best Available Technology (BAT) requirements under OAC rule

3745-31-05(A)(3) do not apply to the particulate emissions and OC from this air contaminant source since the uncontrolled potential to emit for particulate emissions and OC are less than ten tons per year.

## II. Operational Restrictions

1. The permittee shall only burn distillate fuel oils and/or gaseous fuels in the identified boiler; no residual oils or crude oil, including fuel oils numbed 4, 5, and 6, as defined by the American Society for Testing and Materials (ASTM) in Method ASTM D396-02a, "Standard Specifications for Fuel Oils" shall be burned in the boiler identified above.

2. The quality of distillate oil received for burning in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.05 lb/mmBtu of actual heat input and the sulfur content limitation for distillate oil of less than or equal to 0.05 weight per cent sulfur.

3. The maximum annual distillate oil usage rate for this emissions unit shall not exceed 2,000,000 gallons per rolling, 12-month period.

   To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the distillate oil usage levels specified in the following table:

| Month | Maximum Allowable Cumulative Usage (gallons) of distillate oil |
|---|---|
| 1 | 250,000 |
| 1-2 | 500,000 |
| 1-3 | 750,000 |
| 1-4 | 1,000,000 |
| 1-5 | 1,250,000 |
| 1-6 | 1,500,000 |
| 1-7 | 1,750,000 |
| 1-8 | 2,000,000 |
| 1-9 | 2,000,000 |
| 1-10 | 2,000,000 |
| 1-11 | 2,000,000 |
| 1-12 | 2,000,000 |

   After the first 12 calendar months of operation, compliance with the annual distillate oil usage limitation shall be based upon a rolling, 12-month summation of the usage rates.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

   a. Alternative 1:

      For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

   b. Alternative 2:

      The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)].

   c. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

3. The permittee shall maintain monthly records of the following information:

   a. The total volume of natural gas (mmft$^3$) burned in this emissions unit.

   b. The total number of gallons of distillate oil used in this boiler for each month.

c. Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the gallons of distillate oil used.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative production rate for each calendar month.

## IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):

   a. construction date (no later than 30 days after such date);

   b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

   c. actual start-up date (within 15 days after such date); and,

   d. date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to the Ohio EPA Southeast District Office and to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   50 West Town Street, Suite 700
   P. O. Box 1049
   Columbus, Ohio 43216-1049

2. The permittee shall notify the Ohio EPA Southeast District Office in writing of any fuel burned in this emissions unit other than natural gas or distillate oil.

3. The permittee shall notify the Ohio EPA Southeast District Office in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term III.1 above.

4. The notifications identified in terms IV.2 and IV.3 shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 30 days after the deviation occurs.

5. The permittee shall submit annual reports that specify the total $SO_2$ emissions from this emissions unit during the previous calendar year. This requirement shall be satisfied by the submittal of an annual fee emissions report.

6. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month distillate oil usage limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative distillate oil usage limitations. These reports shall be sent to the Ohio EPA Southeast District Office within 30 days after the deviation occurs.

**Issued: To be entered upon final issuance**

## V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitations:

      Nitrogen oxides (NOx) emissions shall not exceed 0.036 lb/mmBtu and 12.42 TPY using natural gas and 0.20 lb/mmBtu and 27.42 tons per rolling 12-month period using distillate oil.

      Applicable Compliance Methods:

      The emission limitations were based upon documented, manufacturer supplied, performance data for $NO_x$ emissions of 0.20 lb/mmBtu for low sulfur, distillate oil and 0.036 lb/mmBtu for natural gas. Compliance with the annual emission limitation for natural gas is demonstrated by multiplying the lb NOx/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

      Compliance with the tons per rolling 12-month period distillate oil limitation is demonstrated by multiplying the lb/mmBtu by the heat value of distillate oil of the boiler and the actual gallons usage of distillate oil and dividing by 2000 lbs/ton.

      The permittee shall demonstrate compliance with the lb/mmBtu emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

   b. Emission Limitations:

      Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu and 28.41 TPY using natural gas.

      Applicable Compliance Methods:

      The emission limitations were based upon documented, manufacturer supplied, performance data for CO emissions of 0.082 lb/mmBtu for natural gas. Compliance with the annual emission limitation for natural gas may be demonstrated by multiplying the lb CO/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

The permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4, and 10.

c. Emission Limitation:

20% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

d. Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5.

e. Emission Limitation:

SO2 emissions shall not exceed 0.05 lb/mmBtu of actual heat input using distillate oil.

Applicable Compliance Method:

When burning low sulfur, distillate oil, compliance shall be demonstrated by the monitoring and record keeping requirements in this permit, and fuel testing requirements and certification for each shipment of low sulfur, distillate oil. The sulfur dioxide emission rate (in lbs/mmBtu) shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emissions tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4, and 6.

f. Emission Limitation:

SO2 emissions shall not exceed 7.10 tons per rolling 12-month period

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation is demonstrated by multiplying 0.05 lb/mmBtu by the heat value of distillate oil of the boiler and the actual gallons usage of distillate oil and dividing by 2000 lbs/ton.

2. The permittee shall conduct, or have conducted, an initial performance test for this emissions unit (if the emissions test has not already been conducted) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit;

b. The emission testing shall be conducted to demonstrate compliance with the NOx and CO lb/mmBtu emission limitations, while burning the worst case fuel for each pollutant

.

c. The permittee shall be employ the test methods specified above in V.1. to demonstrate compliance with the allowable emissions. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

d. The tests 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, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA Southeast District Office refusal to accept the results of the visible emissions test.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test, 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 visible emissions test (including opacity readings and the emissions unit operating parameters) shall be signed by the person(s) responsible for the test and submitted to the Ohio

EPA Southeast District Office within 30 days following the completion of the test. 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.

## VI. Miscellaneous Requirements

None

**Issued: To be entered upon final issuance**

**B. State Only Enforceable Section**

**I. 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.

**Operations, Property, and/or Equipment - B043 - 78.8 mmBTU/Hr Johnston Boiler Model PFTS2000-3LG125W firing Natural Gas or Low-Sulfur No. 2 Fuel Oil. ACP Boiler No. 3.**

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|
| None | None |
| | |

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

Emissions Unit ID: B043

**NEW SOURCE REVIEW FORM B**

PTI Number: 06-08290 Facility ID: 0666000000

FACILITY NAME United States Enrichment Corp

FACILITY DESCRIPTION ACP Boiler No 3. CITY/TWP Piketon

SIC CODE 2819 SCC CODE 10200502/03 EMISSIONS UNIT ID B043

EMISSIONS UNIT DESCRIPTION 78.8 mmBTU/Hr Johnston Boiler Model PFTS2000-3LG125W firing Natural Gas or Low-Sulfur No. 2 Fuel Oil. ACP Boiler No. 3.

DATE INSTALLED Upon PTI Issuance

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate NG/Fuel Oil | Tons Per Year NG/Fuel Oil | Short Term Rate | Tons Per Year |
| Particulate Matter | Attainment | .00745 / .0241 lb/mmbtu | 2.57 / 3.30 | .00745 / .0241 lb/mmbtu | 2.57 / 3.30 |
| $PM_{10}$ | Attainment | | | | |
| Sulfur Dioxide | Attainment | 0.0518 | 7.10 | 0.0518 | 7.10 (fuel oil) |
| Organic Compounds | Attainment | .0054 / .01 | 1.86 / 1.37 | .0054 / .01 | 1.86 / 1.37 |
| Nitrogen Oxides | Attainment | .036 / 0.20 | 12.42 / 27.42 | .036 / 0.20 | 12.42 / 27.42 |
| Carbon Monoxide | Attainment | .082 / .040 | 28.41 / 5.50 | .082 / .040 | 28.41 / 5.50 |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

APPLICABLE FEDERAL RULES:

NSPS? DDDDD NESHAP? DC PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

**Enter Determination**: Low sulfur fuel oil limited to 2,000,000 gallons and Flue gas recirculation and low-NOx burners while firing natural gas.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $ not specified

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: NOx