



February 23, 2005  
GDP 05-0001

Mr. Jack R. Strosnider  
Director, Office of Nuclear Material Safety and Safeguards  
Attention: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

**Paducah Gaseous Diffusion Plant (PGDP)**  
**Portsmouth Gaseous Diffusion Plant (PORTS)**  
**Docket Nos. 70-7001 and 70-7002**  
**Certificate Nos. GDP-1 and GDP-2**  
**Submittal of Environmental Compliance Status Report (ECSR) Related Information**

Dear Mr. Strosnider:

On January 16, 2001, representatives from USEC and the NRC Staff met at NRC headquarters to discuss the Environmental Compliance Status Report (ECSR) contained in Volume 3 of the PGDP and PORTS Certification Applications. As a result of this January meeting, USEC committed (See the Reference) to provide copies of the PGDP and PORTS Quarterly Radiological Monitoring Discharge Reports for plant outfalls. Enclosures 1 and 2 provide the fourth quarter calendar year 2004 reports for PGDP and PORTS, respectively.

Should you have any questions or require additional information, please contact Mark Smith at (301) 564-3244. There are no new commitments contained in this submittal.

Sincerely,

Steven A. Toelle  
Director, Nuclear Regulatory Affairs

UMSS01

Mr. Jack R. Strosnider  
February 23, 2005  
GDP 05-0001, Page 2

Reference: Letter from Steven A. Toelle (USEC) to Mr. Michael F. Weber (NRC), Paducah Gaseous Diffusion Plant (PGDP), Portsmouth Gaseous Diffusion Plant (PORTS), Docket Nos. 70-7001 and 70-7002, "Environmental Compliance Status Report (ECSR) Related Information", GDP 01-0018, dated March 26, 2001.

Enclosures: 1. PGDP Quarterly Radiological Discharge Monitoring Report-Fourth Quarter 2004  
2. PORTS Quarterly Radiological Discharge Monitoring Report-Fourth Quarter 2004

cc: J. Henson, Chief, Fuel Facility Inspection, NRC Region II  
B. Bartlett, NRC Senior Resident Inspector, PGDP  
D. Martin, NRC Project Manager

Enclosure 1  
GDP 05-0001  
10 Pages Total

PGDP Quarterly Radiological Discharge Monitoring Report  
Fourth Quarter 2004

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

**KY0102083**  
 PERMIT NUMBER

**002 2**  
 DISCHARGE NUMBER

MONITORING PERIOD

|      |    |     |      |    |     |
|------|----|-----|------|----|-----|
| YEAR | MO | DAY | YEAR | MO | DAY |
| 04   | 10 | 01  | 04   | 12 | 31  |

LIFT STATION 002 BYPASS  
 (SUBR PA) MCCRACKEN  
 F - FINAL  
 MAJOR ATTACHMENT 6  
 \*\*\* NO DISCHARGE [ ] \*\*\*  
 NOTE: Read Instructions before completing this form.

ATTN: MGR WASTE MGMT/ENV COMP

| PARAMETER               |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |          |          | NO EX  | FREQUENCY OF ANALYSIS | SAMPLE TYPE |       |
|-------------------------|--------------------|---------------------|---------|-------|--------------------------|----------|----------|--------|-----------------------|-------------|-------|
|                         |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE  | MAXIMUM  |        |                       |             | UNITS |
| TECHNETIUM-99, TOTAL    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 18.1000  | 18.1000  |        | 0                     | 1/92        | GRAB  |
| 22100 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |        |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | PCI/L  |                       |             |       |
| URANIUM, NATURAL, TOTAL | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.0020   | 0.0020   | (19)   | 0                     | 1/92        | GRAB  |
| 22708 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |        |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L   |                       |             |       |
| TOXICITY, FINAL CONC    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      | (2F)   | 0                     | 2/92        | GRAB  |
| TOXICITY UNITS          | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | 1.00     | ACUTE  |                       | QTRLY       | GRAB  |
| 61406 1 0 0             |                    |                     |         |       |                          | 30DA AVG | DAILY MX | TOXCTY |                       |             |       |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |          |          |        |                       |             |       |
| METALS, TOTAL           | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 1.1500   | 1.1500   | (19)   | 0                     | 1/92        | GRAB  |
| 78240 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |        |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L   |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |        |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |        |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |        |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |        |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |        |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |        |                       |             |       |

|   |   |  |              |      |    |     |
|---|---|--|--------------|------|----|-----|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER      | I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. | TELEPHONE  | DATE         |      |    |     |
| VERNON SHANKS, USEC WASTE MGMT/ENV COMP MGR |   | <i>V. J. Shank</i><br>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 270 441-6039 | 05   | 01 | 20  |
| TYPED OR PRINTED                            |   | AREA CODE  | NUMBER       | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 BDL MEANS BELOW DETECTABLE LIMIT

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

**KY0102083**  
 PERMIT NUMBER

**006 2**  
 DISCHARGE NUMBER

**C-611 WATER TREATMENT PLANT**  
**(SUBR PA) MCCRACKEN**  
**F - FINAL**  
**MAJOR**

| MONITORING PERIOD |    |     |      |    |     |
|-------------------|----|-----|------|----|-----|
| YEAR              | MO | DAY | YEAR | MO | DAY |
| 04                | 10 | 01  | 04   | 12 | 31  |

\*\*\* NO DISCHARGE [ ] \*\*\*

NOTE: Read instructions before completing this form.

ATTN: MGR WASTE MGNT/ENV COMP

| PARAMETER   |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |                 |                       |              | NO EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|--------------------|---------------------|---------|-------|--------------------------|-----------------|-----------------------|--------------|-------|-----------------------|-------------|
|   |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE         | MAXIMUM               | UNITS        |       |                       |             |
| TOXICITY, FINAL CONC<br>TOXICITY UNITS<br>61406 1 0 0<br>EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL             | BDL                   | (2F)         | 0     | 2/92                  | GRAB        |
|   | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT 1 00% DAILY MX | ACUTE TOXCTY |       | OTRLY                 | GRAB        |
| METALS, TOTAL<br>78240 1 0 0<br>EFFLUENT GROSS VALUE                          | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.9300          | 0.9300                | (19)         | 0     | 1/92                  | GRAB        |
|   | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX       | MG/L         |       | OTRLY                 | GRAB        |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                       |              |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |                       |              |       |                       |             |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                       |              |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |                       |              |       |                       |             |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                       |              |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |                       |              |       |                       |             |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                       |              |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |                       |              |       |                       |             |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
**VERNON SHANKS, USEC**  
**WASTE MGNT/ENV COMP MGR**  
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

*V. J. Shanks*  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT.

TELEPHONE **270 441-6039**  
 DATE **05 01 20**  
 AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
**BDL MEANS BELOW DETECTABLE LIMIT**

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

**KY0102083**  
 PERMIT NUMBER

**008-2**  
 DISCHARGE NUMBER

COMBINED WASTEWATERS  
 (SUBR PA) MCCRACKEN  
 F - FINAL  
 MAJOR

| MONITORING PERIOD |    |     |      |    |     |
|-------------------|----|-----|------|----|-----|
| YEAR              | MO | DAY | YEAR | MO | DAY |
| 04                | 10 | 01  | 04   | 12 | 31  |

\*\*\* NO DISCHARGE [ ] \*\*\*

NOTE: Read instructions before completing this form.

ATTN: MGR WASTE MGNT/ENV COMP

| PARAMETER   | SAMPLE MEASUREMENT | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |                 |               | NO EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|--------------------|---------------------|---------|-------|--------------------------|-----------------|---------------|-------|-----------------------|-------------|
|   |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE         | MAXIMUM       |       |                       |             |
| TECHNETIUM-99, TOTAL<br>22100 1 0 0<br>EFFLUENT GROSS VALUE                   | *****              | *****               | ****    | ***** | BDL                      | BDL             |               | 0     | 2/92                  | GRAB        |
|   | PERMIT REQUIREMENT | *****               | ****    | ***** | REPORT 30DA AVG          | REPORT DAILY MX | PCI/L         |       | QTRLY                 | GRAB        |
| URANIUM, NATURAL, TOTAL<br>22708 1 0 0<br>EFFLUENT GROSS VALUE                | *****              | *****               | ****    | ***** | 0.0100                   | 0.0120          | (19)          | 0     | 2/92                  | GRAB        |
|   | PERMIT REQUIREMENT | *****               | ****    | ***** | REPORT 30DA AVG          | REPORT DAILY MX | MG/L          |       | QTRLY                 | GRAB        |
| TOXICITY, FINAL CONC<br>TOXICITY UNITS<br>61406 1 0 1<br>EFFLUENT GROSS VALUE | *****              | *****               | ****    | ***** | BDL                      | BDL             | (2G)          | 0     | 1/92                  | COMP        |
|   | PERMIT REQUIREMENT | *****               | ****    | ***** | REPORT 30DA AVG          | REPORT DAILY MX | CHRONC TOXCTY |       | QTRLY                 | COMP        |
| METALS, TOTAL<br>78240 1 0 0<br>EFFLUENT GROSS VALUE                          | *****              | *****               | ****    | ***** | 0.2390                   | 0.2390          | (19)          | 0     | 1/92                  | GRAB        |
|   | PERMIT REQUIREMENT | *****               | ****    | ***** | REPORT 30DA AVG          | REPORT DAILY MX | MG/L          |       | QTRLY                 | GRAB        |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |               |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |               |       |                       |             |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |               |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |               |       |                       |             |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |               |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |               |       |                       |             |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
**VERNON SHANKS, USEC WASTE MGNT/ENV COMP MGR**  
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

*V. J. Shanks*  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: 270-441-6039  
 DATE: 05 01 20  
 AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 BDL MEANS BELOW DETECTABLE LIMIT

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

**KY0102083**  
 PERMIT NUMBER

**009 2**  
 DISCHARGE NUMBER

COMBINED WASTEWATERS  
 (SUBR PA) MCCRACKEN  
 F - FINAL  
 MAJOR

| MONITORING PERIOD |    |     |    |      |    |     |
|-------------------|----|-----|----|------|----|-----|
| YEAR              | MO | DAY | TO | YEAR | MO | DAY |
| 04                | 10 | 01  |    | 04   | 12 | 31  |

\*\*\* NO DISCHARGE [ ] \*\*\*

NOTE: Read instructions before completing this form.

ATTN: MGR WASTE MGMT/ENV COMP

| PARAMETER   |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |                 |                 |                | NO EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|--------------------|---------------------|---------|-------|--------------------------|-----------------|-----------------|----------------|-------|-----------------------|-------------|
|   |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE         | MAXIMUM         | UNITS          |       |                       |             |
| TECHNETIUM-99; TOTAL<br>22100 1 0 0<br>EFFLUENT GROSS VALUE                   | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL             | BDL             |                | 0     | 2/92                  | GRAB        |
|   | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX | PCI/L          |       |                       | OTRLY GRAB  |
| URANIUM, NATURAL, TOTAL<br>22708 1 0 0<br>EFFLUENT GROSS VALUE                | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL             | BDL             | (19)           | 0     | 2/92                  | GRAB        |
|   | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX | MG/L           |       |                       | OTRLY GRAB  |
| TOXICITY, FINAL CONC<br>TOXICITY UNITS<br>61406 1 0 1<br>EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL             | BDL             | (2G)           | 0     | 1/92                  | COMP        |
|   | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX | CHRONIC TOXCTY |       |                       | OTRLY COMP  |
| METALS, TOTAL<br>78240 1 0 0<br>EFFLUENT GROSS VALUE                          | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.2440          | 0.2440          | (19)           | 0     | 1/92                  | GRAB        |
|   | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX | MG/L           |       |                       | OTRLY GRAB  |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                 |                |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |                 |                |       |                       |             |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                 |                |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |                 |                |       |                       |             |
|   | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                 |                |       |                       |             |
|   | PERMIT REQUIREMENT |                     |         |       |                          |                 |                 |                |       |                       |             |

|  |  |   |              |      |    |     |
|--|--|---|--------------|------|----|-----|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER         | I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. | TELEPHONE   | DATE         |      |    |     |
| VERNON SHANKS, USEC<br>WASTE MGMT/ENV COMP MGR |  | <i>V. J. Shanks</i><br>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 270 441-6039 | 05   | 01 | 20  |
| TYPED OR PRINTED                               |  | AREA CODE   | NUMBER       | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):  
 BDL MEANS BELOW DETECTABLE LIMIT

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

**KY0102083**  
 PERMIT NUMBER

**010-2**  
 DISCHARGE NUMBER

COMBINED WASTEWATERS  
 (SUBR PA) MCCRACKEN  
 F - FINAL  
 MAJOR

MONITORING PERIOD  
 FROM: YEAR 04 MO 10 DAY 01 TO YEAR 04 MO 12 DAY 31

\*\*\* NO DISCHARGE [ ] \*\*\*

NOTE: Read Instructions before completing this form.

ATTN: MGR WASTE MGNT/ENV COMP

| PARAMETER               |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |          |          |        | NO EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|-------------------------|--------------------|---------------------|---------|-------|--------------------------|----------|----------|--------|-------|-----------------------|-------------|
|                         |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE  | MAXIMUM  | UNITS  |       |                       |             |
| TECHNETIUM-99: TOTAL    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 14.1000  | 28.2000  |        | 0     | 2/92                  | GRAB        |
| 22100 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |        |       | OTRLY                 | GRAB        |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | PCI/L  |       |                       |             |
| URANIUM, NATURAL, TOTAL | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.0065   | 0.0120   | (19)   | 0     | 2/92                  | GRAB        |
| 22708 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |        |       | OTRLY                 | GRAB        |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L   |       |                       |             |
| TOXICITY, FINAL CONC    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      | (2G)   | 0     | 1/92                  | COMP        |
| TOXICITY UNITS          | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | 1.0      | CHRON  |       | OTRLY                 | COMP        |
| 61406 1 0 1             |                    |                     |         |       |                          | 30DA AVG | DAILY MX | TOXCTY |       |                       |             |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |          |          |        |       |                       |             |
| METALS, TOTAL           | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.2090   | 0.2090   | (19)   | 0     | 1/92                  | GRAB        |
| 78240 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |        |       | OTRLY                 | GRAB        |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L   |       |                       |             |

|  |   |   |              |    |    |
|--|---|---|--------------|----|----|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER                             | I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. | TELEPHONE   | DATE         |    |    |
| TYPED OR PRINTED<br>VERNON SHANKS, USEC<br>WASTE MGNT/ENV COMP MGR |   | SIGNATURE OF PRINCIPAL EXECUTIVE<br>OFFICER OR AUTHORIZED AGENT | 270 441-6039 | 05 | 01 |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 BDL MEANS BELOW DETECTABLE LIMIT



PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES) DISCHARGE MONITORING REPORT (DMR)

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

KY0102083  
 PERMIT NUMBER

011-2  
 DISCHARGE NUMBER

LIFT STATION 011 BYPASS  
 (SUBR PA) MCCRACKEN  
 F - FINAL  
 MAJOR


| MONITORING PERIOD |    |     |    |      |    |     |
|-------------------|----|-----|----|------|----|-----|
| YEAR              | MO | DAY | TO | YEAR | MO | DAY |
| 04                | 10 | 01  |    | 04   | 12 | 31  |

\*\*\* NO DISCHARGE [ ] \*\*\*

NOTE: Read instructions before completing this form.

ATTN: MGR WASTE MGNT/ENV COMP

| PARAMETER               |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |                 |                 |             | NO EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|-------------------------|--------------------|---------------------|---------|-------|--------------------------|-----------------|-----------------|-------------|-------|-----------------------|-------------|
|                         |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE         | MAXIMUM         | UNITS       |       |                       |             |
| TECHNETIUM-99 TOTAL     | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL             | BDL             |             | 0     | 12/92                 | GRAB        |
| 22100 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX | PCI/L       |       | QTRLY                 | GRAB        |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |                 |                 |             |       |                       |             |
| URANIUM, NATURAL, TOTAL | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.0697          | 0.1280          | (19)        | 0     | 12/92                 | GRAB        |
| 22708 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX | MG/L        |       | QTRLY                 | GRAB        |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |                 |                 |             |       |                       |             |
| TOXICITY, FINAL CONC    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL             | BDL             | (2F)        | 0     | 1/92                  | GRAB        |
| TOXICITY UNITS          | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX | ACUTE TOXCT |       | QTRLY                 | GRAB        |
| 61406 1 0 0             |                    |                     |         |       |                          |                 |                 |             |       |                       |             |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |                 |                 |             |       |                       |             |
| METALS, TOTAL           | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL             | BDL             | (19)        | 0     | 1/92                  | GRAB        |
| 78240 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT 30DA AVG | REPORT DAILY MX | MG/L        |       | QTRLY                 | GRAB        |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |                 |                 |             |       |                       |             |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                 |             |       |                       |             |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |                 |                 |             |       |                       |             |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                 |             |       |                       |             |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |                 |                 |             |       |                       |             |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |                 |                 |             |       |                       |             |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |                 |                 |             |       |                       |             |

|   |   |   |              |          |
|---|---|---|--------------|----------|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER                          | I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. | <br>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE    | DATE     |
| VERNON SHANKS, USEC WASTE MGNT/ENV COMP MGR<br>TYPED OR PRINTED |   |   | 270 441-6039 | 05 01 20 |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 BDL MEANS BELOW DETECTABLE LIMIT

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

|                   |      |    |                  |    |      |    |     |
|-------------------|------|----|------------------|----|------|----|-----|
| KY0102083         |      |    | 012-2            |    |      |    |     |
| PERMIT NUMBER     |      |    | DISCHARGE NUMBER |    |      |    |     |
| MONITORING PERIOD |      |    |                  |    |      |    |     |
| FROM              | YEAR | MO | DAY              | TO | YEAR | MO | DAY |
|                   | 04   | 10 | 01               |    | 04   | 12 | 31  |

LIFT STATION 012 BYPASS  
 (SUBR PA) MCCRACKEN  
 F - FINAL  
 MAJOR  
 \*\*\* NO DISCHARGE [ ] \*\*\*  
 NOTE: Read instructions before completing this form.

| PARAMETER               |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |          |          | NO EX        | FREQUENCY OF ANALYSIS | SAMPLE TYPE |       |
|-------------------------|--------------------|---------------------|---------|-------|--------------------------|----------|----------|--------------|-----------------------|-------------|-------|
|                         |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE  | MAXIMUM  |              |                       |             | UNITS |
| TECHNETIUM-99 TOTAL     | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      |              | 0                     | 1/92        | GRAB  |
| 22100 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |              |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | PCI/L        |                       |             |       |
| URANIUM, NATURAL, TOTAL | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.0020   | 0.0020   | (19)         | 0                     | 1/92        | GRAB  |
| 22708 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |              |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L         |                       |             |       |
| TOXICITY, FINAL CONC    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      | (2F)         | 0                     | 4/92        | GRAB  |
| TOXICITY UNITS          | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |              |                       | QTRLY       | GRAB  |
| 61406 1 0 0             |                    |                     |         |       |                          | 30DA AVG | DAILY MX | ACUTE TOXCTY |                       |             |       |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |          |          |              |                       |             |       |
| METALS, TOTAL           | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.9690   | 0.9690   | (19)         | 0                     | 1/92        | GRAB  |
| 78240 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |              |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L         |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |              |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |              |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |              |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |              |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |              |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |              |                       |             |       |

|   |  |   |              |      |    |     |
|---|--|---|--------------|------|----|-----|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER      | I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. | TELEPHONE   | DATE         |      |    |     |
| VERNON SHANKS, USEC WASTE MGNT/ENV COMP MGR |  | <i>V. J. Shanks</i><br>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 270 441-6039 | 05   | 01 | 20  |
| TYPED OR PRINTED                            |  | AREA CODE   | NUMBER       | YEAR | MO | DAY |

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 BDL MEANS BELOW DETECTABLE LIMIT

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

**KY0102083**  
 PERMIT NUMBER

**013 2**  
 DISCHARGE NUMBER

STORMWATER RUNOFF  
 (SUBR PA) MCCRACKEN  
 F - FINAL  
 MAJOR

| MONITORING PERIOD |    |     |    |      |    |     |
|-------------------|----|-----|----|------|----|-----|
| YEAR              | MO | DAY | TO | YEAR | MO | DAY |
| 04                | 10 | 01  |    | 04   | 12 | 31  |

\*\*\* NO DISCHARGE [ ] \*\*\*

NOTE: Read instructions before completing this form.

ATTN: MGR WASTE MGMT/ENV COMP

| PARAMETER               |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |          |          | NO EX       | FREQUENCY OF ANALYSIS | SAMPLE TYPE |       |
|-------------------------|--------------------|---------------------|---------|-------|--------------------------|----------|----------|-------------|-----------------------|-------------|-------|
|                         |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE  | MAXIMUM  |             |                       |             | UNITS |
| TECHNETIUM-99, TOTAL    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      |             | 0                     | 1/92        | GRAB  |
| 22100 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |             |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | PCI/L       |                       |             |       |
| URANIUM, NATURAL, TOTAL | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      | (19)        | 0                     | 1/92        | GRAB  |
| 22708 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |             |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L        |                       |             |       |
| TOXICITY, FINAL CONC    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      | (2F)        | 0                     | 1/92        | GRAB  |
| TOXICITY UNITS          | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |             |                       | QTRLY       | GRAB  |
| 61406 1 0 0             |                    |                     |         |       |                          | 30DA AVG | DAILY MX | ACUTE TOXCT |                       |             |       |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |          |          |             |                       |             |       |
| METALS, TOTAL           | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.6030   | 0.6030   | (19)        | 0                     | 1/92        | GRAB  |
| 78240 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |             |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L        |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |             |                       |             |       |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
**VERNON SHANKS, USEC WASTE MGMT/ENV COMP MGR**  
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

TELEPHONE  
 270 441-6039  
 DATE  
 05 01 20  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  
 AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here).  
 BDL MEANS BELOW DETECTABLE LIMIT

NAME USEC PGDP  
 ADDRESS C/O US ENRICHMENT CORP  
 2 DEMOCRACY CTR 6903 ROCKLEDGE  
 BETHESDA MD 20817  
 FACILITY USEC PGDP  
 LOCATION PADUCAH KY 42001-1410

KY0102083  
 PERMIT NUMBER

016-2  
 DISCHARGE NUMBER

FIRE PROTECTION WATER  
 (SUBR PA) MCCRACKEN  
 F - FINAL  
 MAJOR

| MONITORING PERIOD |    |     |    |      |    |     |
|-------------------|----|-----|----|------|----|-----|
| YEAR              | MO | DAY | TO | YEAR | MO | DAY |
| 04                | 10 | 01  |    | 04   | 12 | 31  |

\*\*\* NO DISCHARGE [ ] \*\*\*  
 NOTE: Read instructions before completing this form.

ATTN: MGR WASTE MGMT/ENV COMP

| PARAMETER               |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |          |          | NO EX       | FREQUENCY OF ANALYSIS | SAMPLE TYPE |       |
|-------------------------|--------------------|---------------------|---------|-------|--------------------------|----------|----------|-------------|-----------------------|-------------|-------|
|                         |                    | AVERAGE             | MAXIMUM | UNITS | MINIMUM                  | AVERAGE  | MAXIMUM  |             |                       |             | UNITS |
| TECHNETIUM-99, TOTAL    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      |             | 0                     | 1/92        | GRAB  |
| 22100 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |             |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | PCI/L       |                       |             |       |
| URANIUM, NATURAL, TOTAL | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | 0.0010   | 0.0010   | (19)        | 0                     | 1/92        | GRAB  |
| 22708 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |             |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L        |                       |             |       |
| TOXICITY, FINAL CONC    | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      | (2F)        | 0                     | 1/92        | GRAB  |
| TOXICITY UNITS          | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |             |                       | QTRLY       | GRAB  |
| 61406 1 0 0             |                    |                     |         |       |                          | 30DA AVG | DAILY MX | ACUTE TOXCT |                       |             |       |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          |          |          |             |                       |             |       |
| METALS, TOTAL           | SAMPLE MEASUREMENT | *****               | *****   | ****  | *****                    | BDL      | BDL      | (19)        | 0                     | 1/92        | GRAB  |
| 78240 1 0 0             | PERMIT REQUIREMENT | *****               | *****   | ****  | *****                    | REPORT   | REPORT   |             |                       | QTRLY       | GRAB  |
| EFFLUENT GROSS VALUE    |                    |                     |         |       |                          | 30DA AVG | DAILY MX | MG/L        |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | SAMPLE MEASUREMENT |                     |         |       |                          |          |          |             |                       |             |       |
|                         | PERMIT REQUIREMENT |                     |         |       |                          |          |          |             |                       |             |       |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 VERNON SHANKS, USEC  
 WASTE MGMT/ENV COMP MGR  
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

*V. J. Shanks*  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 270-441-6039  
 DATE 05 01 20  
 AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 BDL MEANS BELOW DETECTABLE LIMIT

Enclosure 2  
GDP 05-0001  
10 Pages Total

PORTS Quarterly Radiological Discharge Monitoring Report  
Fourth Quarter 2004

**Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter**

**United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**

**Outfall 001 / X-230J-7 East Holding Pond**

|                           | Concentrations    |                   |                   |                       | Loadings     |             |           |         |
|---------------------------|-------------------|-------------------|-------------------|-----------------------|--------------|-------------|-----------|---------|
|                           | Alpha<br>pCi/l    | Beta<br>pCi/l     | Tc<br>pCi/l       | U<br>ug/l             | Alpha<br>mCi | Beta<br>mCi | Tc<br>mCi | U<br>kg |
| 10/4/2004                 | < 3.3             | < 7               | < 9               | 0.34                  | < 0.02       | < 0.11      | < 0.15    | 0.005   |
| 10/11/2004                | < 5.0             | < 6               | < 9               | 0.33                  | < 0.02       | < 0.09      | < 0.14    | 0.005   |
| 10/18/2004                | < 3.3             | < 6               | < 9               | 0.46                  | < 0.03       | < 0.10      | < 0.15    | 0.007   |
| 10/25/2004                | 5.3               | 8                 | < 9               | 0.85                  | 0.09         | 0.13        | < 0.16    | 0.014   |
| 11/1/2004                 | 2.5               | < 7               | < 9               | 0.58                  | 0.04         | < 0.11      | < 0.14    | 0.009   |
| 11/8/2004                 | 3.8               | < 7               | < 9               | 1.19                  | 0.06         | < 0.12      | < 0.15    | 0.020   |
| 11/15/2004                | 3.1               | 11                | < 9               | 0.76                  | 0.06         | 0.20        | < 0.17    | 0.014   |
| 11/22/2004                | < 4.3             | 15                | 15                | 1.22                  | < 0.08       | 0.28        | 0.28      | 0.023   |
| 11/29/2004                | 3.6               | 19                | 16                | 1.42                  | 0.06         | 0.31        | 0.26      | 0.024   |
| 12/6/2004                 | 4.9               | 19                | 25                | 1.47                  | 0.08         | 0.31        | 0.42      | 0.024   |
| 12/13/2004                | 7.9               | 17                | 20                | 2.00                  | 0.13         | 0.27        | 0.31      | 0.032   |
| 12/20/2004                | 4.6               | 8                 | 11                | 0.95                  | 0.02         | 0.04        | 0.06      | 0.005   |
| 12/27/2004                | < 4.8             | 7                 | 15                | 0.79                  | < 0.04       | 0.11        | 0.23      | 0.012   |
| Total                     | < 56.4            | < 136             | < 165             | 12.36                 | < 0.72       | < 2.19      | < 2.62    | 0.196   |
| Average                   | < 4.3             | < 10              | < 13              | 0.95                  | < 0.06       | < 0.17      | < 0.20    | 0.015   |
| Maximum                   | 7.9               | 19                | 25                | 2.00                  | 0.13         | 0.31        | 0.42      | 0.032   |
| Minimum                   | < 2.5             | < 6               | < 9               | 0.33                  | < 0.02       | 0.04        | 0.06      | 0.005   |
| Transuranics<br>001120104 | Am 241<br>< 0.060 | Np 237<br>< 0.147 | Pu 238<br>< 0.054 | Pu 239+240<br>< 0.054 |              |             |           |         |

**Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter**

**United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**

**Outfall 002 / X-230K South Holding Pond**

|                           | Concentrations    |                   |                   |                       | Loadings     |             |           |         |
|---------------------------|-------------------|-------------------|-------------------|-----------------------|--------------|-------------|-----------|---------|
|                           | Alpha<br>pCi/l    | Beta<br>pCi/l     | Tc<br>pCi/l       | U<br>ug/l             | Alpha<br>mCi | Beta<br>mCi | Tc<br>mCi | U<br>kg |
| 10/4/2004                 | < 4.2             | < 7               | < 9               | 0.60                  | < 0.001      | < 0.02      | AA        | 0.002   |
| 10/11/2004                | AL                | AL                | AL                | AL                    | AL           | AL          | AL        | AL      |
| 10/18/2004                | < 4.7             | 9                 | < 10              | 0.47                  | < 0.005      | 0.16        | AA        | 0.008   |
| 10/25/2004                | < 3.3             | 15                | < 9               | 0.43                  | < 0.004      | 0.22        | AA        | 0.007   |
| 11/1/2004                 | 4.2               | < 7               | < 9               | 0.73                  | 0.022        | < 0.04      | AA        | 0.004   |
| 11/8/2004                 | 5.2               | < 7               | < 9               | 0.62                  | 0.096        | < 0.13      | AA        | 0.011   |
| 11/15/2004                | 3.9               | 9                 | < 9               | 0.71                  | 0.072        | 0.17        | AA        | 0.013   |
| 11/22/2004                | < 5.0             | < 7               | < 9               | 0.77                  | < 0.011      | < 0.17      | AA        | 0.018   |
| 11/29/2004                | < 3.5             | 9                 | < 9               | 0.88                  | < 0.011      | 0.19        | AA        | 0.019   |
| 12/6/2004                 | < 3.5             | < 7               | < 9               | 1.01                  | < 0.013      | < 0.15      | AA        | 0.022   |
| 12/13/2004                | < 5.9             | < 6               | < 9               | 1.04                  | < 0.019      | < 0.18      | AA        | 0.031   |
| 12/20/2004                | < 5.4             | < 6               | < 9               | 1.04                  | < 0.004      | < 0.04      | AA        | 0.007   |
| 12/27/2004                | < 6.4             | 8                 | < 9               | 0.98                  | < 0.009      | 0.13        | AA        | 0.015   |
| Total                     | < 55.2            | < 98              | < 109             | 9.28                  | < 0.267      | < 1.60      | AA        | 0.157   |
| Average                   | < 4.6             | < 8               | < 9               | 0.77                  | < 0.022      | < 0.13      | AA        | 0.013   |
| Maximum                   | < 6.4             | 15                | < 10              | 1.04                  | 0.096        | 0.22        | AA        | 0.031   |
| Minimum                   | < 3.3             | < 6               | < 9               | 0.43                  | < 0.001      | < 0.02      | AA        | 0.002   |
| Transuranics<br>002120104 | Am 241<br>< 0.207 | Np 237<br>< 0.266 | Pu 238<br>< 0.060 | Pu 239+240<br>< 0.163 |              |             |           |         |

**Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter**

**United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**

**Outfall 003 / X-6619 Sewage Treatment Plant**

|                           | Concentrations    |                   |                   |                       | Loadings     |             |           |         |
|---------------------------|-------------------|-------------------|-------------------|-----------------------|--------------|-------------|-----------|---------|
|                           | Alpha<br>pCi/l    | Beta<br>pCi/l     | Tc<br>pCi/l       | U<br>ug/l             | Alpha<br>mCi | Beta<br>mCi | Tc<br>mCi | U<br>kg |
| 10/4/2004                 | 8.0               | 152               | 221               | 3.97                  | 0.05         | 0.95        | 1.38      | 0.025   |
| 10/11/2004                | 6.6               | 132               | 193               | 3.33                  | 0.04         | 0.77        | 1.13      | 0.020   |
| 10/18/2004                | 5.9               | 135               | 191               | 3.54                  | 0.04         | 0.95        | 1.35      | 0.025   |
| 10/25/2004                | 9.4               | 125               | 170               | 5.79                  | 0.07         | 0.94        | 1.28      | 0.044   |
| 11/1/2004                 | 11.3              | 106               | 166               | 5.51                  | 0.08         | 0.73        | 1.15      | 0.038   |
| 11/8/2004                 | 11.0              | 137               | 208               | 8.02                  | 0.09         | 1.13        | 1.72      | 0.066   |
| 11/15/2004                | 12.3              | 119               | 158               | 7.30                  | 0.10         | 0.95        | 1.26      | 0.058   |
| 11/22/2004                | 15.7              | 161               | 197               | 9.67                  | 0.13         | 1.36        | 1.66      | 0.082   |
| 11/29/2004                | 11.2              | 114               | 155               | 8.09                  | 0.10         | 0.97        | 1.32      | 0.069   |
| 12/6/2004                 | 15.0              | 109               | 151               | 9.41                  | 0.13         | 0.94        | 1.30      | 0.081   |
| 12/13/2004                | 8.5               | 95                | 129               | 4.29                  | 0.08         | 0.85        | 1.15      | 0.038   |
| 12/20/2004                | < 6.1             | 90                | 145               | 5.61                  | < 0.05       | 0.73        | 1.18      | 0.046   |
| 12/27/2004                | < 5.7             | 71                | 120               | 4.69                  | < 0.05       | 0.62        | 1.04      | 0.041   |
| Total                     | < 126.7           | 1547              | 2204              | 79.22                 | < 1.00       | 11.89       | 16.90     | 0.631   |
| Average                   | < 9.7             | 119               | 170               | 6.09                  | < 0.08       | 0.91        | 1.30      | 0.049   |
| Maximum                   | 15.7              | 161               | 221               | 9.67                  | 0.13         | 1.36        | 1.72      | 0.082   |
| Minimum                   | < 5.7             | 71                | 120               | 3.33                  | 0.04         | 0.62        | 1.04      | 0.020   |
| Transuranics<br>003120104 | Am 241<br>< 0.142 | Np 237<br>< 0.226 | Pu 238<br>< 0.154 | Pu 239+240<br>< 0.154 |              |             |           |         |



**Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter**

**United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**

**Outfall 004 / Cooling Tower Blowdown**

|                           | Concentrations    |                   |                   |                       | Loadings     |             |           |         |
|---------------------------|-------------------|-------------------|-------------------|-----------------------|--------------|-------------|-----------|---------|
|                           | Alpha<br>pCi/l    | Beta<br>pCi/l     | Tc<br>pCi/l       | U<br>ug/l             | Alpha<br>mCi | Beta<br>mCi | Tc<br>mCi | U<br>kg |
| 10/4/2004                 | < 3.4             | 10                | < 9               | 1.51                  | < 0.016      | 0.175       | AA        | 0.027   |
| 10/11/2004                | < 5.3             | 10                | < 9               | 1.09                  | < 0.012      | 0.175       | AA        | 0.020   |
| 10/18/2004                | < 3.7             | 13                | < 9               | 0.96                  | < 0.010      | 0.209       | AA        | 0.016   |
| 10/25/2004                | < 2.7             | 13                | < 9               | 0.74                  | < 0.008      | 0.239       | AA        | 0.014   |
| 11/1/2004                 | 3.3               | 11                | < 9               | 1.46                  | 0.059        | 0.191       | AA        | 0.026   |
| 11/8/2004                 | < 2.4             | 12                | < 9               | 0.90                  | < 0.010      | 0.223       | AA        | 0.016   |
| 11/15/2004                | < 3.9             | 9                 | < 9               | 0.51                  | < 0.006      | 0.165       | AA        | 0.010   |
| 11/22/2004                | < 4.6             | 8                 | < 9               | 2.04                  | < 0.025      | 0.166       | AA        | 0.041   |
| 11/29/2004                | < 4.7             | 10                | < 9               | 1.47                  | < 0.018      | 0.196       | AA        | 0.030   |
| 12/6/2004                 | < 3.1             | 11                | < 9               | 0.94                  | < 0.010      | 0.181       | AA        | 0.016   |
| 12/13/2004                | < 4.8             | 7                 | < 9               | 0.75                  | < 0.004      | 0.067       | AA        | 0.007   |
| 12/20/2004                | < 5.5             | 12                | < 9               | 0.80                  | < 0.004      | 0.101       | AA        | 0.007   |
| 12/27/2004                | < 5.1             | 8                 | < 9               | 0.45                  | < 0.002      | 0.054       | AA        | 0.003   |
| Total                     | < 52.5            | 131               | < 117             | 13.62                 | < 0.184      | 2.142       | AA        | 0.233   |
| Average                   | < 4.0             | 10                | < 9               | 1.05                  | < 0.014      | 0.165       | AA        | 0.018   |
| Maximum                   | < 5.5             | 13                | < 9               | 2.04                  | 0.059        | 0.239       | AA        | 0.041   |
| Minimum                   | < 2.4             | 7                 | < 9               | 0.45                  | < 0.002      | 0.054       | AA        | 0.003   |
| Transuranics<br>004120104 | Am 241<br>< 0.169 | Np 237<br>< 0.065 | Pu 238<br>< 0.177 | Pu 239+240<br>< 0.065 |              |             |           |         |

**Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter**

**United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**

**Outfall 005 / X-611B Lime Sludge Lagoon**

|              | Concentrations |               |              |                  | Loadings     |             |           |         |
|--------------|----------------|---------------|--------------|------------------|--------------|-------------|-----------|---------|
|              | Alpha<br>pCi/l | Beta<br>pCi/l | Tc<br>pCi/l  | U<br>ug/l        | Alpha<br>mCi | Beta<br>mCi | Tc<br>mCi | U<br>kg |
| 10/4/2004    | < 3.3          | < 7           | < 9          | 0.43             | < 0.02       | < 0.58      | AA        | 0.036   |
| 10/11/2004   | < 4.8          | < 6           | < 9          | 0.42             | < 0.02       | < 0.37      | AA        | 0.027   |
| 10/18/2004   | < 3.3          | 7             | < 9          | 0.45             | < 0.02       | 0.50        | AA        | 0.031   |
| 10/25/2004   | 2.6            | < 5           | < 9          | 0.29             | 0.30         | < 0.59      | AA        | 0.033   |
| 11/1/2004    | 2.1            | < 7           | < 9          | 0.35             | 0.20         | < 0.65      | AA        | 0.033   |
| 11/8/2004    | 3.6            | < 7           | < 9          | 0.40             | 0.34         | < 0.66      | AA        | 0.038   |
| 11/15/2004   | 4.8            | < 7           | < 9          | 0.32             | 0.43         | < 0.59      | AA        | 0.028   |
| 11/22/2004   | < 4.2          | < 7           | < 9          | 0.39             | < 0.02       | < 0.71      | AA        | 0.040   |
| 11/29/2004   | AL             | AL            | AL           | AL               | AL           | AL          | AL        | AL      |
| 12/6/2004    | AL             | AL            | AL           | AL               | AL           | AL          | AL        | AL      |
| 12/13/2004   | AL             | AL            | AL           | AL               | AL           | AL          | AL        | AL      |
| 12/20/2004   | AL             | AL            | AL           | AL               | AL           | AL          | AL        | AL      |
| 12/27/2004   | AL             | AL            | AL           | AL               | AL           | AL          | AL        | AL      |
| Total        | < 28.7         | < 52          | < 73         | 3.05             | < 1.35       | < 4.64      | AA        | 0.265   |
| Average      | < 3.6          | < 7           | < 9          | 0.38             | < 0.17       | < 0.58      | AA        | 0.033   |
| Maximum      | 4.8            | 7             | < 9          | 0.45             | 0.43         | < 0.71      | AA        | 0.040   |
| Minimum      | 2.1            | < 5           | < 9          | 0.29             | < 0.02       | < 0.37      | AA        | 0.027   |
| Transuranics | Am 241<br>AL   | Np 237<br>AL  | Pu 238<br>AL | Pu 239+240<br>AL |              |             |           |         |

**Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter**

**United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**

**Outfall 009 / X-230L North Holding Pond**

|                           | Concentrations    |                   |                   |                       | Loadings     |             |           |         |
|---------------------------|-------------------|-------------------|-------------------|-----------------------|--------------|-------------|-----------|---------|
|                           | Alpha<br>pCi/l    | Beta<br>pCi/l     | Tc<br>pCi/l       | U<br>ug/l             | Alpha<br>mCi | Beta<br>mCi | Tc<br>mCi | U<br>kg |
| 10/4/2004                 | 3.4               | < 7               | < 9               | 4.01                  | 0.017        | < 0.034     | AA        | 0.020   |
| 10/11/2004                | < 5.0             | < 6               | < 9               | 4.40                  | < 0.013      | < 0.028     | AA        | 0.021   |
| 10/18/2004                | 3.9               | 7                 | < 9               | 5.08                  | 0.047        | 0.080       | AA        | 0.062   |
| 10/25/2004                | 4.6               | 11                | < 9               | 7.58                  | 0.046        | 0.113       | AA        | 0.076   |
| 11/1/2004                 | 8.6               | < 7               | < 9               | 6.32                  | 0.069        | < 0.056     | AA        | 0.051   |
| 11/8/2004                 | 7.2               | 8                 | < 9               | 7.32                  | 0.092        | 0.103       | AA        | 0.094   |
| 11/15/2004                | < 3.8             | 8                 | < 9               | 6.68                  | < 0.046      | 0.091       | AA        | 0.081   |
| 11/22/2004                | 5.3               | < 7               | < 9               | 6.94                  | 0.094        | < 0.126     | AA        | 0.123   |
| 11/29/2004                | 7.9               | 8                 | 20                | 7.25                  | 0.141        | 0.140       | 0.35      | 0.129   |
| 12/6/2004                 | 5.0               | 10                | < 9               | 6.60                  | 0.076        | 0.148       | AA        | 0.102   |
| 12/13/2004                | 4.8               | < 6               | < 9               | 6.65                  | 0.104        | < 0.123     | AA        | 0.144   |
| 12/20/2004                | < 5.3             | < 6               | < 9               | 6.34                  | < 0.023      | < 0.034     | AA        | 0.038   |
| 12/27/2004                | 6.5               | < 6               | < 9               | 6.17                  | 0.071        | < 0.061     | AA        | 0.068   |
| Total                     | < 71.3            | < 94              | < 128             | 81.34                 | < 0.839      | < 1.137     | 0.35      | 1.009   |
| Average                   | < 5.5             | < 7               | < 10              | 6.26                  | < 0.065      | < 0.087     | 0.35      | 0.078   |
| Maximum                   | 8.6               | 11                | 20                | 7.58                  | 0.141        | 0.148       | 0.35      | 0.144   |
| Minimum                   | 3.4               | < 6               | < 9               | 4.01                  | < 0.013      | < 0.028     | 0.35      | 0.020   |
| Transuranics<br>009120104 | Am 241<br>< 0.186 | Np 237<br>< 0.236 | Pu 238<br>< 0.211 | Pu 239+240<br>< 0.053 |              |             |           |         |

**Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter**

**United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**

**Outfall 010 / X-230J-5 Northwest Holding Pond**

|                           | Concentrations    |                   |                   |                       | Loadings     |             |           |         |
|---------------------------|-------------------|-------------------|-------------------|-----------------------|--------------|-------------|-----------|---------|
|                           | Alpha<br>pCi/l    | Beta<br>pCi/l     | Tc<br>pCi/l       | U<br>ug/l             | Alpha<br>mCi | Beta<br>mCi | Tc<br>mCi | U<br>kg |
| 10/4/2004                 | < 3.5             | < 7               | < 9               | 1.13                  | < 0.005      | < 0.052     | AA        | 0.008   |
| 10/11/2004                | < 5.2             | < 6               | < 9               | 0.95                  | < 0.004      | < 0.040     | AA        | 0.007   |
| 10/18/2004                | < 3.5             | 7                 | < 9               | 1.50                  | < 0.007      | 0.056       | AA        | 0.012   |
| 10/25/2004                | < 2.5             | 7                 | < 9               | 3.09                  | < 0.019      | 0.067       | AA        | 0.032   |
| 11/1/2004                 | 5.6               | < 7               | < 9               | 3.06                  | 0.044        | < 0.055     | AA        | 0.024   |
| 11/8/2004                 | 5.9               | 8                 | < 9               | 3.75                  | 0.060        | 0.077       | AA        | 0.038   |
| 11/15/2004                | 4.2               | 10                | < 9               | 3.69                  | 0.038        | 0.093       | AA        | 0.034   |
| 11/22/2004                | < 4.5             | < 7               | < 9               | 3.51                  | < 0.026      | < 0.089     | AA        | 0.044   |
| 11/29/2004                | < 4.4             | < 7               | < 9               | 3.09                  | < 0.033      | < 0.125     | AA        | 0.054   |
| 12/6/2004                 | 7.2               | 9                 | < 9               | 3.29                  | 0.087        | 0.103       | AA        | 0.040   |
| 12/13/2004                | 8.1               | < 6               | < 9               | 4.08                  | 0.097        | < 0.068     | AA        | 0.049   |
| 12/20/2004                | < 5.4             | < 6               | < 9               | 3.82                  | < 0.010      | < 0.024     | AA        | 0.017   |
| 12/27/2004                | < 5.2             | < 6               | < 9               | 2.75                  | < 0.020      | < 0.068     | AA        | 0.034   |
| Total                     | < 65.2            | < 90              | < 118             | 37.71                 | < 0.450      | < 0.917     | AA        | 0.393   |
| Average                   | < 5.0             | < 7               | < 9               | 2.90                  | < 0.035      | < 0.071     | AA        | 0.030   |
| Maximum                   | 8.1               | 10                | < 9               | 4.08                  | 0.097        | < 0.125     | AA        | 0.054   |
| Minimum                   | < 2.5             | < 6               | < 9               | 0.95                  | < 0.004      | < 0.024     | AA        | 0.007   |
| Transuranics<br>010120104 | Am 241<br>< 0.063 | Np 237<br>< 0.155 | Pu 238<br>< 0.057 | Pu 239+240<br>< 0.057 |              |             |           |         |

**Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter**

**United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**

**Outfall 011 / X-230J-6 Northeast Holding Pond**

|                           | Concentrations    |                   |                   |                       | Loadings     |             |           |         |
|---------------------------|-------------------|-------------------|-------------------|-----------------------|--------------|-------------|-----------|---------|
|                           | Alpha<br>pCi/l    | Beta<br>pCi/l     | Tc<br>pCi/l       | U<br>ug/l             | Alpha<br>mCi | Beta<br>mCi | Tc<br>mCi | U<br>kg |
| 10/4/2004                 | < 3.5             | < 7               | < 9               | 0.96                  | < 0.0001     | < 0.0010    | AA        | 0.0001  |
| 10/11/2004                | < 5.4             | < 6               | < 9               | 0.86                  | < 0.0000     | < 0.0005    | AA        | 0.0001  |
| 10/18/2004                | < 3.6             | 7                 | < 9               | 0.97                  | < 0.0003     | 0.0040      | AA        | 0.0006  |
| 10/25/2004                | < 2.6             | 8                 | < 9               | 1.05                  | < 0.0001     | 0.0020      | AA        | 0.0002  |
| 11/1/2004                 | 3.7               | < 7               | < 9               | 1.19                  | 0.0003       | < 0.0010    | AA        | 0.0001  |
| 11/8/2004                 | < 2.4             | < 7               | < 9               | 1.26                  | < 0.0013     | < 0.0110    | AA        | 0.0021  |
| 11/15/2004                | < 3.9             | < 7               | < 9               | 1.04                  | < 0.0004     | < 0.0050    | AA        | 0.0007  |
| 11/22/2004                | < 4.6             | < 7               | < 9               | 1.19                  | < 0.0012     | < 0.0120    | AA        | 0.0020  |
| 11/29/2004                | 9.1               | 8                 | < 9               | 1.37                  | 0.0155       | 0.0140      | AA        | 0.0023  |
| 12/6/2004                 | 3.3               | < 7               | < 9               | 1.25                  | 0.0011       | < 0.0020    | AA        | 0.0004  |
| 12/13/2004                | < 4.6             | < 6               | < 9               | 1.28                  | < 0.0005     | < 0.0040    | AA        | 0.0008  |
| 12/20/2004                | < 5.4             | < 6               | < 9               | 1.27                  | < 0.0001     | < 0.0010    | AA        | 0.0001  |
| 12/27/2004                | 5.7               | < 6               | < 9               | 1.03                  | 0.0036       | < 0.0040    | AA        | 0.0007  |
| Total                     | < 57.8            | < 87              | < 118             | 14.72                 | < 0.0246     | < 0.0615    | AA        | 0.0102  |
| Average                   | < 4.4             | < 7               | < 9               | 1.13                  | < 0.0019     | < 0.0047    | AA        | 0.0008  |
| Maximum                   | 9.1               | 8                 | < 9               | 1.37                  | 0.0155       | 0.0140      | AA        | 0.0023  |
| Minimum                   | < 2.4             | < 6               | < 9               | 0.86                  | < 0.0000     | < 0.0005    | AA        | 0.0001  |
| Transuranics<br>011120104 | Am 241<br>< 0.166 | Np 237<br>< 0.147 | Pu 238<br>< 0.147 | Pu 239+240<br>< 0.060 |              |             |           |         |

Plant Radiological Discharges to Surface Water  
Calendar Year 2004 - 4th Quarter

United States Enrichment Corporation (USEC)  
Portsmouth Gaseous Diffusion Plant, Piketon, Ohio

NOTES

Weekly concentrations and loadings with quarterly summaries are presented for Gross Alpha Activity, Gross Beta Activity, Technetium-99 (beta) Activity and Total Uranium Concentration. These figures are based on seven-day composite samples and measured flows at each outfall except at Outfall 005. Since Outfall 005 historically had no discharge, there is no composite sampler there and effluent data is based on grab samples taken when there is an actual discharge.

Due to the reduction in the plant heat load associated with the end of uranium enrichment operations, PORTS has been unable to recycle all of the water entering the X-611B Lime Sludge Lagoon into the plant water system. Consequently, the X-611B (Outfall 005) has had a continuous overflow to Little Beaver Creek since the middle of May 2001.

In the week ending November 22, 2004, USEC completed an upgrade to its X-611 Water Treatment Plant which permitted USEC to resume recycling all the supernatant from the X-611B Lime Sludge Lagoon to the intake of the X-611 facility. Routine overflows from X-611B ceased at that time.

Quarterly concentrations are presented for Americium-241, Neptunium-237, Plutonium-238, Plutonium 239 and Plutonium 240. (All of these are transuranics. Plutonium 239 and Plutonium 240 activities are reported as a combined activity because they emit substantially identical radiation.) These figures are based on quarterly grab samples.

Weekly concentrations that are below the Minimum Detectable Activity (MDA) or Laboratory Limit of Detection (LLD) are indicated by a "less than" (<) prefix ahead of the numerical MDA/LLD. MDAs vary somewhat from day to day and from outfall to outfall depending on interferences present and other conditions.

Weekly loadings that correspond to less than MDA/LLD concentrations are calculated based on the MDA/LLD value and prefixed with a "<" except as follows: Technetium loadings at Outfalls 002, 004, 005, 009, 010, and 011 are presumed to be zero unless actually detected, based on the historical absence of technetium in these outfalls. These loadings are coded as "AA" unless actually detected.

Loadings are not calculated for transuranics because no measurable transuranic concentrations are routinely not found in any USEC-leased outfall.

AA indicates no detectable concentration.

AL indicates no flow during the sampling period.