



August 24, 2005  
GDP 05-0036

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 second quarter calendar year 2005 reports for PGDP and PORTS, respectively.

Should you have any questions or require additional information, please contact me at (301) 564-3250. There are no new commitments contained in this submittal.

Sincerely,

Steven A. Toelle  
Director, Nuclear Regulatory Affairs

MISSO1

Mr. Jack R. Strosnider  
August 24, 2005  
GDP 05-0036, 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-Second Quarter 2005  
2. PORTS Quarterly Radiological Discharge Monitoring Report-Second Quarter 2005

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 05-0036  
10 Pages Total

**PGDP Quarterly Radiological Discharge Monitoring Report  
Second Quarter 2005**

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

NAME **C/O US ENRICHMENT CORP**  
 ADDRESS **2 DEMOCRACY CTR 6903 ROCKLEDGE BETHESDA MD 20817**  
 FACILITY **USEC PGDP**  
 LOCATION **PADUCAH KY 42001-1410 FROM**  
**ATTN: MGR WASTE MGMT/ENV COMP**

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES)

DISCHARGE MONITORING REPORT (DMR)  
**KY0102083 002 2**

PERMIT NUMBER

DISCHARGE NUMBER

LIFT STATION 002 BYPASS

(SUBR PA)

F. - FINAL

MAJOR

MCCRACKEN

ATTACHMENT 6

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

\*\*\* 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											
22100 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	23.9000	23.9000		0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT			OTRL	GRAB
URANIUM NATURAL											
TOTAL											
22708 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	0.0020	0.0020	(19)	0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT			OTRL	GRAB
TOXICITY FINAL CONC											
TOXICITY UNITS											
61406 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL	BDL	(2F)	0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	1.00	ACUTE		OTRL	GRAB
METALS TOTAL											
78240 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	1.4700	1.4700	(19)	0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT			OTRL	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						270 441-6039		05	07	19	
WASTE MGMT/ENV COMP MGR		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT.				AREA CODE		NUMBER	YEAR	MO	DAY
TYPED OR PRINTED											

COMMENT AND EXPLANATION OF ANY VIOLATIONS (If any, attach here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location)  
 USEC PGDP

NAME C/O US ENRICHMENT CORP  
 ADDRESS 2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
USEC PGDP  
 FACILITY PADUCAH KY 42001-1410 FROM  
 LOCATION ATTN: MGR WASTE MGMT/ENV COMP

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES)

DISCHARGE MONITORING REPORT (DMR) KY0102083 006 2

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

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

\*\*\* 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			
TOXICITY, FINAL CONC										
TOXICITY UNITS	- SAMPLE MEASUREMENT	*****	*****	****	*****	BDL	BDL	0	2/91	GRAB
61406 1 0 0		*****	*****		*****	REPORT	1.00		QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX			
METALS, TOTAL										
78240 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	0.3940	0.3940	0	1/91	GRAB
EFFLUENT GROSS VALUE		*****	*****		*****	REPORT	REPORT		QTRLY	GRAB
	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX			
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	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 MGMT/ENV COMP MGR

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 KNOWLEDGE 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.

SIGNATURE OF PRINCIPAL EXECUTIVE  
 OFFICER OR AUTHORIZED AGENT

TELEPHONE 270-441-6039  
 DATE 05 07 19

TYPED OR PRINTED  
 COMMENT AND EXPLANATION OF ANY VIOLATIONS (If from all attachments here)

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

NAME USEC PGDP

ADDRESS C/O US ENRICHMENT CORP

2 DEMOCRACY CTR 6903 ROCKLEDGE

BETHESDA MD 20817

USEC PGDP

FACILITY PADUCAH

LOCATION ATTN: MGR WASTE MGMT/ENV COMP

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES)

DISCHARGE MONITORING REPORT (DMR)

COMBINED WASTEWATERS

(SUBR PA)

F - FINAL

MAJOR

MCCRACKEN

KY0102083

008-2

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

\*\*\* 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																
22100 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL REPORT	BDL REPORT		0	2/91	GRAB					
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	30DA AVG	DAILY MX	PCI/L			GRAB					
URANIUM, NATURAL																
TOTAL																
22708 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	0.0110 REPORT	0.0140 REPORT	(19)	0	2/91	GRAB					
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	30DA AVG	DAILY MX	MG/L			GRAB					
TOXICITY, FINAL CONC																
TOXICITY UNITS																
61406 1 0 1	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL REPORT	BDL 1.0	(2G) CHRONC	0	1/91	COMP					
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	30DA AVG	DAILY MX	TOXCTY			COMP					
METALS, TOTAL																
78240 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	0.3590 REPORT	0.3590 REPORT	(19)	0	1/91	GRAB					
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	30DA AVG	DAILY MX	MG/L			GRAB					
	SAMPLE MEASUREMENT															
	PERMIT REQUIREMENT															
	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							270 441-6039		05	07	19					
WASTE MGMT/ENV. COMP. MGR							SIGNATURE OF PRINCIPAL EXECUTIVE									
TYPED OR PRINTED							OFFICER OR AUTHORIZED AGENT.		AREA CODE	NUMBER	YEAR MO DAY					
COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)																

PERMITTEE NAME/ADDRESS (Include Facility Name/Location) U.S. ENRICHMENT CORP

NAME C/O U.S. ENRICHMENT CORP  
 ADDRESS 2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
USEC PGDP  
 FACILITY PADUCAH KY 42001-1410 FROM  
 LOCATION MGR WASTE MGMT/ENV COMP

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES)  
 DISCHARGE MONITORING REPORT (DMR) KY0102083 009 2

COMBINED WASTEWATERS  
 (SUBR PA)  
 F - FINAL  
 MAJOR

MCCRACKEN

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD  
 YEAR MO DAY TO YEAR MO DAY

\*\*\* 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		*****	*****	****	*****	BDL REPORT	BDL REPORT		0	2/91 QTRLY	GRAB
22100 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL REPORT	BDL REPORT		0	2/91 QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	PCI/L			
URANIUM, NATURAL, TOTAL		*****	*****	****	*****	BDL REPORT	BDL REPORT	(19)	0	2/91 QTRLY	GRAB
22708 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL REPORT	BDL REPORT		0	2/91 QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	MG/L			
TOXICITY, FINAL CONC		*****	*****	****	*****	BDL REPORT	BDL REPORT	(2G) CHRONC	0	1/91 QTRLY	COMP
TOXICITY UNITS	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL REPORT	BDL 1.0		0	1/91 QTRLY	COMP
61406 1 0 1	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	TOXCT			
EFFLUENT GROSS VALUE		*****	*****	****	*****	0.3080 REPORT	0.3080 REPORT	(19)	0	1/91 QTRLY	GRAB
METALS, TOTAL	SAMPLE MEASUREMENT	*****	*****	****	*****	0.3080 REPORT	0.3080 REPORT		0	1/91 QTRLY	GRAB
78240 1 0 0	PERMIT REQUIREMENT			****		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

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. Shank*  
 SIGNATURE OF PRINCIPAL EXECUTIVE  
 OFFICER OR AUTHORIZED AGENT

TELEPHONE  
 270 441-6039 05 07 19  
 DATE  
 AREA CODE NUMBER YEAR MO DAY

TYPED OR PRINTED  
 NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME/ADDRESS (Include  
Facility Name/Location/County/State)

NAME C/O US ENRICHMENT CORP  
ADDRESS 2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
FACILITY USEC PGDP  
LOCATION PADUCAH KY 42001-1410  
ATTN: MGR WASTE MGMT/ENV COMP

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES)  
DISCHARGE MONITORING REPORT (DMR) KY0102083 010 2

PERMIT NUMBER

DISCHARGE NUMBER

COMBINED WASTEWATERS  
(SUBR PA)  
F - FINAL  
MAJOR

MCCRACKEN

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

\*\*\* 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														
22100 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	13.8500	27.7000		0	2/91	GRAB			
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT	FCI/L		QTRLY	GRAB			
URANIUM, NATURAL														
TOTAL	SAMPLE MEASUREMENT	*****	*****	****	*****	0.0070	0.0100	(19)	0	2/91	GRAB			
22708 1 0 0	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT	MG/L		QTRLY	GRAB			
EFFLUENT GROSS VALUE						30DA AVG	DAILY MX							
TOXICITY, FINAL CONC														
TOXICITY UNITS	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL	BDL	(2G)	0	1/91	COMP			
61406 1 0 1	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	1.0	CHRON		QTRLY	COMP			
EFFLUENT GROSS VALUE						30DA AVG	DAILY MX	TOXCT						
METALS, TOTAL														
78240 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	0.4730	0.4730	(19)	0	1/91	GRAB			
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT	MG/L		QTRLY	GRAB			
						30DA AVG	DAILY MX							
	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						270 441-6039		05	07	19				
WASTE MGMT/ENV COMP MGR						SIGNATURE OF PRINCIPAL EXECUTIVE		AREA CODE	NUMBER	YEAR	MO	DAY		
TYPED OR PRINTED		OFFICER OR AUTHORIZED AGENT												

COMMITTEE AND REPRESENTATIVE OF ANY VIOLATIONS (If applicable, attach this here)

PERMITTEE NAME/ADDRESS (Include  
Facility Name/Location/County/State)

NAME C/O US ENRICHMENT CORP  
ADDRESS 2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
FACILITY USEC PGDP  
LOCATION PADUGAH KY 42001-1410  
ATTN: MGR WASTE MGMT/ENV COMP

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

KY0102063

011 2

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

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD  
YEAR MONTH DAY TO YEAR MONTH DAY

\*\*\* 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		*****	*****	****	*****	BDL	BDL		0	11/91	GRAB
22100 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL	BDL			QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	PCI/L			
URANIUM, NATURAL											
TOTAL		*****	*****	****	*****	0.0503	0.0780	(19)	0	11/91	GRAB
22708 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	REPORT	REPORT			QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	MG/L			
TOXICITY, FINAL CONC											
TOXICITY UNITS		*****	*****	****	*****	BDL	BDL	(2F)	0	1/91	GRAB
61406 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	REPORT	1.00	ACUTE		QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	TOXCTY			
METALS, TOTAL											
78240 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	0.0000	0.0000	(19)	0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		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 07 19**

AREA CODE NUMBER YEAR MO DAY

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

*V. J. Shanks*

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here).

PERMITTEE NAME/ADDRESS (Include Facility Name/Location and street address)

USEC PGDP

NAME C/O US ENRICHMENT CORP

ADDRESS 2 DEMOCRACY CTR 6903 ROCKLEDGE

BETHESDA MD 20817

USEC PGDP

FACILITY PADUCAH KY 42001-1410 FROM

LOCATION ATTN: MGR WASTE MGMT/ENV COMP

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES)

DISCHARGE MONITORING REPORT (DMR) KY0102083 012-2

LIFT STATION 012 BYPASS

(SUBR PA)

MCCRACKEN

F - FINAL

MAJOR

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

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

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		*****	*****	****	*****	BDL	BDL		0	1/91	GRAB
22100 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	REPORT	REPORT			QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	PCI/L			
URANIUM NATURAL											
TOTAL		*****	*****	****	*****	0.0030	0.0030	(19)	0	1/91	GRAB
22708 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	REPORT	REPORT			QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	MG/L			
TOXICITY FINAL CONC											
TOXICITY UNITS		*****	*****	****	*****	1.33	4.00	(2F)	1	3/91	GRAB
61406 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	REPORT	1.00	ACUTE		QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	TOXCT			
METALS TOTAL											
78240 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	2.0000	2.0000	(19)	0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		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 07 19

COMMENT AND EXPLANATION OF ANY VIOLATIONS (If any, list all attachments here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location) **GDP**

NAME **C/O US ENRICHMENT CORP**  
 ADDRESS **2 DEMOCRACY CTR 6903 ROCKLEDGE**  
**BETHESDA MD 20817**  
**USEC PGDP**  
 FACILITY **PADUCAH** **KY 42001-1410**  
 LOCATION **ATTN: MGR WASTE MGNT/ENV COMP**

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES)

DISCHARGE MONITORING REPORT (DMR) **KY0102083** **013 2**

STORMWATER RUNOFF

(SUBR PA)

MCCRACKEN

F - FINAL

MAJOR

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

\*\*\* 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											
22100 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL REPORT	BDL REPORT		0	1/91 QTRLY	GRAB GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	PCI/L			
URANIUM, NATURAL, TOTAL											
22708 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL REPORT	BDL REPORT	(19)	0	1/91 QTRLY	GRAB GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	MG/L			
TOXICITY, FINAL CONC											
TOXICITY UNITS	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL REPORT	BDL 1.0	(2F) ACUTE	0	1/91 QTRLY	GRAB GRAB
61406 1 0 0	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	TOXCTY			
EFFLUENT GROSS VALUE											
METALS, TOTAL											
78240 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	1.1800 REPORT	1.1800 REPORT	(19)	0	1/91 QTRLY	GRAB GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****		30DA AVG	DAILY MX	MG/L			
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

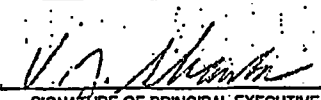
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER,  
**VERNON SHANKS, USEC**  
**WASTE MGNT/ENV COMP MGR**

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TELEPHONE  
**270 441-6039**

DATE  
**05 07 19**

TYPED OR PRINTED  
 COMMENT AND EXPLANATION OF ANY VIOLATIONS (If checked, fill in here)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  


PERMITTEE NAME/ADDRESS (Include, if  
Facility Name/Location differs)

NAME USEC PGDP  
C/O US ENRICHMENT CORP  
ADDRESS 2 DEMOCRACY CTR 6903 ROCKLEDGE  
BETHESDA MD 20817  
FACILITY USEC PGDP  
LOCATION PADUCAH KY 42001-1410  
ATTN: MGR WASTE MGNT/ENV COMP

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES)

DISCHARGE MONITORING REPORT (DMR) KY0102083 016 2

FIRE PROTECTION WATER

(SUBR PA)

MCCRACKEN

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

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											
22100 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL	BDL		0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT			QTRLY	GRAB
URANIUM, NATURAL						30DA AVG	DAILY MX	PCI/L			
TOTAL											
22708 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	0.0060	0.0060	(19)	0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT			QTRLY	GRAB
TOXICITY, FINAL CONC						30DA AVG	DAILY MX	MG/L			
TOXICITY UNITS											
61406 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	BDL	BDL	(2F)	0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	1.0	ACUTE		QTRLY	GRAB
METALS, TOTAL						30DA AVG	DAILY MX	TOXCTY			
78240 1 0 0	SAMPLE MEASUREMENT	*****	*****	****	*****	0.8900	0.8900	(19)	0	1/91	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	REPORT			QTRLY	GRAB
						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 MGNT/ENV COMP MGR

TYPED OR PRINTED

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SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

*V. J. Shanks*

TELEPHONE

270 441-6039

DATE

05 07 19

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Enclosure 2  
GDP 05-0036  
10 Pages Total

**PORTS Quarterly Radiological Discharge Monitoring Report  
Second Quarter 2005**

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd Quarter**

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

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

	Concentrations				Loadings			
	Alpha pCi/l	Beta pCi/l	Tc pCi/l	U ug/l	Alpha mCi	Beta mCi	Tc mCi	U kg
4/4/2005	< 3.9	14	15	1.81	< 0.097	0.36	0.37	0.045
4/11/2005	4.3	10	< 9	0.72	0.118	0.28	< 0.26	0.020
4/18/2005	< 3.0	< 6	< 10	0.45	< 0.047	< 0.18	< 0.29	0.014
4/25/2005	< 2.7	< 7	< 9	0.68	< 0.086	< 0.27	< 0.34	0.025
5/2/2005	< 4.5	10	< 9	1.37	< 0.169	0.37	< 0.34	0.051
5/9/2005	< 3.6	8	< 9	0.64	< 0.074	0.28	< 0.31	0.022
5/16/2005	< 2.5	7	< 10	0.48	< 0.057	0.25	< 0.33	0.017
5/23/2005	< 3.5	< 5	< 10	0.69	< 0.103	< 0.23	< 0.42	0.030
5/30/2005	< 2.8	< 7	< 9	0.40	< 0.043	< 0.22	< 0.29	0.013
6/6/2005	< 3.5	< 7	< 9	0.63	< 0.055	< 0.19	< 0.23	0.016
6/13/2005	< 3.8	< 6	< 9	0.39	< 0.035	< 0.15	< 0.25	0.010
6/20/2005	< 3.4	< 6	< 9	0.45	< 0.042	< 0.16	< 0.25	0.012
6/27/2005	< 3.5	< 6	< 9	0.33	< 0.023	< 0.12	< 0.19	0.007
Total	< 45.0	< 100	< 126	9.04	< 0.949	< 3.04	< 3.86	0.281
Average	< 3.5	< 8	< 10	0.70	< 0.073	< 0.23	< 0.30	0.022
Maximum	< 4.5	14	15	1.81	< 0.169	0.37	< 0.42	0.051
Minimum	< 2.5	< 5	< 9	0.33	< 0.023	< 0.12	< 0.19	0.007
Transuranics '001060105	Am 241 < 0.181	Np 237 < 0.062	Pu 238 < 0.056	Pu 239+240 < 0.056				

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd Quarter**

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

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

	Concentrations				Loadings			
	Alpha pCi/l	Beta pCi/l	Tc pCi/l	U ug/l	Alpha mCi	Beta mCi	Tc mCi	U kg
4/4/2005	< 4.8	< 6	< 10	0.84	< 0.016	< 0.193	AA	0.026
4/11/2005	< 4.7	< 5	< 10	0.75	< 0.010	< 0.112	AA	0.016
4/18/2005	6.6	7	< 10	0.73	0.078	0.077	AA	0.009
4/25/2005	< 3.4	< 8	< 9	0.84	< 0.006	< 0.085	AA	0.009
5/2/2005	< 7.1	8	< 9	0.93	< 0.007	0.100	AA	0.012
5/9/2005	< 5.5	8	< 9	0.97	< 0.004	0.058	AA	0.007
5/16/2005	< 3.7	< 5	< 10	0.97	< 0.005	< 0.045	AA	0.008
5/23/2005	< 5.6	7	< 10	1.23	< 0.009	0.084	AA	0.014
5/30/2005	< 4.3	< 8	< 9	1.09	< 0.004	< 0.042	AA	0.006
6/6/2005	< 5.4	< 8	< 9	1.02	< 0.003	< 0.039	AA	0.005
6/13/2005	< 6.1	7	< 9	1.06	< 0.004	0.047	AA	0.007
6/20/2005	< 5.1	< 6	< 9	0.71	< 0.005	< 0.069	AA	0.008
6/27/2005	< 5.2	< 6	< 9	0.74	< 0.000	< 0.000	AA	0.000
Total	< 67.5	< 89	< 122	11.88	< 0.149	< 0.950	AA	0.128
Average	< 5.2	< 7	< 9	0.91	< 0.011	< 0.073	AA	0.010
Maximum	< 7.1	8	< 10	1.23	0.078	0.193	AA	0.026
Minimum	< 3.4	< 5	< 9	0.71	< 0.000	< 0.000	AA	0.000
Transuranics '002060105	Am 241 < 0.064	Np 237 < 0.261	Pu 238 < 0.178	Pu 239+240 < 0.065				

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd Quarter**

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

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

	Concentrations				Loadings			
	Alpha pCi/l	Beta pCi/l	Tc pCi/l	U ug/l	Alpha mCi	Beta mCi	Tc mCi	U kg
4/4/2005	6.4	113	157	7.86	0.037	0.66	0.91	0.046
4/11/2005	10.6	162	258	6.38	0.056	0.88	1.37	0.034
4/18/2005	6.7	199	270	4.62	0.036	1.08	1.46	0.025
4/25/2005	6.0	109	135	3.29	0.041	0.74	0.92	0.023
5/2/2005	< 5.7	94	123	6.99	< 0.044	0.73	0.96	0.055
5/9/2005	9.7	95	122	6.01	0.056	0.54	0.70	0.035
5/16/2005	8.9	93	113	3.91	0.057	0.60	0.73	0.025
5/23/2005	12.1	101	129	7.18	0.081	0.68	0.86	0.048
5/30/2005	22.3	107	136	12.5	0.122	0.59	0.75	0.069
6/6/2005	7.9	94	141	4.64	0.044	0.53	0.79	0.026
6/13/2005	9.1	96	131	7.60	0.063	0.67	0.91	0.053
6/20/2005	49.6	100	137	25.1	0.392	0.79	1.08	0.198
6/27/2005	55.4	112	145	25.1	0.376	0.76	0.99	0.170
Total	< 210.4	1475	1997	121.2	< 1.406	9.22	12.42	0.804
Average	< 16.2	113	154	9.32	< 0.108	0.71	0.96	0.062
Maximum	55.4	199	270	25.1	0.392	1.08	1.46	0.198
Minimum	< 5.7	93	113	3.29	< 0.036	0.53	0.70	0.023
Transuranics '003060205	Am 241 < 0.083	Np 237 < 0.252	Pu 238 < 0.200	Pu 239+240 < 0.073				

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd Quarter**

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

**Outfall 004 / Cooling Tower Blowdown**

	Concentrations				Loadings			
	Alpha pCi/l	Beta pCi/l	Tc pCi/l	U ug/l	Alpha mCi	Beta mCi	Tc mCi	U kg
4/4/2005	< 4.1	< 6	< 10	0.60	< 0.0055	< 0.093	AA	0.0092
4/11/2005	< 4.2	8	< 9	0.77	< 0.0052	0.095	AA	0.0087
4/18/2005	< 3.2	< 6	< 10	1.39	< 0.0025	< 0.018	AA	0.0042
4/25/2005	AL	AL	AL	AL	AL	AL	AL	AL
5/2/2005	< 4.9	10	< 9	0.87	< 0.0010	0.018	AA	0.0016
5/9/2005	< 3.9	14	< 9	0.95	< 0.0003	0.007	AA	0.0005
5/16/2005	< 2.7	11	< 10	1.03	< 0.0008	0.014	AA	0.0013
5/23/2005	< 3.8	15	< 10	1.28	< 0.0022	0.042	AA	0.0036
5/30/2005	4.2	13	< 9	1.35	0.0219	0.070	AA	0.0071
6/6/2005	< 3.9	15	< 9	1.06	< 0.0079	0.192	AA	0.0132
6/13/2005	< 4.2	12	< 9	1.28	< 0.0100	0.153	AA	0.0166
6/20/2005	< 4.2	13	< 9	0.95	< 0.0039	0.088	AA	0.0065
6/27/2005	< 3.8	12	< 9	0.95	< 0.0033	0.069	AA	0.0054
Total	< 47.1	< 135	< 111	12.48	< 0.0644	< 0.858	AA	0.0778
Average	< 3.9	< 11	< 9	1.04	< 0.0054	< 0.072	AA	0.0065
Maximum	< 4.9	15	< 10	1.39	0.0219	0.192	AA	0.0166
Minimum	< 2.7	< 6	< 9	0.60	< 0.0003	< 0.007	AA	0.0005
Transuranics '004060105	Am 241 < 0.063	Np 237 < 0.143	Pu 238 < 0.209	Pu 239+240 < 0.209				

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd Quarter**

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

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

	Concentrations				Loadings			
	Alpha pCi/l	Beta pCi/l	Tc pCi/l	U ug/l	Alpha mCi	Beta mCi	Tc mCi	U kg
4/4/2005	< 3.7	< 6	< 10	0.25	< 0.006	< 0.22	AA	0.010
4/11/2005	AL	AL	AL	AL	AL	AL	AL	AL
4/18/2005	AL	AL	AL	AL	AL	AL	AL	AL
4/25/2005	AL	AL	AL	AL	AL	AL	AL	AL
5/2/2005	AL	AL	AL	AL	AL	AL	AL	AL
5/9/2005	AL	AL	AL	AL	AL	AL	AL	AL
5/16/2005	AL	AL	AL	AL	AL	AL	AL	AL
5/23/2005	AL	AL	AL	AL	AL	AL	AL	AL
5/30/2005	AL	AL	AL	AL	AL	AL	AL	AL
6/6/2005	AL	AL	AL	AL	AL	AL	AL	AL
6/13/2005	AL	AL	AL	AL	AL	AL	AL	AL
6/20/2005	AL	AL	AL	AL	AL	AL	AL	AL
6/27/2005	AL	AL	AL	AL	AL	AL	AL	AL
Total	< 3.7	< 6	< 10	0.25	< 0.006	< 0.22	AA	0.010
Average	< 3.7	< 6	< 10	0.25	< 0.006	< 0.22	AA	0.010
Maximum	< 3.7	< 6	< 10	0.25	< 0.006	< 0.22	AA	0.010
Minimum	< 3.7	< 6	< 10	0.25	< 0.006	< 0.22	AA	0.010
Transuranics 005032905	Am 241 < 0.412	Np 237 < 0.237	Pu 238 < 0.374	Pu 239+240 < 0.207				

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd Quarter**

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

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

	Concentrations				Loadings			
	Alpha pCi/l	Beta pCi/l	Tc pCi/l	U ug/l	Alpha mCi	Beta mCi	Tc mCi	U kg
4/4/2005	< 4.3	6	< 10	5.04	< 0.061	0.124	AA	0.101
4/11/2005	5.9	6	< 9	5.02	0.053	0.053	AA	0.045
4/18/2005	5.3	< 6	< 10	4.77	0.035	< 0.039	AA	0.032
4/25/2005	5.9	< 7	< 9	4.19	0.104	< 0.128	AA	0.074
5/2/2005	< 4.9	10	< 9	3.73	< 0.030	0.132	AA	0.050
5/9/2005	3.8	8	< 9	4.46	0.022	0.046	AA	0.026
5/16/2005	11.0	8	< 10	3.55	0.091	0.066	AA	0.029
5/23/2005	< 3.6	7	< 10	4.36	< 0.022	0.058	AA	0.037
5/30/2005	5.3	< 7	< 9	4.63	0.032	< 0.043	AA	0.028
6/6/2005	4.2	< 8	< 9	3.50	0.027	< 0.047	AA	0.022
6/13/2005	< 3.9	6	< 9	3.59	< 0.014	0.037	AA	0.024
6/20/2005	< 3.9	7	< 9	3.47	< 0.017	0.057	AA	0.028
6/27/2005	3.6	< 6	< 9	3.95	0.019	< 0.030	AA	0.021
Total	< 65.6	< 91	< 121	54.26	< 0.526	< 0.861	AA	0.517
Average	< 5.0	< 7	< 9	4.17	< 0.040	< 0.066	AA	0.040
Maximum	11.0	10	< 10	5.04	0.104	0.132	AA	0.101
Minimum	< 3.6	< 6	< 9	3.47	< 0.014	< 0.030	AA	0.021
Transuranics '009060105	Am 241 < 0.070	Np 237 < 0.055	Pu 238 < 0.055	Pu 239+240 0.187				

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd Quarter**

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

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

	Concentrations					Loadings			
	Alpha pCi/l	Beta pCi/l	Tc pCi/l	U ug/l		Alpha mCi	Beta mCi	Tc mCi	U kg
4/4/2005	< 4.2	< 6	< 10	3.17		< 0.021	< 0.066	AA	0.034
4/11/2005	< 4.3	14	< 9	3.45		< 0.013	0.087	AA	0.021
4/18/2005	< 3.5	< 6	< 10	2.99		< 0.010	< 0.032	AA	0.016
4/25/2005	3.8	< 7	< 9	2.32		0.044	< 0.084	AA	0.027
5/2/2005	< 5.0	7	< 9	3.80		< 0.022	0.067	AA	0.036
5/9/2005	< 4.0	5	< 9	2.95		< 0.008	0.024	AA	0.014
5/16/2005	< 2.6	< 5	< 10	1.95		< 0.006	< 0.027	AA	0.011
5/23/2005	< 3.7	7	< 10	2.86		< 0.013	0.049	AA	0.022
5/30/2005	< 3.0	< 7	< 9	2.38		< 0.007	< 0.032	AA	0.011
6/6/2005	< 3.8	< 8	< 9	2.06		< 0.006	< 0.034	AA	0.009
6/13/2005	< 4.2	< 6	< 9	1.65		< 0.005	< 0.026	AA	0.008
6/20/2005	< 4.0	< 6	< 9	1.74		< 0.007	< 0.035	AA	0.011
6/27/2005	< 3.7	< 6	< 9	1.38		< 0.004	< 0.028	AA	0.007
Total	< 49.8	< 89	< 121	32.70		< 0.163	< 0.590	AA	0.225
Average	< 3.8	< 7	< 9	2.52		< 0.013	< 0.045	AA	0.017
Maximum	< 5.0	14	< 10	3.80		0.044	0.087	AA	0.036
Minimum	< 2.6	< 5	< 9	1.38		< 0.004	0.024	AA	0.007
Transuranics '010060105	Am 241 < 0.070	Np 237 < 0.141	Pu 238 < 0.052	Pu 239+240 < 0.096					

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd Quarter**

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

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

	Concentrations				Loadings			
	Alpha pCi/l	Beta pCi/l	Tc pCi/l	U ug/l	Alpha mCi	Beta mCi	Tc mCi	U kg
4/4/2005	< 4.3	< 6	< 10	1.43	< 0.00087	< 0.0062	AA	0.00145
4/11/2005	< 4.4	< 5	< 9	1.25	< 0.00018	< 0.0012	AA	0.00029
4/18/2005	< 3.5	< 6	< 10	1.05	< 0.00007	< 0.0007	AA	0.00012
4/25/2005	< 2.9	< 7	< 9	0.85	< 0.00010	< 0.0014	AA	0.00017
5/2/2005	< 5.0	6	< 9	1.14	< 0.00015	0.0014	AA	0.00025
5/9/2005	< 4.0	6	< 9	1.09	< 0.00019	0.0016	AA	0.00032
5/16/2005	< 2.6	< 5	< 10	0.74	< 0.00029	< 0.0032	AA	0.00048
5/23/2005	< 3.7	< 5	< 10	0.97	< 0.00021	< 0.0020	AA	0.00035
5/30/2005	< 3.1	9	< 9	0.80	< 0.00023	0.0044	AA	0.00039
6/6/2005	< 3.8	< 8	< 9	0.50	< 0.00009	< 0.0022	AA	0.00014
6/13/2005	< 4.1	< 6	< 9	0.69	< 0.00006	< 0.0008	AA	0.00010
6/20/2005	< 4.0	< 6	< 9	0.74	< 0.00006	< 0.0007	AA	0.00010
6/27/2005	< 3.7	< 6	< 9	0.70	< 0.00006	< 0.0008	AA	0.00009
Total	< 49.1	< 80	< 121	11.95	< 0.00255	< 0.0266	AA	0.00425
Average	< 3.8	< 6	< 9	0.92	< 0.00020	< 0.0020	AA	0.00033
Maximum	< 5.0	9	< 10	1.43	< 0.00087	< 0.0062	AA	0.00145
Minimum	< 2.6	< 5	< 9	0.50	< 0.00006	< 0.0007	AA	0.00009
Transuranics '011060105	Am 241 < 0.222	Np 237 < 0.219	Pu 238 < 0.173	Pu 239+240 < 0.219				

**Plant Radiological Discharges to Surface Water  
Calendar Year 2005 - 2nd 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 has no discharge, there is no composite sampler there and effluent data is based on grab samples and manual measurements taken when there is an actual discharge.

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 measurable transuranic concentrations are not normally present in any USEC-leased outfall.

Outfall 002 was valved off at the end of June for maintenance work on its effluent control system. There was flow for a few hours during the last week included in this report, but due to the very limited amount of flow the weekly loadings round off to zero.

Outfall 005 had two discharge events within the week of April 4. Both events were sampled for both the usual weekly parameters and transuranic parameters. Nothing was detected except trace levels of uranium. The concentrations presented in this report are the higher from both sets of samples.

AA indicates no detectable concentration.

AL indicates no flow during the sampling period.