



May 25, 2011  
GDP 11-1016

Ms. Catherine Haney  
Director, Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

**Paducah Gaseous Diffusion Plant (PGDP)  
Docket No. 70-7001, Certificate No. GDP-1  
Submittal of NRC Form 327, "Special Nuclear Material (SNM) and Source Material (SM)  
Physical Inventory Summary Report"**

INFORMATION TRANSMITTED HERewith IS PROTECTED FROM PUBLIC  
DISCLOSURE AS CONFIDENTIAL COMMERCIAL OR FINANCIAL  
INFORMATION AND/OR TRADE SECRETS PURSUANT TO  
10 CFR 2.390(d)(1)

Dear Ms. Haney:

As required by 10 CFR 74.17(a) and the Fundamental Nuclear Material Control Plan (FNMCP), the United States Enrichment Corporation (USEC) is submitting to the United States Nuclear Regulatory Commission (NRC) the SNM and SM Physical Inventory Summary Report for the Paducah Gaseous Diffusion Plant. The Form 327 document in Enclosure 1 covers the bimonthly inventory period stated therein.

Enclosure 1 contains information concerning USEC's material control and accounting program for special nuclear material at the plant. As such, Enclosure 1 contains confidential commercial or financial information that is exempt from public disclosure pursuant to 10 CFR 2.390(d)(1). USEC hereby requests that Enclosure 1 be withheld from public disclosure based on 10 CFR 2.390(d)(1), which states, in part:

"The following information is considered commercial or financial information within the meaning of § 9.17(a)(4) of this chapter and is subject to disclosure only in accordance with the provisions of § 9.19 of this chapter.

United States Enrichment Corporation  
Paducah Gaseous Diffusion Plant  
P.O. Box 1410, Paducah, KY 42002

NH5501

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Correspondence and reports to or from the NRC which contain information or records concerning a licensee's or applicant's physical protection, classified matter protection, or material control and accounting program for special nuclear material not otherwise designated as Safeguards Information or classified as National Security Information or Restricted Data."

There are no new commitments contained in this submittal. Should you have any questions or comments on the enclosed information, please contact Jere Bracey at (270) 441-5928.

Sincerely,

A handwritten signature in black ink, appearing to read "V. J. Shanks", written in a cursive style.

Vernon J. Shanks  
Manager, Regulatory Affairs

Enclosure: As Stated

cc: J. Calle, Chief, Fuel Facility Inspection Branch 2, NRC Region II  
T. Liu, NRC Project Manager PGDP, NRC-HQ  
M. Miller, NRC Senior Resident Inspector, PGDP  
T. Pham, NRC Senior Safeguards Analysis, NRC-HQ