March 20, 2009

Mr. Steven A. Toelle
Director, Nuclear Regulatory Affairs
U. S. Enrichment Corporation
2 Democracy Center
6903 Rockledge Drive
Bethesda, MD 20817

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING TECHNICAL SAFETY REQUIREMENT CHANGE TO REVISE NORMETEX PUMP URANIUM HEXAFLUORIDE RELEASE DETECTION SYSTEM CONTROLS, PADUCAH GASEOUS DIFFUSION PLANT (TAC NO. L32477)

Dear Mr. Toelle:

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the November 4, 2009 certificate amendment request, submitted by United States Enrichment Corporation (USEC), Paducah Gaseous Diffusion Plant (PGDP or certificate holder), concerning USEC-PGDP's proposed revision to its Technical Safety Requirement (TSR), Section 2.3.4.3 to extend the allowed completion time for restoring automatic uranium hexafluoride release detection and isolation system operability. The staff's review of the TSR revision request has identified that additional information is needed before a final decision can be taken on the submittal.

Your response to the request for additional information, specified in the enclosure, should be provided to the NRC within 10 business days from the date of this letter. This time frame has been agreed upon between NRC staff and USEC-PGDP representatives during the telephone conference held on March 12, 2009.

In accordance with Title 10 of the *Code of Federal Regulations*, Section 2.390 of the NRC's Rules of Practice, a copy of this letter will be available electronically from the Publicly Available Records component of NRC Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Website at http://www.nrc.gov/reading-rm/adams.html.

If there are any questions regarding this action, please contact me at (301) 492-3217 or via e-mail at tilda.liu@nrc.gov.

Sincerely,

/RA/

Tilda Y. Liu, Senior Project Manager
Advanced Fuel Cycle, Enrichment,
and Uranium Conversion Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Enclosure: As stated

Docket No.: 70-7001
Certificate No.: GDP-1

cc w/enclosure: Vernon Shanks, USEC-Paducah

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PADUCAH GASEOUS DIFFUSION PLANT
CERTIFICATE OF AMENDMENT REQUEST 08-0017
TECHNICAL SAFETY REQUIREMENT CHANGE TO REVISE NORMETEX PUMP URANIUM HEXAFLUORIDE RELEASE DETECTION SYSTEM CONTROLS

REQUEST FOR ADDITIONAL INFORMATION

The bases for review of the proposed Technical Safety Requirement (TSR) are contained in *Title 10 of the Code of Federal Regulations* (10 CFR) 76.87 and 10 CFR 76.35. It is necessary for the U.S. Nuclear Regulatory Commission staff to evaluate whether the proposed TSR change for the Normetex Pump uranium hexafluoride (UF_6) Release Detection System Controls will provide adequate protection of the public health and safety, and that appropriate management controls and oversight will be provided to ensure that activities relevant to nuclear safety are conducted in an appropriately controlled manner that ensures protection of employee and public health and safety.

RAI-1

Provide additional technical justification as to how the proposed administrative control (i.e., "smoke watch") for a period of up to 14 days provides adequate protection of employee and public health and safety. The certificate holder is requested to consider in its response the following:

a. a comparison of the effectiveness of each control (automatic and smoke watch), including the minimum detectable concentration of UF_6 which can be sensed by each method, along with its associated minimum detectable release rate, the maximum response time required to mitigate the hazard, from the onset of the release to the ultimate termination of the release; and a discussion of how the minimum leak rate and concentration detectable by human means is considered adequate for meeting the facility certificate requirements;

b. additional information regarding the effectiveness of a smoke watch , as an adequate compensatory measure, when considering human factors (e.g., fatigue, attentiveness) and environmental conditions (e.g., heat, noise); and

c. a discussion of whether there is additional risk to plant workers or the public associated with "smoke watches," and, if so, provide justification as to why the use of a smoke watch during the proposed time frame is still considered adequate for assuring the health and safety of plant workers and the public.