

March 13, 2014

Mr. Steve Toelle, Director
Regulatory Affairs
United States Enrichment Corporation
6903 Rockledge Drive
Bethesda, MD 20817-1818

SUBJECT: CERTIFICATE AMENDMENT REQUEST RELATED TO REVISION OF
TECHNICAL SAFETY REQUIREMENTS TABLE 3.2.2-1, MINIMUM STAFFING
REQUIREMENTS FOR THE PADUCAH GASEOUS DIFFUSION PLANT -
TECHNICAL ASSIGNMENT CONTROL NUMBER L36030

Dear Mr. Toelle:

I am responding to your letter dated December 16, 2013 (GDP 13-0020), requesting the U.S. Nuclear Regulatory Commission's (NRC's) review and approval of an amendment to Certificate of Compliance GDP-1 for the Paducah Gaseous Diffusion Plant (PGDP). The proposed certificate amendment request would revise PGDP's Technical Safety Requirements, Table 3.2.2-1, Health Physics Minimum Staffing Requirements. In addition, the proposed amendment would revise the minimum staffing requirements for the C-310 facility by removing the Cascade 3 mode from the facility's minimum staffing requirements.

Our review of your submittal has identified additional information that is needed before final action can be taken. The additional information specified in the enclosure should be provided to the NRC within 30 days from the date of this letter. Please reference Technical Assignment Control Number L36030 for this action in your response.

In accordance to Title 10 of the *Code of Federal Regulations* 2.390(d) of the NRC's "Agency Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

S. Toelle

-2-

If you have any questions regarding this matter, please contact me at (301) 287-9070, or e-mail, Osiris.Siurano-Perez@nrc.gov.

Sincerely,

/RA/

Osiris Siurano-Perez, Project Manager
Uranium Enrichment Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

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

cc: Mr. Vernon Shanks, USEC

If you have any questions regarding this matter, please contact me at (301) 287-9070, or e-mail, Osiris.Siurano-Perez@nrc.gov.

Sincerely,

/RA/

Osiris Siurano-Perez, Project Manager
Uranium Enrichment Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

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

cc: Mr. Vernon Shanks, U.S. Enrichment Corporation

DISTRIBUTION:

FCSS r/f JAndersen, FCSS SAni, FCSS MBailey, FCSS
MCrespo, RII JDowns, FCSS TPham, FCSS RRussell, RII

ML14071A086

OFFICE	FCSS/UEB	FCSS/UEB	NRC/RII	FCSS/UEB
NAME	OSiurano	TBrockington	MSykes	BSmith
DATE	03/12/14	03/13/14	03/12 /14	03/13/14

OFFICIAL RECORD COPY

**REQUEST FOR ADDITIONAL INFORMATION
PADUCAH GASEOUS DIFFUSION PLANT
CERTIFICATE AMENDMENT REQUEST – MINIMUM STAFFING REQUIREMENTS
LETTER GDP-0020 DATED DECEMBER 16, 2013,
DOCKET NUMBER 70-7001
CERTIFICATE NUMBER GDP-1**

The United States Enrichment Corporation (USEC) is requesting an amendment to modify Technical Safety Requirements (TSR), Section 3.0, Administrative Controls. Specifically, USEC requests that Table 3.2.2-1, Minimum Staffing Requirements, be modified to remove the requirement for continuous Health Physics (HP) coverage under shutdown plant conditions. USEC further states that the removal of HP technicians will not result in a significant decrease in the effectiveness of any of the Paducah Gaseous Diffusion Plant's (PGDP's) programs or plans contained in its Certificate application. However, based on a recent inspection of USEC's implementation of its Emergency Plan (EP), the U.S. Nuclear Regulatory Commission (NRC) staff is concerned about the possible adverse impacts that the removal of HP technicians may pose on the PGDP's emergency response capabilities. This is based on the fact that the EP responsibilities are based on the assumption that a qualified individual is there to perform the function as required by the TSR.

NUREG/CR 5569 Health Physics Position Paper (HPPOS) #238, "Health Physics Position on Task Qualification of HP Technicians," states that there are certain tasks and job assignments that require in-depth knowledge and can only be performed by fully qualified American National Standards Institute (ANSI) technicians.

The NRC Health Physics Position Task Qualification of HP Technicians (HPPOS-238 PDR-9111210362 - see [memorandum](#) from L. J. Cunningham to J. H. Joyner (and others) dated September 20, 1991), states that Health Physics Technicians (HPTs) may independently perform specific tasks or job assignments if they meet the required prerequisites and complete the required task qualifications of their plant training programs. However, there are certain tasks and job assignments that require in-depth knowledge and can only be performed by fully qualified ANSI technicians, such as authorizing the free release of radioactive materials from the restricted area, approval of effluent release permits, approval of radiation work permits, and receipt/shipping of radioactive material. In the area of Emergency Preparedness, for example, a non-fully qualified HPT should not be authorized to lead emergency search and rescue teams, lead environmental monitoring teams, and perform offsite dose assessment. In addition, the Beaver Valley Escalated Enforcement Letter EA-03-054 (White Finding/NOV) for the inability of the Emergency Response Organization to meet staffing requirements during an emergency states that "...responding to an emergency with "meter qualified" (i.e. non-ANSI qualified) individuals is not acceptable to the NRC, in part because although many of your (the Beaver Valley) staff are "meter qualified" to perform basic radiation protection (RP) duties, this level of training would not be sufficient to carry out the complex RP duties that would be necessary in a radiological emergency."

Based on NRC staff inspections and interviews with E-Squad personnel and the fire chief, the E-Squad personnel may not be qualified to perform the above described tasks and only possess very basic health physics knowledge (e.g., use survey meters, fill out paperwork, set up air samplers, etc.). E-Squad personnel are not trained to determine protective equipment or actions for others during an emergency, which would be a function of qualified HP technicians, nor are they qualified or trained to do daily survey meter quality control checks and inspections.

Enclosure

With these issues in mind, please provide additional information on the following:

1. What provisions, in accordance with your training program, has PGDP made to ensure appropriate formal qualification of the e-squad members to meet health physics qualification requirements?
2. PGDP's EP states that..."Upon request from the hospitals, plant health physics personnel are dispatched to assist in contamination control and decontamination of the patient, hospital staff, and hospital facilities/equipment." If requested by off-site hospitals, what provisions have been made to ensure a qualified HP tech is dispatched to assist in contamination control and decontamination of the patient, hospital staff, and hospital facilities/equipment?
3. What provisions have been made for the daily instrument quality control checks and instrument verification and replacement of faulty meters for the e-squad that is currently performed by qualified HP personnel?
4. What provisions have been made to provide the technical advice on the consequences and control of personnel exposure at the onset of an emergency prior to activation of the emergency operations center?
5. Emergency Action Levels (EALs) at PGDP are based on Emergency Response Planning Guide (ERPG) levels, which are based on airborne concentrations of radioactive materials or chemicals. The E-Squad personnel are not trained to measure radioactivity air concentrations to determine EALs. What provisions have been made to ensure the availability of qualified personnel to perform the air sampling and monitoring required for the classification of emergencies based on air concentrations and ERPGs?