

December 07, 2004

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

SUBJECT: PADUCAH GASEOUS DIFFUSION PLANT - CERTIFICATE AMENDMENT  
REQUEST DATED AUGUST 4, 2004 (TAC L52561)

Dear Mr. Toelle:

We have reviewed your request dated August 4, 2004, a Certificate amendment request to change the Technical Specification Requirements for the Paducah Gaseous Diffusion Plant.

We have determined that additional information is necessary to complete our review. The enclosure to this letter describes the additional information that is needed. Please respond to this request for additional information within 30 days, or provide notification if a longer period of time will be required to provide your response.

For administrative purposes, we are closing TAC No. L52561 with this letter, and will open a new TAC No. upon receipt of your response.

If you have any questions regarding this request, please contact me at (301) 415-7254 or via e-mail to [dem1@nrc.gov](mailto:dem1@nrc.gov).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Please note that on October 25, 2004, the NRC suspended public access to ADAMS, and initiated an additional security review of publicly available documents to ensure that potentially sensitive information is removed from the ADAMS database accessible through the NRC's web site. Interested members of the public may obtain copies of the referenced documents for review and/or copying by contacting the Public Document Room pending resumption of public access to ADAMS. The NRC Public Document Room is located at NRC Headquarters in Rockville, MD, and can be contacted at (800) 397-4209 or (301) 415-4737 or [pdr@nrc.gov](mailto:pdr@nrc.gov).

Sincerely,

/RA/

Dan E. Martin, Project Manager  
Uranium Processing Section  
Fuel Cycle Facilities Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Materials Safety  
and Safeguards

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

Enclosure: Request for Additional Information

cc: Mr. Randall M. DeVault, DOE-Oak Ridge  
Russell Starkey, Paducah

December 07, 2004

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Sincerely,

/RA/

Dan E. Martin, Project Manager  
Uranium Processing Section  
Fuel Cycle Facilities Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Materials Safety  
and Safeguards

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

Enclosure: Request for Additional Information

cc: Mr. Randall M. DeVault, DOE-Oak Ridge  
Russell Starkey, Paducah

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## REQUEST FOR ADDITIONAL INFORMATION

### CERTIFICATE AMENDMENT REQUEST

DATED AUGUST 4, 2004

- 1) The proposed basis for TSR 2.2.5.5, "C-337-A Jet Station Barrier Frame," SAR 3.15.2.9.3, "System Evaluation," and SAR 4.3.2.2.10, "Pigtail/Line Failure Outside Autoclave (Primary System Integrity)," mentioned an analysis of the frame structure that verified that the frame structure would absorb the load imposed by an impact without collapse or contact with the primary system piping.

Please provide the assumptions used in the analysis, a brief description of the analysis method, as well as a summary of the results of the analysis for Nuclear Regulatory Commission (NRC) review. Please describe the "scenarios" analyzed and how they bound the potential types and magnitudes of impacts.

The NRC staff must review the details of the barrier frame analysis in order for the NRC staff to determine that the barrier frame provides equivalent or better protection than the current crane travel limit switch.

- 2) The proposed surveillance requirement (SR) for TSR 2.2.5.5, "C-337-A Jet Station Barrier Frame," requires, "The jet station barrier frame in C-337-A shall be inspected for structural defects."

Please provide a description of how the barrier frame will be inspected for structural defects, including procedures to be used and what the user is directed to look for.

Please provide a discussion of why the SR requires an inspection for structural defects. Describe how an inspection for structural defects includes verification that the frame meets its original design specification for dimensions, material condition, that it has sustained no significant structural damage, and that the inspection verifies that no field modifications have been made since the original installation. Please describe the minimum qualifications of the person performing this inspection and how they are defined and documented.

- 3) Please describe the "administrative controls" that are relied on to prevent a cylinder or other heavy load from being moved over the jet station piping. Please explain how a cylinder or other heavy load will be prevented from "drifting" over the jet station piping.
- 4) Please describe the horizontal distance from the jet station barrier frame from the current crane travel limit stop and the proposed crane travel limit stop location. Please describe how the crane travel limit stop is activated to prevent loads from traveling over the jet station, while allowing loads to be moved by the jet station, to the side, if not over the jet station.
- 5) Current SAR Section 3.2.2 states that "Limit switches on the cranes keep cylinders from being transported over the jet stations in C-337A." Since the TSR-required limit switch control would be replaced by the "administrative controls" to prevent loads from traveling over the jet station, please describe how an equivalent level and margin of safety will be maintained.