



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

July 14, 1998

EAs 98-249; 98-250; 98-251

Mr. J. H. Miller
Vice President - Production
United States Enrichment Corporation
Two Democracy Center
6903 Rockledge Drive
Bethesda, MD 20817

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY-
\$55,000 (NRC Inspection Report 70-7002/98005(DNMS))

Dear Mr. Miller:

This refers to the inspection conducted March 9, 1998 through May 8, 1998, at the United States Enrichment Corporation (USEC) Portsmouth Gaseous Diffusion Plant in Piketon, Ohio. The purpose of the inspection was to review the activities authorized by NRC Certificate Number GDP-2. The inspection report detailing our findings was issued on May 18, 1998. A predecisional enforcement conference was held with you and members of your staff on June 5, 1998, to discuss the apparent violations, the root causes, and the corrective actions. A summary report of the conference will be sent to you by separate correspondence.

Based on the information developed during the inspection and the information provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) and the circumstances surrounding the violations are described in detail in the subject inspection report.

The most significant violation, which is described in Section I of the Notice, involves a programmatic deficiency in the maintenance and surveillance program for air-operated, safety-related valves at the Portsmouth plant. Specifically, during the inspection, NRC staff raised concerns about the ability of air-operated autoclave containment isolation valves to perform their intended safety function with a degraded plant air system. The air-operated isolation valves normally operate with nonsafety-related plant air, and have safety-related backup air reservoirs. At the time of the inspection, routine functional tests of the air-operated valves were not performed; however, a scheduled leak rate test was performed on each autoclave for the "pigtail" isolation valve. As a result of the NRC's concerns, you initiated testing of air-operated autoclave isolation valves, which identified that as of June 5, 1998, numerous valves were not capable of meeting the test acceptance criteria (24 failures out of 55 valves tested).

During the conference, your staff stated that the root cause for the violation in Section I was the failure to develop a testing program to demonstrate that autoclave air-to-close valves perform their design function after a loss of normal supply air. In addition, your staff stated that this

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violation should be categorized at Severity Level IV based on your assessment that there was no impact on safety. The NRC has considered all of the information surrounding this violation and concluded that while there were no actual safety consequences in this case, the violation is a significant safety concern because: (1) there was an increased potential for a significant release if a loss of plant air and a catastrophic rupture of a uranium hexafluoride cylinder had occurred concurrently; and (2) the root cause indicates a lack of fundamental understanding of the importance of demonstrating that safety system components will perform their intended safety functions over the full range of operating conditions. Further, this violation is of particular concern given the duration and number of test failures identified. Therefore, the violation has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions (Enforcement Policy)," NUREG-1600, as a Severity Level III violation.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$55,000 is considered for a Severity Level III violation. Because Portsmouth has been the subject of escalated enforcement actions within the last two years, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit for *identification* is not warranted because NRC staff identified the valve issue and brought it to USEC's attention. However, credit for *corrective action* is warranted because you took prompt and comprehensive action to define the magnitude of the problem and to implement corrective actions. Specifically, the corrective actions described during the conference included: (1) declaring affected autoclaves inoperable; (2) declaring all safety-related systems with air-to-close valves either inoperable or performing an Operability Evaluation; (3) establishing criteria by which to test and repair the valves; (4) issuing by June 17, 1998, formal testing criteria to be used for surveillance testing of the backup air reservoir tanks; and (5), developing by July 10, 1998, an action plan to verify that design bases systems credited for backup are being properly tested.

Therefore, to emphasize the importance of prompt identification of violations, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the base amount of \$55,000 for the Severity Level III violation.

The violations in Section II of the Notice involving improper installation of a containment valve actuator, failure to maintain a fluorinating environment for a uranium deposit greater than safe-mass, failure to report laboratory sample results, failure to implement maintenance procedures, and failure to perform adequate post-maintenance testing, are each categorized as Severity Level IV violations in accordance with the Enforcement Policy. At the conference, you provided information regarding one of the examples (Cell 29-3-6) of an apparent violation regarding the failure to maintain a fluorinating environment for which you believed a violation did not occur. After reviewing the information presented at the conference, the NRC concluded that no violation of Technical Safety Requirements occurred for Cell 29-3-6.

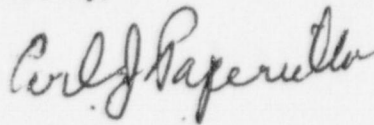
During the conference, one apparent violation regarding exceeding your possession limit for enriched uranium was discussed. In your presentation, you stated that a possession limit violation had not occurred, based on a December 20, 1993 Joint Statement of Understanding

between the NRC and the Department of Energy. Further, you stated that Compliance Plan Issue A4 did not clearly describe several issues regarding possession of uranium enriched to greater than ten percent U-235. Upon further review, the NRC concluded that the enriched uranium possession limits of Portsmouth Safety Analysis Report, Section 1.5 were violated. However, this non-repetitive, licensee-identified and corrected violation is being treated as a Non-Cited Violation in accordance with Section VII.B.1 of the NRC Enforcement Policy.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room.

Sincerely,

A handwritten signature in dark ink, appearing to read "Carl J. Paperiello", written in a cursive style.

Carl J. Paperiello
Acting Regional Administrator

Docket No. 70-7002
Certificate No. GDP-2

Enclosure: Notice of Violation and Proposed
Imposition of Civil Penalty

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