



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

March 4, 2009

EA-08-330

Mr. Robert Van Namen
Senior Vice President – Uranium Enrichment
United States Enrichment Corporation
Two Democracy Center
6903 Rockledge Drive
Bethesda, MD 20817

SUBJECT: NOTICE OF VIOLATION (NRC INSPECTION REPORT NO. 70-7002/2008-004)

Dear Mr. Van Namen:

This refers to an inspection conducted on September 10 and 11, and October 27 through 30, 2008, at United States Enrichment Corporation's (USEC) Portsmouth, Ohio facility. The purpose of the inspection was to determine whether activities authorized by the certificate were conducted safely and in accordance with NRC requirements. The results of our review, including the identification of an apparent violation involving the movement of a cylinder containing liquid uranium hexafluoride in early September 2008 by a means other than an approved overhead crane or scale cart, were documented in NRC Report No. 70-7002/2008-004, dated January 5, 2009. In our letter forwarding the inspection report, you were informed that the NRC was considering escalated enforcement action for the apparent violation, and that a pre-decisional enforcement conference would be held to discuss the details of the incident.

On February 5, 2009, a pre-decisional enforcement conference was held in the NRC's Region II office with you and members of your staff. At the conference, you acknowledged that a violation occurred as stated in the NRC's inspection report, and presented detailed information regarding the root and contributing causes, and corrective actions planned and completed to preclude recurrence. USEC expressed its understanding of the seriousness of this incident, and stated that positive actions have been taken to enhance its existing processes, provide additional controls, and reinforce site expectations. USEC discussed in detail its overall assessment of the incident, and concluded that the incident did not pose the potential for undue risk to the public or site workers, and that plant operations remained within the approved safety basis.

Based on the information developed during the inspection and the information provided at the conference, the NRC has determined that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the NRC's inspection report of January 5, 2009. In summary, on September 8, 2008, a cylinder containing liquid uranium hexafluoride was moved to a storage pad with mobile equipment (i.e., straddle carrier) instead of an approved crane. USEC's investigation into the event determined that an operator mistakenly documented the cylinder tare weight instead of the net weight on the form used to determine the cylinder cooling time.

As a result, the cylinder was prematurely moved from the liquid uranium cylinder area to a storage pad with mobile equipment after only two days of cooling time instead of the required five day cooling time, in violation of Technical Safety Requirement (TSR) 2.1.3.14.

The NRC considers any movement of a liquid bearing uranium hexafluoride cylinder by unapproved means to be a very serious regulatory matter and potentially a significant safety concern. In this case, release of uranium hexafluoride did not occur because the cylinder was not breached during or after movement to its storage pad location. In evaluating whether the circumstances represented a potential for significant injury or loss of life due to a loss of control over licensed material, or in this case material authorized by a certificate of compliance, or whether it represented a substantial potential for exposure or release caused by a failure to comply with NRC regulations, the NRC staff considered the facts specific to this matter. In doing so, the NRC staff conducted an inspection of USEC's evaluation of the potential to drop and subsequently breach a liquid cylinder transported by the unapproved transporter (i.e., straddle carrier) and the potential consequences of such an incident for the circumstances specific to this case. The NRC staff also performed limited independent analyses of the potential consequence to members of the public and onsite workers in the event that a cylinder, including the type and content of the specific cylinder in this incident, were to be breached. In addition, the NRC staff reviewed the licensing basis regarding the potential for dropping of a cylinder when transported by approved means and considered historical information presented by USEC regarding the reliability of the specific, unapproved transporter (i.e., straddle carrier) used in this incident to gain insight as to the increased potential for dropping a cylinder. In light of these reviews, the staff concurs with the certificate holder's assertion that the increased likelihood of a cylinder drop in these circumstances is reasonably judged as approximately a factor of ten. The NRC also agrees that, in the unlikely event that this specific cylinder had been dropped and experienced a breach, the overall consequence to the public or a site worker would be low and within the design basis of the facility. Consequently, the NRC concludes the incident did not present the potential for a significant injury or loss of life; however, the NRC did conclude that the incident presented a substantial potential for exposure or release caused by a failure to comply with NRC regulations. Based on the above, the NRC has concluded that the significance of the violation is appropriately characterized at Severity Level III, in accordance with the NRC Enforcement Policy.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$32,500 is considered for each Severity Level III violation. Because USEC Portsmouth has not been the subject of escalated enforcement within the past two years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section VI.C.2 of the Enforcement Policy. As USEC presented at the conference, corrective actions included, in part: (1) immediate actions to re-affirm control of the cylinder and brief appropriate plant staff on the incident and procedural requirements; (2) an update to daily operating instructions for all affected areas to provide independent review of the amount of liquid uranium hexafluoride in cylinders; (3) concentrated training remediation for the employee directly involved in the incident as well as confirmation of the proficiency of other uranium material handler employees; (4) multiple procedural revisions for activities associated with management and movement of cylinders, including the independent confirmation of cylinder weight and standard cooldown times based on cylinder sizes; (5) planned actions to conduct a

review of independent verifications performed in conjunction with TSR-related and other important safety-significant activities; and (6) the performance of a planned Endpoint Assessment to determine whether corrective actions were effective to prevent recurrence of similar incidents. Based on the above, credit is warranted for the factor of *Corrective Action*.

Therefore, to encourage prompt and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

In addition, issuance of this Severity Level III violation constitutes escalated enforcement action that may subject you to increased inspection effort.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved is already adequately addressed on the docket in the subject inspection report and in the information presented at the conference. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.390 of NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agency-Wide Document Access and Management System (ADAMS) on the Internet at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, if you choose to respond, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

/RA/

Luis A. Reyes
Regional Administrator

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

Enclosure: Notice of Violation

cc w/encl: (See page 4)

R. Van Namen

4

cc w/encl:
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Distribution w/encl: (See page 5)

Distribution w/encl:

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- M. Weber, NMSS
- C. Marco, OGC
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- J. Ledford, RII
- R. Trojanowski, RII
- OEMAIL
- PUBLIC

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 NON-PUBLICLY AVAILABLE
 SENSITIVE
 NON-SENSITIVE

ADAMS: X Yes ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI	RII:EICS	RII:ORA	OE	NMSS	
SIGNATURE	/RA/	/RA/	/RA/SES FOR	/RA/	/RA/VIA EMAIL	/RA/VIA EMAIL	
NAME	JHENSON	JSHEA	CEVANS	MCCREE	VRAY	MRODDATZ	
DATE	2/24/09	2/24/09	2/24/09	3/4/09	3/3/09	3/3/09	
E-MAIL COPY?	YES	YES	YES	YES	YES NO	YES NO	YES NO

NOTICE OF VIOLATION

United States Enrichment Corporation
Portsmouth Gaseous Diffusion Plant
Portsmouth, OH

Docket No. 70-7002
Certificate No. GDP-2
EA-08-330

During an NRC Inspection conducted September 10 and 11, and October 27 through 30, 2008, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Technical Safety Requirement 2.1.3.14 limiting condition for operation requires that cylinders containing liquid uranium hexafluoride shall be moved by overhead cranes or scale carts.

Contrary to the above, on September 8, 2008, a cylinder containing liquid uranium hexafluoride was moved by a means (staddle carrier) other than an overhead crane or scale cart.

This is a Severity Level III violation (Supplement VI).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved is already adequately addressed on the docket in Inspection Report No. 70-7002/2008-004 and in the information presented at the enforcement conference of February 5, 2009. However, if the description therein does not accurately reflect your position or your corrective actions, you are required to submit a written statement or explanation under 10 CFR 2.201. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, EA-08-330." and send it to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S., Nuclear Regulatory Commission, Region II, and a copy to the NRC Resident Inspector at your facility that is the subject of this NOV.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must

Enclosure

specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 4th day of March 2009