

NUCLEAR REGULATORY COMMISSION
NRC-2009-0377

In the Matter of)	
)	Docket No.: 07007001
United States Enrichment Corporation)	Certificate No. GDP-1
Paducah Gaseous Enrichment Plant)	
)	EA-08-344

CONFIRMATORY ORDER
(EFFECTIVE IMMEDIATELY)

I

The United States Enrichment Corporation (USEC), a subsidiary of USEC Inc., is the holder of NRC Certificates of Compliance (COC) No. GDP-1 issued by the NRC pursuant to 10 CFR Part 76 on November 26, 1996, and renewed on December 22, 2008. The COC is set to expire on December 31, 2013. The certificate authorizes USEC to operate the Paducah Gaseous Diffusion Plant (Paducah), located near Paducah, Kentucky. The certificate also authorizes USEC to receive, and other NRC licensees to transfer to USEC, byproduct material, source material, or special nuclear material to the extent permitted under the COC.

This Confirmatory Order is the result of an agreement reached during an alternative dispute resolution (ADR) mediation session conducted on July 2, 2009.

II

On December 5, 2008, the NRC's Office of Investigations (OI) completed an investigation (OI Case No. 2-2008-023) regarding activities at the Paducah Gaseous Diffusion Plant located in Paducah, Kentucky. The purpose of the investigation was to determine whether one or more operators deliberately concealed damaged equipment, falsified records, and made false statements to conceal a procedural error while moving a uranium hexafluoride (UF₆) cylinder.

Based on the evidence developed during the investigation, the NRC staff identified four apparent violations.

III

On July 2, 2009, the NRC and USEC met in an ADR session mediated by a professional mediator, which was arranged through Cornell University's Institute on Conflict Resolution. ADR is a process in which a neutral mediator with no decision-making authority assists the parties in reaching an agreement or resolving any differences regarding their dispute. This confirmatory order is issued pursuant to the agreement reached during the ADR process. The elements of the agreement consist of the following:

1. The NRC and USEC agreed that four violations occurred during and subsequent to an incident that occurred in late January 2008, while an operator was preparing a UF₆ cylinder for movement using the applicable procedure. The violations involved the following:
 - a. On January 29, 2008, an Operator in building C-337A failed to follow Step 8.7.37 of checklist "Cylinder Burping and Cold Pressure Procedure" incorporated into procedure USEC CP4-CO-CN2045a that required that the pigtail be disconnected from the cylinder and the autoclave manifold prior to cylinder movement. As a result, the pigtail and the autoclave manifold were damaged when the cylinder was lifted. In addition, the same Operator subsequently willfully placed a waste pigtail in a radioactive waste storage bag and hid it in an unrelated control panel, instead of storing the waste pigtail in a drum and completing the required documentation in accordance with the requirements of USEC Procedure CP4-CO-CN2045a, Step 5.27.3. USEC

Procedure CP4-CO-CN2045a is required by Technical Safety Requirements 3.1.1, "Procedures Scope," which requires, in part, that written procedures shall be implemented to cover activities listed in Appendix A to Safety Analysis Report (SAR) section 6.11. Appendix A to SAR 6.11, "Organization and Operating Programs," lists UF6 cylinder handling as an activity that requires implementation of written procedures.

- b. On January 29, 2008, an Operator in the C-337A building willfully did not take any action to secure the damaged autoclave manifold, contact the appropriate supervisor or manager, or log the damage in a work package, narrative logbook, or other quality record. The Operator also willfully attempted to repair the autoclave manifold so as to conceal the initial failure to disconnect the pigtail from the autoclave manifold and the cylinder. In addition, a second Operator failed to contact the appropriate supervisor or manager upon learning of an incident that resulted in damage to both the pigtail and the autoclave manifold, and an Operator-Trainee in the C-337A building also failed to contact the appropriate supervisor or manager upon witnessing the incident. The actions of the two Operators and Operator-Trainee are contrary to USEC procedures CP2-PS-PS1044, "Use of Procedures", and CP2-CO-CO1032, "Shift Routines and Operating Practices."
- c. On January 29, 2008, an Operator in the C-337A building willfully prepared and signed his name (i.e., falsified) on a document, indicating that the pigtail had been properly disconnected from the autoclave manifold, when in fact the Operator knew that the pigtail had not been properly disconnected and was damaged. A second Operator in the C-337A building also willfully signed his name (i.e., falsified) on a document, with knowledge that the pigtail had not been properly disconnected from the autoclave. The falsification of documents is prohibited by USEC Procedure UE2-OP-OP1030, "Conduct of Operation."

- d. On January 30, 2008, two Operators and an Operator-Trainee, individuals who were familiar with the circumstances that resulted in damage to an autoclave manifold, willfully denied any knowledge of these circumstances when questioned by Corporation management. These actions are contrary to USEC Procedure UE2-OP-OP1030, "Conduct of Operation."
2. At the ADR session, USEC-Paducah representatives agreed that the circumstances described in Item 1 above represent violations of requirements, and were due, in part, to the willful actions of the two Operators and an Operator-Trainee.
3. Based on USEC-Paducah's review of the incident and NRC concerns with respect to precluding recurrence of the violations, USEC took the following actions:
 - a. In January 2008, cylinders potentially affected by the incident were inspected.
 - b. In February 2008, the Nuclear Safety & Quality organization began conducting surveillances of in-hand procedure use at the General Manager's request.
 - c. On February 1, 2008, the USEC Section Manager issued a memorandum to all UF₆ handling personnel describing the discovery of the damaged manifold and the need for anyone with knowledge to come forward.
 - d. On February 4, 2008, the damaged pigtail was retrieved and stored per NCS requirements, and the NCS incident evaluation was completed.
 - e. On February 5, 2008, the crane and lifting devices used by Operator 1 on January 29, 2008 were tested and inspected.
 - f. On February 12, 2008, USEC conducted an "All Hands Stand Down" meeting with all plant personnel to inform them about the event and to reinforce management expectations.
 - g. On February 22, 2008, Operations initiated a Long-Term Order requiring that two operators be present during cylinder connections and disconnections.

- h. On February 29, 2008, the General Manager sent a letter to all employees reinforcing the need for procedural compliance.
- i. On February 29, 2008, the General Manager sent a letter to all employees reinforcing the need to stop work and report errors.
- j. In March 2008, USEC completed repairs of the 2E autoclave manifold.
- k. In March 2008, a Use of Procedures question bank was distributed as a coaching tool plant-wide. The question bank covers the stop work requirements and other rules that govern procedure use at the plant.
- l. In April 2008, USEC conducted a session for all supervisors to reinforce the responsibilities of line management to establish and maintain a strong safety culture. In addition, supervisors were tasked with conducting a Nuclear Safety Culture briefing for all workers that highlights the safety implication of not reporting mistakes and the related guidance in the USEC Code of Conduct.
- m. In August 2008, USEC revised its new employee training materials to include additional training on the elements of a Safety Conscious Work Environment.
- n. In October 2008, USEC revised the relevant plant procedures to require two operators to be present for selected cylinder operations.
- o. In October 2008, USEC developed recurring training for Operations and Maintenance supervisors to reinforce “conduct of” principles and procedure compliance. Training will be conducted for a period of 12 months from the date of issuance of the Confirmatory Order.
- p. In November 2008, USEC conducted briefings for all personnel who handle fissile materials on the importance of complying with procedures.
- q. In March 2009, the General Manager and Plant Manager conducted over 25 briefings for all employees with regard to safety culture, open communications, teamwork to identify vulnerabilities early, procedural compliance, and reporting off-normal conditions.

- r. USEC took disciplinary action to address the unacceptable performance of the three individuals involved in the incident.
4. In addition to the actions completed by USEC as discussed above, USEC agreed to additional corrective actions and enhancements, as fully delineated below in Section V of the Confirmatory Order.
5. At the ADR session, the NRC and USEC agreed that (1) the actions referenced in Section III.3 and Section V, would be incorporated into a Confirmatory Order, and (2) the resulting Confirmatory Order would be considered by the NRC for any assessment of USEC, as appropriate.
6. In consideration of the completed corrective actions delineated in Section III.3 and the commitments delineated in Section V of this Confirmatory Order, the NRC agreed to refrain from proposing a civil penalty or issuing a Notice of Violation for all matters discussed in the NRC's letter to USEC of February 25, 2009 (EA-08-344).
7. This agreement is binding upon successors and assigns of USEC.

On August 12, 2009, USEC consented to issuance of this Order with the commitments, as described in Section V below. USEC further agreed that this Order is to be effective upon issuance and that it has waived its right to a hearing.

IV

Since USEC has completed the actions as delineated in Section III.3, and agreed to take the actions as set forth in Section V, the NRC has concluded that its concerns can be resolved through issuance of this Order.

I find that USEC's commitments as set forth in Section V are acceptable and necessary and conclude that with these commitments the public health and safety are reasonably assured. In view of the foregoing, I have determined that public health and safety require that USEC's commitments be confirmed by this Order. Based on the above and USEC's consent, this Order is immediately effective upon issuance.

V

Accordingly, pursuant to Sections 104b, 161b, 161i, 161o, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and 10 CFR Part 76, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT CERTIFICATE NO. GDP-1 BE MODIFIED AS FOLLOWS:

- a. USEC agrees to conduct an end-point effectiveness review of actions targeting improvement in procedural compliance. USEC will review plant data for instances of failing to comply with applicable sections of CP2-PS-PS1044, "Use of Procedures."
- b. USEC agrees to conduct a mid-point effectiveness review of its efforts to enforce compliance with the USEC Code of Conduct. USEC will review plant data for instances of intentional procedure or USEC Code of Conduct violations. The acceptable success criterion is zero instances of intentional procedure or USEC Code of Conduct violations.

- c. Not later than 180 days after the issuance of the confirmatory order, USEC will conduct a review of the Assessment Tracking Reports classified as either “Significant Conditions Adverse to Quality” or “Level 1 events” during the 12 months preceding the issuance of the confirmatory order, in addition to this occurrence, to determine if weaknesses in any of the 13 safety culture components, as identified in NRC Regulatory Information Summary 2006-13, caused or significantly contributed to the event.
- d. Within 90 days after conducting the review described in paragraph V.d and following completion of the Safety Conscious Work Environment assessment, USEC will assess the safety culture component weaknesses identified above, integrate the results with the Safety Conscious Work Environment assessment, and develop any appropriate corrective actions.
- e. USEC-Paducah agrees to complete the items listed in Section V within 12 months of issuance of the Confirmatory Order.
- f. Within 3 months of completion of the terms of the Confirmatory Order, USEC-Paducah will provide the NRC with a letter discussing its basis for concluding that the Order has been satisfied.

The Regional Administrator, NRC Region II, may relax or rescind, in writing, any of the above conditions upon a showing by USEC of good cause.

VI

Any person adversely affected by this Confirmatory Order, other than USEC, may request a hearing within 20 days of its publication in the Federal Register. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for

extension of time must be directed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and include a statement of good cause for the extension.

If a person other than USEC requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.309 (d) and (f).

If a hearing is requested by a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Confirmatory Order should be sustained.

A request for a hearing must be filed in accordance with the NRC E-Filing rule, which became effective on October 15, 2007. The NRC E-filing Final Rule was issued on August 28, 2007 (72 FR 49139), and was codified in pertinent part at 10 CFR Part 2, Subpart B. The E-Filing process requires participants to submit and serve documents over the internet or, in some cases, to mail copies on electronic optical storage media. Participants may not submit paper copies of their filings unless they seek a waiver in accordance with the procedures described below.

To comply with the procedural requirements associated with E-Filing, at least five (5) days prior to the filing deadline the requestor must contact the Office of the Secretary by e-mail at HEARINGDOCKET@NRC.GOV, or by calling (301) 415-1677, to request (1) a digital ID certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any NRC proceeding in which it is participating; and/or (2) creation of an electronic docket for the proceeding (even in instances

when the requestor (or its counsel or representative) already holds an NRC-issued digital ID certificate). Each requestor will need to download the Workplace Forms Viewer™ to access the Electronic Information Exchange (EIE), a component of the E-Filing system. The Workplace Forms Viewer™ is free and is available at <http://www.nrc.gov/site-help/e-submittals/install-viewer.html>. Information about applying for a digital ID certificate also is available on NRC's public website at <http://www.nrc.gov/site-help/e-submittals/apply-certificates.html>.

Once a requestor has obtained a digital ID certificate, had a docket created, and downloaded the EIE viewer, he/she can then submit a request for a hearing through EIE. Submissions should be in Portable Document Format (PDF) in accordance with NRC guidance available on the NRC public website at <http://www.nrc.gov/site-help/e-submittals.html>. A filing is considered complete at the time the filer submits its document through EIE. To be timely, electronic filings must be submitted to the EIE system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The EIE system also distributes an e-mail notice that provides access to the document to the NRC Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, any others who wish to participate in the proceeding (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request is filed so that they may obtain access to the document via the E-Filing system.

A person filing electronically using the agency's adjudicatory e-filing system may seek assistance through the "Contact Us" link located on the NRC website at <http://www.nrc.gov/site-help/e-submittals.html> or by calling the NRC Meta-System Help Desk, which is available between 8:00 a.m. and 8:00 p.m., Eastern Time, Monday through Friday, excluding government

holidays. The Meta-System Help Desk can be contacted by telephone at 1-866-672-7640 or by e-mail at MSHD.Resource@nrc.gov.

Participants who believe that they have good cause for not submitting documents electronically must file a motion, in accordance with 10 CFR 2.302(g), with their initial paper filing requesting authorization to continue to submit documents in paper format. Such filings must be submitted by (1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service.

Documents submitted in adjudicatory proceedings will appear in NRC's electronic hearing docket, which is available to the public at http://ehd.nrc.gov/EHD_Proceeding/home.asp, unless excluded pursuant to an order of the Commission, an Atomic Safety and Licensing Board, or a Presiding Officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their works.

In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section V above shall be final 20 days from the date this Order is published in the Federal Register without further order or proceedings. If an extension of time for requesting a hearing has been approved, the provisions specified in Section V shall be final when the extension expires if a hearing request has not been received. A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Victor M. McCree
Deputy Regional Administrator for Operations

Dated this 18th day of August 2009