

NOTICE OF VIOLATION

United States Enrichment Corporation
Portsmouth Gaseous Diffusion Plant

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

During an NRC inspection conducted from April 6 through May 14, 1999, two violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, Revision (Rev.) 1, the violations are listed below:

1. Technical Safety Requirement 3.9.1 requires, in part, that written procedures shall be implemented for activities described in Appendix A, to Safety Analysis Report, Section 6.11.

Safety Analysis Report, Section 6.11, Appendix A, described administrative activities, including operations, chemical safety, radiation protection and equipment control as activities for which procedures shall be implemented. In addition,

- a. Paragraph 5.0 of Procedure XP2-SH-SH5030, "Actions To Be Taken During a Uranium Hexafluoride (UF_6), Hydrogen Fluoride (HF), Fluorine (F_2) or Chlorine Trifluoride (ClF_3) Release," Rev. 1, dated March 22, 1996, required, in part, that operators encountering any visible sign of a release, no matter how minor, shall immediately flee the area ("see and flee").
- b. Paragraph 6.0 of Procedure XP2-SH-IS1034, "Accident Prevention/Equipment Control Tags," Revision 0, dated July 31, 1997, required, in part, that defective equipment shall be tagged with a caution tag.
- c. Paragraph 8.2 of Procedure XP4-CO-CA6770, "Vibration Surveys," Rev. 1, Change A, dated November 2, 1998, required, in part, that operations staff record readings to the nearest 0.1 mil in the appropriate space on Form A-686, "Vibration Survey Sheet," a quality record.
- d. Paragraph 6.5 of Procedure XP4-TE-EA1807, "Receipt of Natural and Paducah Product Feed and Shipment of Feed Containers," Rev. 2, dated March 3, 1997, required that a cylinder must be stored for a period of not less than 30 days after emptying, (to allow for cooling) prior to return shipment to the supplier.
- e. Paragraph 6.4 of Procedure XP2-SH-IH1042, "Instruction For Lockout/Tagout," Revision 0, dated June 31, 1997, required, in part, that authorized employees performing maintenance on de-energized machine or equipment shall install a personal tag and lock to secure the energy isolation device.
- f. Paragraph 6.7.11 of Procedure XP2-SH-IH1037, "Respiratory Protection Program," Rev. 0, dated June 11, 1997, required that respirator wearers shall inspect and perform a user seal-check for respirators prior to use.

Paragraph 6.7.11 of the procedure required, in part, that the respirator wearer verify the respirator seal each time the respirator was donned by performing a positive or negative pressure seal check appropriate to the respiratory protective equipment.

Contrary to the above, chemical safety, operations, radiation protection and equipment control activities were not performed in accordance with documented procedures appropriate to the circumstances in the following examples, respectively:

- a. On May 9, 1999, an operator failed to immediately flee the Building X-342 autoclave area upon encountering a visible release, as required by Procedure XP2-SH-SH5030. **(VIO 70-7002/99005-01a)**
- b. On February 22, 1999, plant staff failed to tag the defective recirculating cooling water control valve for Cell 33-3-8 with a caution tag, as required by Procedure XP2-SH-IS1034. **(VIO 70-7002/99005-01b)**
- c. On April 22, 1999, operations staff failed to record vibration readings taken on Motor 30-WB-1 in Building X-330 on Form A-686, "Vibration Survey Sheet," as required by Procedure XP4-CO-CA6770. **(VIO 70-7002/99005-01c)**
- d. On February 10, 1999, the certificatee failed to store an emptied cylinder for 30 days prior to shipping the cylinder offsite to a supplier, as required by Procedure XP4-TE-EA1807. **(VIO 70-7002/99005-01d)**
- e. On May 10, 1999, a maintenance mechanic performing a maintenance activity on the de-energized Building X-343 North Crane hoist motor failed to install a personal tag and lock to secure the electrical power hoist motor breaker enclosure, as required by Procedure XP2-SH-IH1042. **(VIO 70-7002/99005-01e)**
- f. On April 26 and 27, 1999, five plant staff failed to implement the respiratory protection program requirements, as required by Procedure XP2-SH-IH1037. Specifically, five members of plant staff failed to verify the respirator seal each time the respirator was donned by performing a positive or negative pressure seal check appropriate to the respiratory protective equipment prior to performing work activities. **(VIO 70-7002/99005-01f)**

**This is a Severity Level IV violation (Supplement VI).
(VIO 070-07001/99005-01a,b,c,d,e, and f).**

2. 10 CFR 76.93, "Quality Assurance," required that the Corporation shall establish, maintain, and execute a quality assurance program satisfying each of the applicable requirements of ASME NQA-1-1989, "Quality Assurance Program Requirements for Nuclear Facilities."

Quality Assurance Program Appendix A, Section 2, "AQ [Augmented Quality] - Other SSCs," Section 2.5, "Instructions, Procedures, and Drawings," states, in part, that Section 2.5, "Instructions, Procedures, and Drawings," of the Quality (Q) Program applies.

Section 2.5.1, "Instructions, Procedures, and Drawings," of the Quality Assurance Program requires, in part, that measures are in place to ensure that activities affecting quality are prescribed by documented procedures and instructions, appropriate to the circumstances, and are accomplished in accordance with these documents. These documents also include quantitative and qualitative acceptance criteria to ensure that important operations have been satisfactorily accomplished.

Safety Analysis Report Section 3.8.2.2, "Q and AQ Structures, Systems and Components," states, in part, that the AQ function of UF₆ [uranium hexafluoride] process piping and equipment is to provide a containment boundary for UF₆ during the enrichment process. Safety Analysis Report, Accident Analysis Section 4.1.2.7, "Effects of High Speed Equipment Missiles," states, in part, that vibration checks [of the Top and Side Purge Cascade] are performed periodically to prevent a hazardous situation from developing, in case of excessive vibration, the cell is shut down and the faulty equipment replaced.

Contrary to the above, prior to May 7, measures were not in place to ensure that vibration monitoring of UF₆ process equipment by engineering staff, an activity affecting safety and quality, was prescribed by documented procedures and instructions, appropriate to the circumstances. In addition, Operations Procedure XP4-CO-CA6770, "Vibration Monitoring," Revision O, dated November 2, 1998, did not prescribe measures appropriate to the circumstances, including quantitative and qualitative acceptance criteria, to ensure that important operations have been satisfactorily accomplished. Specifically, Procedure XP4-CO-CA6770 did not include acceptance criteria for motors with built-in speed increasers with final resultant speeds of 10,000 or 14,400 revolutions per minute, whose vibration affects the AQ boundaries for the uranium hexafluoride enrichment process.

This is a Severity Level IV Violation (Supplement VI). (VIO 70-7002/99005-03).

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance will be achieved is already adequately addressed in Inspection Report 70-7002/99005(DNMS). Therefore, specific responses are not required. However, you are required to submit a written statement or explanation pursuant to 10 CFR 76.70, if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region III, and a copy to the NRC Resident Inspector at the Portsmouth Gaseous Diffusion Plant, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PER 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 specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (for example, explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(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 at Lisle, Illinois
this 11 day of June 1999