

August 12, 2005 GDP 05-0031

Mr. Jack R. Strosnider
Director, Office of Nuclear Material Safety and Safeguards
Attention: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Paducah Gaseous Diffusion Plant (PGDP)
Docket No. 70-7001, Certificate No. GDP-1
Transmittal of Revision 96 to Paducah Certification Application

Dear Mr. Strosnider:

In accordance with 10 CFR 76, the United States Enrichment Corporation (USEC) hereby submits six (6) copies of the Revision 96 (August 12, 2005) to USEC-01, Application for United States Nuclear Regulatory Commission Certification, Paducah Gaseous Diffusion Plant. Revision 96 incorporates changes to the Emergency Plan that were implemented during the period April 2, 2005 to July 29, 2005. Revision 96 also incorporated a TSR Basis change and related changes to the Safety Analysis Report (SAR).

The above changes have been reviewed in accordance with 10 CFR 76.68 and have been determined not to require prior NRC approval. Revision bars are provided in the right-hand margin to identify changes. Revision 96 was implemented effective August 12, 2005.

Should you have any questions regarding this matter, please contact me at (301) 564-3250. There are no new commitments contained in this submittal.

Sincerely,

Steven A. Toelle

Director, Nuclear Regulatory Affairs

NMSSOI

Mr. Jack R. Strosnider August 12, 2005 GDP 05-0031, Page 2

Enclosures:

- 1. Oath and Affirmation
- 2. USEC-01, Application for United States Nuclear Regulatory Commission Certification, Paducah Gaseous Diffusion Plant, Revision 96, Copy Numbers 1 through 6.

cc: G. Janosko, NRC HQ	(w/o)
J. Henson, NRC Region II	USEC-01, Copy Numbers 442, 664
B. Bartlett, NRC Senior Resident Inspector - PGDP	USEC-01, Copy Number 697
R. DeVault (DOE)	USEC-01, Copy Numbers 641-644
D. Martin, NRC Project Manager - PGDP	(w/o)
D. Hartland, NRC Region II	(w/o)

Enclosure 1 GDP 05-0031

Oath and Affirmation

## **OATH AND AFFIRMATION**

I, Steven A. Toelle, swear and affirm that I am the Director, Nuclear Regulatory Affairs of the United States Enrichment Corporation (USEC), that I am authorized by USEC to sign and file with the Nuclear Regulatory Commission Revision 96 (August 12, 2005) to USEC-01, Application for United States Nuclear Regulatory Commission Certification, Paducah Gaseous Diffusion Plant, as described in USEC Letter GDP 05-0031, that I am familiar with the contents thereof, and that the statements made and matters set forth therein are true and correct to the best of my knowledge, information, and belief.

Steven A. Toelle

On this 12th day of August, 2005, the person signing above personally appeared before me, is known by me to be the person whose name is subscribed to within the instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof I hereunto set my hand and official seal.

Jamet Boothe, Notary Public

State of Maryland, Howard County My commission expires June 1, 2007 Enclosure 2 to GDP 05-0031

USEC-01
Application for the United States
Nuclear Regulatory Commission Certification
Paducah Gaseous Diffusion Plant
Revision 96 (August 12, 2005)

APPLICATION FOR UNITED STATES
NUCLEAR REGULATORY COMMISSION CERTIFICATION
PADUCAH GASEOUS DIFFUSION PLANT
REMOVAL/INSERTION INSTRUCTIONS
AUGUST 12, 2005 - REVISION 96

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Table 3.15-2. Boundary Definition for AQ Structures, Systems, and Components (continued).

System	Facility	Boundary Definition	Support Systems
R-114 Coolant Overpressure Control System, Freezer/Sublimer UF <sub>6</sub> High Pressure Relief System, R-114 Coolant Overpressure Control System in the Withdrawal Process (Section 3.15.3.4, and 3.15.4.6)	C-310 C-315 C-331 C-333 C-335 C-337	<ol> <li>Rupture disks</li> <li>Manual block valve between the equipment being protected and the rupture disc or between the rupture disc and a low pressure relief path.</li> <li>Piping from the rupture disc either back to the equipment being protected or to a transition to a larger pipe.</li> <li>Diffusers (if applicable)</li> </ol>	No support systems are required.
Freezer/Sublimer High-High Weight Trip System (Section 3.15.3.5 and 3.15.10.1.4)	C-331 C-333 C-335 C-337	The Freezer/Sublimer High-High Weight Trip System boundary includes:  1. F/S High-High Weight Detection System (independent of the DPCS High-High Weight Trip)  2. Interconnecting circuitry  3. Motor operated UF <sub>6</sub> inlet valve including 480 VAC breaker  4. Motor operated UF <sub>6</sub> return valve including 480 VAC breaker  5. Air operated weight control valve  6. Air operated UF <sub>6</sub> vent valve  7. Air operated R-114 bypass valve  On the RCW loop, the boundary includes:  1. Air operated pump flow control valve  2. Air operated 3-way RCW valve  3. Air operated RCW flow control valve  4. Associated circuitry to position the valves	480 VAC power - Required for motor operated valves to close  120 VAC power - Required for weight measurement channel to provide an output.  24 VDC power - Required for control relay contacts to close thereby allowing 480 VAC power to be supplied to motor operated valve close contactor coils.  Plant Air - Required for repositioning of various valves.
Motor Load Indicators (Section 3.15.3.6, and 3.15.4.4)	C-315 C-331 C-333 C-335 C-337	<ol> <li>Motor load indicators (ammeters) for each enrichment cascade compressor motor in the ACR</li> <li>Total cell motor load indicators for each enrichment cascade cell in the CCF</li> <li>C-315 tails withdrawal high speed compressor motor load indicators (ammeters) in the C-315 and C-331 ACR</li> <li>Associated current transformers</li> <li>Cabling connecting ACR and CCF indicators to compressor motor AC power buses</li> </ol>	No support systems are required.

1. 1.

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- Fluorine (F<sub>2</sub>), a poisonous gas and oxidizer, is purchased and delivered in 5-lb cylinders to C-745B or C-410-K and then fed to and stored in three 1,000 ft<sup>3</sup> tanks (total of approximately 500 lb) in building C-410-D. F<sub>2</sub> is used to pacify metal surfaces prior to exposure to UF 6 and for cell treatment on an as-needed basis. The inventories are controlled so that less than 1,000 lbs of F<sub>2</sub> are available for release from a single credible accident. The plant currently maintains inventories of F<sub>2</sub> at less than 2,000 lb.
- Chlorine (Cl<sub>2</sub>) is a poisonous gas used for water and sewage treatment. An important function of the water treatment process is prechlorination for removal of disease-carrying organisms. Cl<sub>2</sub> is purchased and stored in 1-ton containers and 150 lb cylinders. One-ton chlorine containers are used in building C-611 water treatment plant (typically 10 to 18 containers) and in buildings C-631, C-633, C-635, and C-637 water treatment pump houses and appurtenant structures (12 containers total). Fifteen one-ton containers are normally stored in the C-745-A cylinder storage yard. The quantity of chlorine kept at C-615 is administratively controlled below the 29 CFR 1910.119, Appendix A, process threshold quantity. A maximum of 10 150-lb cylinders are stored and used at the building C-615 sewage treatment plant. Theoretically, 193,500 lb of Cl<sub>2</sub> could be at the plant at any one time, but normal inventories are roughly one-half this value.
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### 1.2 DESCRIPTION OF FACILITY AND SITE

The Paducah Gaseous Diffusion Plant is located at latitude 37°06'49" N. and longitude 88°47'39" W. measured at the center of the plant, on a 3,423-acre tract in McCracken County, Kentucky. The site is generally in a rural area and was previously part of the Kentucky Ordnance Works. Approximately 2079 acres of the site are leased to the Kentucky Department of Fish and Wildlife Resources. The largest cities within a 50-mile radius are Paducah, Kentucky, located approximately 12 miles to the east, and Cape Girardeau, Missouri, located approximately 40 miles to the west. Portions of 28 counties are located within a 50-mile radius of the plant. Of the 28, 11 are in Kentucky, 4 are in Missouri, 10 are in Illinois, and 3 are in Tennessee. Figure 1-1 shows the regional area surrounding PGDP. The general location is an area of low relief with elevations predominantly below 500 ft. The region contains many rivers and streams. The largest rivers in the area are the Mississippi to the west, the Ohio to the north, and the Tennessee and the Cumberland to the east. The plant site and surrounding area elevations vary from 290 ft above sea level at the Ohio River to 380 ft above sea level at the plant site 3.6 miles away. The average slope of 23.7 ft/mile is typical of both the immediate vicinity and the region south of the Ohio River.

There are no institutional or residential structures within the plant property, nor are any military installations located near the site. DOE is engaged in numerous activities related to decommissioning and decontamination both within the fenced plant protected area and on the surrounding DOE reservation.

Emergency Plan - PGDP Rev. 2

January 19, 1996

Roadways within the fenced, limited access or protected area of the plant consist of approximately 23 miles of paved surface. Several paved roads branch to the periphery of the plant area. Water Works Road extends from the southwestern corner of the secured area west to the water treatment plant. The plant access road extends from the main plant entrance to Kentucky Highway 1154 (Woodville Road), which in turn connects with U.S. 60. One intersection exists on the plant entrance road. At this location, South Acid Road leads to the west, and Dykes Road wraps around the eastern side of the plant. Dykes Road and McCaw Road, which enters the area from the east, are access routes for shipments to and from the toll enrichment facility, C-360.

Rail is a means used for cylinder movements and coal shipments. The existing rail system is approximately 17 miles in length. The rail spur enters the site west of C-720 and branches to several areas inside the fence. With the exception of the metals plant (C-340) and the water treatment plant (C-611), all the precess buildings and most of the support facilities have direct rail service.

No rivers or major streams traverse the plant area. However, two small tributaries of the Ohio River, Little Bayou Creek on the east and Big Bayou Creek on the west, provide surface drainage from the PGDP site. These creeks have little flow other than treated effluents from the plant except during the wetter months of the year. The two streams join north of the site and discharge to the Ohio River. An extensive system of dikes and inverted pipe dams are in place to contain on-site spills of hazardous substances that might otherwise enter these waterways. Cooling water for plant processes is taken from the Ohio River and discharged through Big Bayou Creek.

PGDP is situated on a fenced 748-acre (limited access area) site, which is part of the 3422.95-acre DOE reservation as shown in Figures 1-2 and 1-3. More than 115 buildings and structures are located at PGDP accounting for a cumulative gross floor area of 8,183,718 ft<sup>2</sup>. Process buildings C-333 and C-337 contain the most space, each having a gross area of 2,130,120 ft<sup>2</sup>. Figure 1-3 shows the plant layout at PGDP. The plant includes six major process buildings, a series of electrical switchyards, storage areas, cooling towers, a steam plant, a water treatment plant, a sewage disposal plant, a pollution abatement facility, service and maintenance buildings, and facilities for administration, medical, fire, and security.

The plant contains four large process buildings, which are referred to as the cascade buildings. These are designated C-331, C-333, C-335, and C-337. Two small buildings, C-310 and C-315, are referred to as the purge and product withdrawal building and the surge and waste building, respectively. Some of the instruments and controls in these buildings are duplicated in the C-300 Central Control Facility (CCF). This facility also contains the Emergency Operations Center (EOC) and the headquarters of the Plant Shift Superintendent (PSS). A description of the cascade/process buildings and key support buildings is as follows:

The four main process buildings are grouped in two pairs, C-331 and C-333 and C-335 and C-337, which are located in the eastern portion of the plant site. Such a grouping permits easy connection of the multitude of overhead and underground piping and service lines required between the process buildings. The purpose of the process buildings is to house the equipment and much of the support systems necessary for the isotopic separation of uranium. Buildings C-331 and C-335 are essentially identical, as are C-333 and C-337.

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are responsible for coordinating protective force activities and communications. During an emergency, Protective Force Management reports to the Incident Commander and provides updates to the EOC staff. C-200 Headquarters performs the following functions: the content of the desired in the content of the content o provide the state of the second of the secon

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- 2. Maintains communications with the protective force officer at the emergency scene; had a second of the second o
- 3. Advises protective force personnel management, and and a series of the series of th
- Advises the EOC staff

# 6.1.6 Decontamination Facilities and the state of the sta

The real program of the state of the second section of the second section of the second secon Specific facilities, resources, and provisions for the decontamination of personnel, vehicles, and equipment are provided. These facilities are located, designed, and equipped to handle potential emergencies identified in the Emergency Plan.

and the second second of the property of the second of Adequate decontamination equipment and supplies are available on emergency response vehicles for required decontamination activities in the field.

Building C-400 has provisions for decontaminating vehicles and equipment. Chemical Operations has the equipment and personnel capability to provide equipment decontamination services in the field. the Control River and discharged the Cash Tig Bayon Creek

### 6.1.7 Joint Public Information Center

provided the April 19 years of the committee that the second the contract of t The JPIC is the designated location for the dissemination of official information about the emergency to the media and to the public. The JPIC accommodates the following: grafia a salah ang palaga kang kalaga su ang ang manalakan sunag akan ariban ara kalab

- 1. The coordination of information with interfacing federal, state, and local organizations and spokespersons, and the second na demonar i la la distanza de la la seguina de la seguina metro della distanza de la come ma la griffica di di
- 2. Press releases and media briefings, and
- 3. Work space for site personnel, interfacing organization personnel, and representatives of the news media.

The primary JPIC is located in at the Paducah Information Age Park Resource Center?

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JPIC operations are described in EPIPs.

#### 6.2

This section describes the communications systems in place to support emergency response. The communications systems are designed to ensure the reliable, timely flow of information and action directives between all parties having a role to play in the mitigation of emergencies. Reliability is provided via redundancy, dedicated communication equipment to preclude delays due to system overload. and routine use and testing of many of the systems, which lowers the probability of undetected system failures. Timeliness of information flow is achieved by prompt notification, predefined lines of communications, predefined emergency action levels, and predefined levels of authority and responsibility. The communications network is formulated around this basic concept and is designed to channel information directly to the key parties having closely related functions, thus eliminating errors often associated with second-hand information. The essential communications links are manned continuously and are periodically tested to ensure availability. The communications systems in place include the following: 

April 19 March 19 Jan 19 Jan 19

- Commercial telephone system, 1.
- 2. Red handle emergency phones (PBX),
- 3. Pull box system,
- Pull box system,
  Alert signal system, general plant and building (howlers, sirens, etc.), 4. Facsimile machines,
  STE secure phone,
- 5.
- 6.
- STE secure phone,
  Radio repeater network for plant groups, 7.
- Mobile communications system, 8.
- 9. National Warning System (phone line),
- Local emergency response agency radio network, 10.
- 11. PA system,
- 12. Cellular telephones,
- 13.
- Pagers,
  Public Warning System, 14.
- Mutual Aid radio system. 15.

# 6.2.1 On-Site Communications

The Nuclear Regulatory Affairs Manager or designee is responsible for planning and scheduling the inventory and inspection of designated emergency equipment and supplies and ensures that identified deficiencies are corrected in a reasonable period of time. Section 7.6, "Maintenance and Inventory of Emergency Equipment, Instruction, and Supplies," describes inventory and inspection of designated equipment.

### **6.2.1.1** Telephone Systems

The administrative telephone system provides business and emergency communications. The telephone system consists of single line, multi-line, and programmable digital units.

### 7. MAINTAINING EMERGENCY PREFAREDNESS CAPABILITY

This section describes the responsibilities for developing; maintaining, and updating the Plan and EPIPs and for maintaining emergency preparedness capability.

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# 7.1 WRITTEN EMERGENCY PLAN AND PROCEDURES AND AND ADDRESS AND A

Emergency Management is responsible for maintaining and updating the plan, as appropriate, in support of the application for renewal of the certificate of compliance. USEC may make changes to the plan without prior Commission approval if the changes do not decrease the effectiveness of the plan. USEC will furnish these changes to the NRC in accordance with 10 CFR 76.5 and to affected off-site response organizations within six months after the change is made. Emergency Management controls the distribution of the emergency plan ensuring that groups having responsibilities for response functions are included in the distribution.

EPIPs are Level 2 plant procedures and are revised, reviewed, approved, controlled, and distributed in accordance with plant administrative procedure requirements. These requirements, in part, ensure that new or revised EPIPs state duties, responsibilities, and actions to be taken by individual groups or individuals in response to an emergency condition. Level 2 procedures are approved by the General Manager and are distributed to each controlled procedure set holder. The revisions of the procedures incorporate required changes to correct deficiencies identified in emergencies, training, drills, or exercises.

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### 7.2 TRAINING

The Nuclear Regulatory Affairs Manager is responsible for emergency management training program oversight. A series of course modules has been developed for on-site and off-site training programs.

Personnel assigned to the ERO are required to satisfactorily complete an initial training program prior to assignment. Required continuing or refresher training is conducted biennially except for firefighting and hazardous material emergency response, which is conducted annually, and emergency medical technician recertification, which is conducted in accordance with Kentucky statute. A physical examination and respiratory protection training are prerequisites to both firefighting and hazardous material emergency response initial and refresher training.

The initial training program is composed of a collection of functional modules which emergency personnel receive based on their emergency assignment. Specific training requirements are defined by applicable EPIPs.

A formal training record retention program has been established and is maintained for ERO members, support personnel, and off-site agency response organizations. Evaluation records for each course are maintained for incorporation into upgrades of the program.

Emergency Management staff participates in professional emergency management development training activities and other related training. 

## 7.2.1 General Emergency Plan Training

Emergency Plan Training for USEC employees, contractors and subcontractors requiring unescorted access to the CAA is provided biennially through General Employee Training (GET) as described in SAR 6.6.5. Proper response to emergencies is ensured by covering the following basic Emergency Plan elements in GET:

- Emergency Plan safety objectives and priorities; 1.
- 2.
- Ways to report emergencies; Recognition and correct response to plant alarm signals; 3.
- Evacuation guidelines for radiological and non-radiological emergencies:
- Methods of personnel accountability; and
  Personnel responsibility during emergencies.

DOE employees, contractors and subcontractors requiring unescorted access to the CAA also receive biennial training on the six Emergency Plan elements listed above. This training requirement may be satisfied by attending GET delivered by the USEC Training organization, or training prepared by a DOE contractor/subcontractor that has been reviewed by the USEC Training organization to ensure it is equivalent with respect to the six Emergency Plan elements listed above. Any deviations will be referred to the Shared Site process.

All personnel requiring unescorted access to the CAA (DOE and USEC) are subject to direct control of their training through denial of access if the training described above is not up-to-date. Visitors to the CAA are provided with escorts who are up-to-date on this training. Access control includes checking training expiration dates.

Proper emergency response for DOE reservation personnel (i.e. personnel who work outside of the CAA), is limited to protective actions, horn and siren recognition, and site assembly areas.

### 7.2.2 Specialized Emergency Plan Training for the Emergency Response Organization

A formal training program which includes classroom-type training (lectures, seminars), practical applications (tabletop drills, functional drills, and exercises), and self-study programs has been developed for the ERO and support personnel.

The ERO receives training commensurate with assigned positions. This training program ensures the continued emergency management training of all persons who may respond/participate during a plant emergency. Specialized emergency management training is provided and includes but is not limited to the following categories of topics:

- On-Scene Response Activities. Topics covered include incident command, firefighting, HAZMAT response, including monitoring and emergency medical technician training.
- Emergency Management Orientation. Topics covered include concept of operations, emergency organizations, responsibilities and authorities, requirements, facilities and equipment overview, and off-site interface summary including public information.

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• Incident Classification and Notification: Topics covered include classification systems, notification requirements, procedures, and EALs.

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- Hazard/Consequence Assessments and Protective Actions. Topics covered include the spectrum of hazards and possible emergencies (man-made, natural, and security) as well as reference material, site profile information, and site dispersion models. "On-site and off-site protective actions and protective action decision-making philosophy are covered as well as recovery decision making.
- Ongoing Incident Assessment. Topics covered include on-site incident monitoring, off-site field monitoring, personnel protection, and reporting.

Specific emergency training requirements for each position are described in an EPIP, which includes lesson plans for the emergency management training, frequency of retraining, and the number of hours of initial and retraining that are provided to the ERO.

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# 7.2.4 Off-Site Emergency Management Training and additional for the property of the second of the second of

Training is offered biennially by letter of invitation to emergency support organizations that may be called upon to respond to emergencies at the plant. These agencies include local fire, law enforcement, and ambulance services. Assistance is provided as needed by personnel from other plant functions, such as Training, Health Physics, Operations, Security, or Medical. This training includes site-specific information on radiological and chemical hazards, including exposure guidelines, personnel monitoring devices, and basic contamination control principles and orientation tours.

Initial training for precautions associated with the care and treatment of contaminated injured persons has been provided to the emergency room staffs of Lourdes and Western Baptist Hospitals. Additional training will be provided on an as-requested basis.

### 7.3 DRILLS AND EXERCISES

Emergency drills and exercises are conducted to develop, maintain, and test the response capabilities of emergency personnel, facilities, equipment, procedures, and training.

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A drill is a supervised instruction session that develops, tests, or maintains a specific emergency response capability using a limited scope scenario. Drills involve decision making and actions by participating personnel to simulate emergency conditions but do not involve off-site response personnel.

An exercise is an event that tests the integrated capability of all or most of the basic elements existing within the emergency plan and EPIPs. Exercises use scenarios that are wider in scope than drills and may involve off-site response personnel and agencies.

Part of the Comment

Persons trained in the control and evaluation of drills conducts drills and exercises. Controllers and evaluators are provided to each location if a drill or exercise involves simultaneous activities at more than one location. Evaluators are provided with criteria for acceptable performance to evaluate the performance of participants.

The Nuclear Regulatory Affairs Manager has overall responsibility for implementing a coordinated program of emergency drills and exercises. This program is identified in an EPIP. The EPIP requires Emergency Management to promulgate annually a drill and exercise schedule that identifies drill/exercise category, shift/group, and tentative date. Line supervisory personnel are responsible for ensuring that employees under their supervision are available to participate in drills and exercises. Site personnel are required to participate in drills and exercises in a safe and realistic manner.

The Emergency Management Drill and Exercise Committee is responsible for proper exercise scenario development, establishing a planning schedule, developing the scenario, and identifying participants and evaluators. The committee is chaired by a representative of Emergency Management and consists of members representing the areas of police operations, fire services, PSS staff, and others as appointed.

Members of the ERO participate in drills and exercises. This requirement is met if the activated personnel of the ERO respond to an emergency and response objectives are met, records are kept, and a critique is performed.

### 7.3.1 Biennial Exercises

Plant personnel plan and conduct biennial exercises. Off-site response organizations and the NRC are invited to observe or participate in these scheduled exercises.

An exercise scenario manual containing relevant documentation is developed for each exercise. The exercise scenario contains a preplanned description of the accident to be used. It is prepared according to the scope and objectives of the exercise. Each scenario describes a hypothetical situation which serves as the basis for emergency response actions. Scenarios are varied from year to year and are designed to minimize simulation. No scenario information is given to participants prior to an exercise.

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## Appendix B

# LETTERS OF AGREEMENT

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- 2. Paducah-McCracken County Office of Emergency Management, Paducah, Kentucky The state of the state of
- 3. Paducah Fire Department, Paducah, Kentucky and the second to have properly been properly to the second to the second to the second to
- 41. Lone Oak Fire District, McCracken County; Kentucky or thought and transcription of the contract of the contract of
- 5. West McCracken County Fire District, West Paducah, Kentucky
- 6. Lourdes Hospital, Paducah, Kentucky and the second of the property of the second of the second
- Western Baptist Hospital, Paducah, Kentucky
- 8. Vanderbilt University Hospital, Lifeflight Air Ambulance, Nashville, Tennessee
- St. Mary's Medical Center, Lifeflight Air Ambulance, Evansville, Indiana
- 10. Purchase Area District Health Department, Paducah, Kentucky
- Federal Bureau of Investigation (FBI), Louisville, Kentucky
- Kentucky State Police, Post 1, Mayfield, Kentucky McCracken County Sheriff's Department, Paducah, Kentucky
- 14. Paducah Police Department, Office of the Mayor, Paducah, Kentucky
- The Box Decoration Languages are also being a section of the Contract of 15. U. S. Army 717th Explosive Ordnance Disposal, Ft. Campbell, Kentucky

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2.3 <b>-</b> 9a	65	2.3-50	80
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# SECTION 2.4 SPECIFIC TSRS FOR ENRICHMENT CASCADE FACILITIES

# 2.4.3 LIMITING CONTROL SETTINGS, LIMITING CONDITIONS FOR OPERATION, SURVEILLANCES

# 2.4.3.2 FREEZER/SUBLIMER UF VENT LINE MANUAL BLOCK VALVE

LCO 2.4.3.2: The freezer/sublimer  $UF_6$  vent line manual block valve shall be sealed in the open position.

APPLICABILITY: Modes: F/S 1, F/S 3, F/S 5

### **ACTIONS:**

Condition		Required Action		Completion Time
A.	The UF <sub>6</sub> vent line manual block valve is discovered unsealed and/or closed.	A.1	Ensure the valve is open.	Immediately.
B.	Action item A satisfactorily completed.	B.1	Reseal the valve.	8 hours
C.	Action item A or action item B not satisfactorily completed.	C.1	Place the freezer/sublimer in mode F/S 6.	Immediately

## **SURVEILLANCE REQUIREMENTS:**

Surveillance	Frequency
SR 2.4.3.2-1 Visually inspect the UF <sub>6</sub> vent line manual block valve to verify it is sealed open.	Quarterly

### **BASIS:**

Any noncondensible gases are allowed to return to the cascade cell "A" bypass through one-inch automatic UF<sub>6</sub> vent valve and a two-inch vent line. If the automatic UF<sub>6</sub> vent valve fails to open, a rupture disc is provided as a means of pressure relief for the UF<sub>6</sub> side of the freezer/sublimer. Without the manual vent valve open to the rupture disc and the automatic vent valve, this relief protection for the freezer/sublimer is not provided.

The block valve is sealed open, except for maintenance, to assure the rupture discs are provided with a relief path to the A-line of the cascade. This assures the pressure relief system can vent unwanted pressure upon activation. [SAR Section 3.15.3.4.3]