



October 19, 2012
GDP 12-0035

Attention: Document Control Desk
Ms. Catherine Haney
Director, Office of Nuclear Material Safety and Safeguards
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 135 to Certification Application USEC-01

Dear Ms. Haney:

In accordance with 10 CFR 76, the United States Enrichment Corporation (USEC) hereby submits Revision 135 to the USEC-01 certification documents for the Paducah Gaseous Diffusion Plant. This update is required by 10 CFR 76.91(o). Revision 135 includes the following changes:

- Revision 135 incorporates changes to the Safety Analysis Report (SAR) that have been reviewed in accordance with 10 CFR 76 and have been determined to not require prior NRC approval. Revision 135 was effective October 19, 2012.
- Revision 135 incorporates changes to the Quality Assurance Program, Emergency Plan, Fundamental Nuclear Materials Control Plan (FNMCP), and Gaseous Diffusion Plant Security Program (GDPSP). These changes have been reviewed in accordance with 10 CFR 76 and have been determined to not require prior NRC approval. Revision 135 was effective October 19, 2012.

Revision bars are provided in the right-hand margin to identify changes.

Revision 135 to the FNMCP and GDPSP contains certain trade secrets and commercial and financial information exempt from public disclosure pursuant to Section 1314 of the Atomic Energy Act of 1954 (AEA), as amended, and 10 CFR 2.390 and 9.17(a)(4). In accordance with 10 CFR 76.33(e) and 2.390(b), the Revision 135 changes to these plans are being submitted under separate cover (USEC letter GDP 12-0034).

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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,

S. A. Tall

Steven A. Toelle
Director, Regulatory Affairs

- Enclosures: 1. Oath and Affirmation
2. USEC-01, Application for United States Nuclear Regulatory Commission Certification, Paducah Gaseous Diffusion Plant, Revision 135

cc: J. Calle, NRC Region II
R. DeVault (DOE)
J. Diaz-Valez, NRC Region II
T. Liu, NRC Project Manager
NRC Senior Resident Inspector – PGDP
C. Voth, DOE

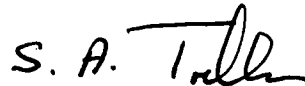
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Enclosure 1
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Oath and Affirmation

OATH AND AFFIRMATION

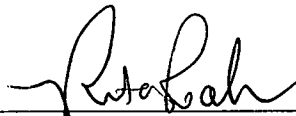
I, Steven A. Toelle, swear and affirm that I am the Director, Regulatory Affairs of the United States Enrichment Corporation (USEC), that I am authorized by USEC to sign and file with the Nuclear Regulatory Commission Revision 135 to USEC-01, Application for United States Nuclear Regulatory Commission Certification, Paducah Gaseous Diffusion Plant, as described in USEC Letter GDP 12-0035, 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 19th day of October, 2012, 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.



Rita Peak, Notary Public
State of Maryland, Montgomery County
My commission expires December 10, 2013

Rita L. Peak
Notary Public
State of Maryland
County of Montgomery
Expiration 12/10/2013

Enclosure 2
GDP 12-0035

USEC-01
Application for the United States
Nuclear Regulatory Commission Certification
Paducah Gaseous Diffusion Plant
Revision 135

**APPLICATION FOR NUCLEAR REGULATORY COMMISSION CERTIFICATION
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3.13 MAINTENANCE

Enrichment Plant Maintenance supports Operations by providing planning, estimating, and safe and reliable performance of preventive, predictive, and corrective maintenance and support services on plant facilities and equipment. Scheduling and coordinating for maintenance is performed by Production Support & Product Scheduling. Maintenance and Production Support & Product Scheduling units are described in Sections 6.1 and 6.4.

The machine shops fabricate, modify, and repair plant process and auxiliary equipment. Machine, welding, and metal working facilities and services are provided to meet the needs of plant operation. The welding facility includes an x-ray machine to aid in weld inspections. Expert services are provided for sheet metal, cranes and elevators, repairs to valves, pumps and compressors, high-efficiency particulate filter maintenance, and heating, ventilation and air conditioning.

The electrical and instrument shops provide motor repair, electrical relay work and testing, radiation instrument calibration, pneumatic instrumentation work, fabricating electrical equipment and systems, maintaining telephone and alarm systems, and calibrating measurement and testing equipment (M&TE) and other instrumentation.

Facility maintenance ensures upkeep and facility improvements to the plant site including painting, capital upgrades, roads and grounds, mobile equipment management and repairs, custodial services, asbestos abatement, carpentry, material erection, UF₆ cylinder handling, locksmithing, and heavy equipment operation.

The materials management program includes general materials receiving, warehousing, shipping, trafficking, and control to support enrichment operations and plant-site related activities. Inventories are maintained to assure timely availability of parts, tools, equipment, and general inventory to meet plant needs. GDP Procurement and Materials controls the low bay area of C-720 related with shipping/receiving and stores.

Additional maintenance program information can be found in Section 6.4.

3.13.1 Maintenance Facilities

The primary maintenance facility is C-720. This building is divided into a low-bay stores area, a high-bay maintenance area, and a mezzanine level with offices and work areas for administrative support personnel, and is serviced by north and south truck alleys. The stores area provides storage room for material and supplies necessary to maintain operations that are not specifically provided elsewhere. The maintenance area has space for shops to fabricate and repair equipment used in the enrichment process. Several different types of jib and overhead cranes support maintenance activities in the C-720 shops.

Another major maintenance facility is the C-724-A, Carpenter Shop Annex and C-724-B, Carpenter Shop. This building houses the carpenter shop, and sign and paint shops.

The C-750, Garage and Appurtenant Structures is also an important maintenance facility at PGDP. It is a typical fully equipped garage facility providing areas to service and maintain plant automotive and

heavy equipment. Hazardous materials associated with the garage are typical industrial materials. Equipment with fixed contamination may also be handled at this facility.

Buildings C-720, Maintenance and Stores Building and Appurtenant Structures, C-720-A, Compressor Shop Addition, C-720-B, Machine Shop Addition, C-720-C, Converter Shop Addition, and C-720-K, Instrument Shop Addition are important to safety and are required to maintain structural integrity during evaluation basis natural phenomenon events (earthquake, high winds, and flooding). The boundary definitions for these buildings are described in Table 3.15-2.

3.13.2 Maintenance Activities

3.13.2.1 Normetex Pump Maintenance

Normetex pumps are periodically removed from service and transported to C-720 for maintenance. The maintenance of the Normetex pumps involves replacement of the pump parts, an overhaul of the pump bearings and shaft, an evacuation test, and an operational test. Since parts may be contaminated, they are disposed of accordingly.

3.13.2.2 Section Deleted

3.13.2.3 Process Motor Repair

Process motor repairs are performed in C-720. The process motor repair area is designed to repair electrical motors and, occasionally, transformers from various areas of the plant.

Due to the limited knowledge regarding the amount of uranium on the motors, all incoming motors are surveyed before arrival in C-720. Motor disassembly takes place in this area. Minor servicing of the motor includes brake work and bearings replacement. Major work includes more thorough disassembly of the motor, such as separation of the stator and rotor.

3.13.2.4 C-720 General Machining

As process equipment in the cascade fails or for other reasons needs repair or routine maintenance, it is moved to C-720 for general machining and repair. This equipment may be contaminated with enriched

5. NUCLEAR SAFETY PROGRAMS

5.1 ENVIRONMENTAL PROTECTION—RADIOLOGICAL

As a condition of certification, 10 CFR 76.60(d) requires that the United States Enrichment Corporation (USEC) comply with the applicable provisions of 10 CFR Part 20, Standards For Protection Against Radiation, not later than the date of the Director's decision on the initial application and/or as specified in an approved plan for achieving compliance. This section addresses the USEC management of radiological environmental protection.

5.1.1 Emission and Effluent Control Systems

Control of plant gaseous emissions and liquid effluents follows the As Low As Reasonably Achievable (ALARA) principle. The following policy has been established regarding the control of effluents:

- The dose to members of the public resulting from gaseous emissions and liquid effluents shall be maintained in accordance with the ALARA principle and below regulatory limits.
- It is the responsibility of each employee to conduct his or her activities in such a manner so as to prevent or minimize the discharge of radioactive material to the environment and to report any unusual or excessive discharge of such material.

Environmental ALARA activities take place in conjunction with the radiological protection ALARA and Waste Minimization/Pollution Prevention programs. The Environmental, Safety, and Health Manager serves on the plant Radiation Protection Committee. Radiological emission data is reviewed by the Radiation Protection Committee and Environmental, Safety and Health (ES&H) personnel. Baseline Effluent Quantities (BEQs) are established for the discharge points described in SAR Sections 5.1.1.1 and 5.1.1.2. Environmental data are reviewed against these goals by the plant Radiation Protection committee as a monitor of the effectiveness of the ALARA program.

It is also the policy of the Gaseous Diffusion Plant to practice pollution prevention for business reasons and to demonstrate commitment to long-term environmental protection. USEC's commitment to environmental protection goes beyond ensuring operations meet just current environmental regulatory requirements. The goal is to minimize the impact to human health and the environment and to preserve resources for future generations. USEC will reduce pollution production at the source using innovative pollution prevention methods, education, training, and awareness.

To this end, USEC is developing and following five strategies for pollution prevention:

- Strategy I Reduce usage of toxic chemicals.
- Strategy II Implement a cost-effective waste minimization and pollution prevention program that reduces the generation of radioactive and RCRA/mixed wastes and minimizes discharges to air and water.

- Strategy III Incorporate pollution prevention considerations into plant operations including process design, engineering, acquisition, procurement, and public outreach.
- Strategy IV Maintain full compliance with Emergency Planning and Community Right-to-Know Act (EPCRA) regulations dealing with reporting requirements and emergency planning and response.
- Strategy V Promote a pollution prevention ethic through education, training, and awareness programs.

5.1.1.1 Airborne Emissions

Airborne Emission Standards

PGDP maintains and uses emission treatment systems, as appropriate, to maintain releases of radioactive material in gaseous emissions to unrestricted areas below the limits specified in 10 CFR 20.1301 and in accordance with ALARA principles as described in Sections 5.1.1 and 5.3.1.1. Unrestricted areas are those areas beyond the DOE reservation boundary and to which any member of the public has unrestricted access. Compliance with 10 CFR 20.1301 is demonstrated as required by 10 CFR 20.1302. Section 5.1.3 discusses methods of evaluation and demonstration of compliance. Furthermore, controls are maintained in order to comply with 40 CFR 61, Subpart H, and 40 CFR 190.

Action Levels for 40 CFR 61 and for Control of Airborne Emissions

Action levels (i.e., BEQs) for control of airborne radionuclide emissions are based on the ALARA philosophy and are shown in Table 5.1-1. The action levels described in this table provide indicators which can aid in identifying operational control system deficiencies. These deficiencies can then be investigated and corrected in a responsible manner so that the dose to the most exposed member of the public remains well below the regulatory limits. There is a BEQ at every continuously sampled radiological vent within the leased premises. At a minimum, these BEQs are reviewed annually. Table 5.1-2 provides a list of current BEQs for each of the continuously sampled radiological vents.

The first action level in Table 5.1-1 is triggered by a single sample exceeding the BEQ. The second action level is triggered by either one of two situations: (1) If a daily uranium sampling result is ten times greater than its BEQ or if a monthly technetium sampling result is 80 times its BEQ, or (2) If the six-month average of sampling results is twice the respective BEQ for uranium or 16 times the BEQ for technetium.

The BEQs are established based on process capability studies and historical operating data.

BEQs are established by the ES&H organization and the manager responsible for the facility from which the emission originates. At a minimum, the BEQs are reviewed annually by ES&H and the facility manager.

Managers of the facility from which the emission originates and the Plant Shift Superintendent are jointly responsible for taking the actions specified in this section.

consists of annual sampling and analysis of various food crops grown in the vicinity of the plant site. Sample locations are selected annually based on meteorological data and the availability of food crops for sampling. If possible, crops from areas of predicted maximum radionuclide concentrations are collected. A background location for food crops is located approximately 10 miles from the site in the least prevalent wind direction for comparison to indicator locations. Food crop sampling locations for 2007 are shown in Figure 5.1-21. These are typical of the locations sampled annually. However, exact locations may change slightly due to meteorological changes, and crop plantings vary from year to year. Food crop samples are analyzed for total uranium and ^{99}Tc .

Action levels for food crop sampling data are established based on previous years data and the data from background sampling locations. Should an action level be exceeded, or a trend indicate that an action level could be exceeded in the future, an evaluation shall be conducted for each exceedance and/or trend indication to determine the need for further investigation. If necessary, an investigation shall be initiated to identify the cause(s) of the trend or exceedance and facility operators shall be assisted in taking actions to reduce discharges of radioactive materials as required. If it is determined that an investigation is not required, the reason(s) for not initiating the investigation shall be documented.

5.1.2.6 Soil and Sediment Monitoring

Soil samples are collected and analyzed annually to determine whether airborne emissions from the site are influencing the soil surrounding the site. Sediment sampling at the site is conducted annually to assess potential radionuclide accumulation in the surrounding receiving streams. Soil and sediment sampling locations are shown in Figure 5.1-22. For trending purposes, soil samples are collected from the same areas each year. The soil samples are obtained from locations which are, in general, in the four cardinal compass directions and just outside the reservation boundary, and from two "remote" locations to the west and southwest of the plant. Sampling points S1, S2, and S5 (east and north locations) are in the prevailing downwind directions from the plant site. The other sampling points (southwest and west) are in the prevailing upwind direction. Sediment samples are analyzed for total uranium, ^{239}Pu , ^{237}Np , ^{235}U , ^{230}Th , and ^{99}Tc . Soil samples are analyzed for total uranium.

Action levels for soil and sediment sampling data are established based on previous years data and the data from upstream (sediment) and background (soil) locations. Should an action level be exceeded, or a trend indicate that an action level could be exceeded in the future, an evaluation shall be conducted for each exceedance and/or trend indication to determine the need for further investigation. If necessary, an investigation shall be initiated to identify the cause(s) of the trend or exceedance and facility operators shall be assisted in taking actions to reduce discharges of radioactive materials as required. If it is determined that an investigation is not required, the reason(s) for not initiating the investigation shall be documented.

5.1.2.7 Data Management

The ES&H Organization is responsible for the collection and verification in accordance with established procedures of field and analytical data for the Environmental Monitoring Program necessary for the demonstration of compliance with 10 CFR 20 dose limits as described in Section 5.1.3, and other requirements of this section. Personnel are responsible for the maintenance of field notebooks, field data and other supporting quality control (QC) documentation. The Laboratory (see Section 5.7) is responsible for sample analysis and the logging of analytical results and quality assurance/quality control (QA/QC) documentation. Data for the demonstration of compliance described in Section 5.1.3 are also provided by other plant organizations. These data are obtained in accordance with applicable procedures.

On-site radiological analysis requests are initially placed into the laboratory information system through which the laboratory electronically inputs analytical results. These data, with the

exception of C-310 stack data, are then transferred electronically to the environmental data base for quality assurance checks and data verification. The environmental data base is the final storage area for verified data. Data are checked to ensure that units, sample numbers, etc. are correct.

The evaluation of data is the responsibility of the ES&H Organization. Data from water effluent and gaseous emission points where BEQs have been established are compared to the BEQs and are also trended. Data from the external gamma radiation, surface water, biological, soil, and sediment sampling programs are also reviewed to identify trends over time. In addition, results from monitoring points in the vicinity of the plant site are reviewed against data from background monitoring points.

Field sample data, including notebooks, calculations, and analytical data and information are reviewed for completeness. Data and information are also reviewed by environmental monitoring personnel to ensure that data acceptance criteria are met. ES&H personnel review data and calculations and approve the data and reports for distribution. ES&H personnel also review data for trends over time and exceedances of BEQs.

The C-310 stack sampling results are used for emission trending and the assessment of potential impacts of emissions on the public. When the laboratory results are obtained from the laboratory, the uranium emission data from C-310 are calculated and the results are communicated to the plant cascade coordinator.

When a result exceeds an established limit, results of other parameters that may be related to the parameter in question are checked to confirm the result. If the result is still in question, the responsible lab is contacted to verify the reported results. An initial verbal investigation includes checks for calculation or transcription errors. If this does not detect any problems, the lab may be requested to reanalyze the sample in question. Results of the laboratory investigation are returned to the ES&H Organization.

5.1.2.8 Quality Control

QC activities for environmental samples and data address both sampling and data management. Sampling QC activities include the use of field blanks, duplicate samples, and chain-of-custody procedures to identify sampling and sample preparation problems, and to ensure sample integrity. Data review and verification, as described in Section 5.1.2.7, form the basis of the data management QC program.

The QA/QC activities for the laboratory analysis of samples are managed by the Production Support and Product Scheduling Organization.

5.1.3 Methods of Evaluation and Demonstration of Compliance

5.1.3.1 Airborne Radionuclides

Characterization of the radiological consequences of radionuclides released to the atmosphere from PGDP is accomplished by calculating the committed effective dose equivalents (CEDE) to the maximally

5.3 RADIATION PROTECTION

As a condition of certification, 10 CFR 76.60(d) requires that USEC "comply with the applicable provisions of 10 CFR Part 20, 'Standards For Protection Against Radiation,' not later than the date of the Director's decision on the initial application and/or as specified in an approved plan for achieving compliance." This section describes USEC's Radiation Protection (RP) Program for keeping occupational radiation exposures and radioactive contamination as low as is reasonably achievable in accordance with the requirements set forth in 10 CFR 20.

5.3.1 Radiation Protection Program

5.3.1.1 ALARA Policy

In accordance with 10 CFR 20.1101, USEC has established an RP Program designed to protect personnel entering the USEC-leased spaces from unnecessary exposure to ionizing radiation and radioactive materials. This program is based upon the following principles:

1. Personnel radiation exposures and the release of radioactive effluents shall be maintained in accordance with the As Low As Reasonably Achievable (ALARA) principle.
2. No individual shall receive a radiation dose in excess of any regulatory limit.

Responsibility for oversight and adherence to this policy rests with the Vice President, Operations. The General Manager has the overall responsibility and authority for the ALARA program at PGDP. The Radiation Protection (RP) Manager (or designee) is responsible for implementing the ALARA program.

5.3.1.2 Radiation Protection Committee

The Radiation Protection Committee (RPC), is an independent advisory group to the General Manager, Plant Manager, and the PORC on radiation protection issues, including the ALARA Program. It functions to (1) monitor selected operational radiation protection issues; (2) advise plant management on radiation protection concerns; (3) review proposed designs, work practices, selected suggestions, and selected projects with regard to contamination control and/or ALARA.

Membership and Structure

Membership consists of persons from various functional disciplines of the plant who have the necessary competence and experience to perform the functions of the committee. Standing committee members are the Radiation Protection Manager (RPM) who serves as the chair, the vice-chair who is appointed by the RPM, the Engineering Manager, the Environmental, Safety, and Health Manager, Operations Manager, Maintenance Manager, and the bargaining unit representative(s). Participation from other functional disciplines may vary depending on the issue of concern. The committee chair, or designee, is responsible for requesting appropriate functional representation. Committee members may designate an alternate to attend committee meetings in their place.

Quorum

The quorum consists of five standing committee members or their alternates.

Authorities

Committee authority is limited to reviews and recommendations. The committee has no approval, stop, or start work authority. Ad hoc subcommittees may be established for special studies or reviews pertinent to committee-related issues.

Meeting Frequency

The committee meets at least quarterly and as directed by the chair.

Responsibilities

The RPC chair ensures that the functions of the committee and tasks which may be assigned by, but are not limited to, the General Manager, Plant Manager, and PORC are properly executed. Minutes are made available to the General Manager, the Plant Manager, and the PORC. Special reports are prepared upon request of the General Manager, the Plant Manager, or the PORC chair, or when the RPC chair determines issues warrant attention.

The RPC reviews matters that have or may have an impact on contamination control and/or ALARA. These include, but are not limited to the following: (1) technologies for selected buildings and/or job tasks; (2) current work practices and completed tasks which have/had contamination control or ALARA concerns; (3) radiation protection violations; (4) lessons learned; (5) trends and resulting impacts on contamination control and/or ALARA; (6) establish annual contamination control and exposure goals; and (7) review BEQs as required by SAR Section 5.1.

necessary to ensure protection of public and worker health and safety and provide for common defense and security and to ensure regulatory or quality compliance. This manager has access to all information at the site related to safety, safeguards and quality. This manager interacts directly with the General Manager, other managers, and key plant personnel and participates, as desired, in any evaluations or discussions related to safety, safeguards and quality. This manager informs the Vice President, Operations and the General Manager about safety, safeguards, and quality issues and compliance. This manager manages the Nuclear Safety and Quality Office and directs plant quality assurance functions involving audits and oversight of plant operations as well as a nuclear safety assurance function.

The Nuclear Safety and Quality Manager primarily works the office shift, but periodically observes plant operations performed on backshifts. This manager is on-call and is notified by the Plant Shift Superintendent's office of reportable events per plant procedures. This notification occurs on all shifts.

The Nuclear Safety and Quality Manager shall have as a minimum a technical degree and 15 years nuclear experience with 3 years of management experience in quality assurance, nuclear safety oversight, engineering and technical support, or regulatory affairs. Either the Nuclear Safety and Quality Manager or a management position responsible for quality assurance that reports to the Nuclear Safety and Quality Manager shall have a minimum of one year quality assurance experience or one year experience implementing quality assurance program requirements.

The Nuclear Safety and Quality Manager is appointed by the Vice President, Operations.

6.1.1.8 Section Deleted

6.1.1.9 General Manager

The General Manager reports to the Vice President, Operations.

The General Manager is responsible for the safe operation of the plant, for compliance with all applicable NRC regulatory requirements, and for adherence to applicable policies. The General Manager is responsible for production, training, procedures, emergency management, fire services, medical services, records management and document control, engineering, transportation, materials handling and storage, shared site programs, and occupational, environmental, security, and nuclear safety.

Day-to-day authority and accountability for production, production support, and, fire services activities is assigned to the Plant Manager. The General Manager has responsibility for the primary day-to-day interface with NRC on matters of adequate safety/safeguards and regulatory compliance, and may delegate responsibility for that interface to the Regulatory Affairs Manager.

The General Manager has overall responsibility for plant security and compliance with applicable security regulatory requirements.

The General Manager has shut down and stop work authority for all or any portion of the plant (leased facilities). The General Manager shall be responsible to authorize restart of shutdown operations and must obtain concurrence of the Vice President, Operations, for any operations that were directed to be shut down by the Vice President, Operations or by the Nuclear Safety and Quality Manager.

The General Manager shall have as a minimum a bachelors degree in engineering or the physical sciences or equivalent technical experience, six years of nuclear experience, and six years of management experience (which may be concurrent with the nuclear experience).

The General Manager is appointed by the Vice President, Operations.

6.1.1.10 Plant Manager

The Plant Manager reports to the General Manager.

The Plant Manager is responsible for the day-to-day production activities at the site including operations, maintenance, work control process, fire services, and production support. The Plant Manager shall be responsible for authorization of restart of shutdown operations but must seek concurrence from the General Manager for any operation that was shutdown by the General Manager, the Vice President, Operations or the Nuclear Safety and Quality Manager.

The Plant Manager shall have as a minimum a bachelors degree in engineering or the physical sciences or equivalent technical experience, six years of nuclear experience, and six years of management experience (which may be concurrent with the nuclear experience).

The Plant Manager is appointed by the General Manager with concurrence by the Vice President, Operations.

6.1.1.11 Operations Manager

The Operations Manager reports to the Plant Manager.

The Operations Manager is responsible for the operation of the enrichment cascade, plant utilities, chemical services, feed and product facilities, shift operations, and fire services. This includes activities such as ensuring the correct and safe operation of the UF₆ processes; proper receipt, storage, handling and on-site transportation of UF₆; providing electric power, steam, compressed air, nitrogen, plant and sanitary water, waste water treatment for the cascade and support facilities; and providing chemical cleaning, and

decontamination services. In the absence of the General Manager and Plant Manager, the Operations Manager may be delegated the responsibilities and authorities of the General and/or the Plant Manager. This manager shall have the authority to stop work and/or shut down operations in any part of the operation for which he/she has responsibility.

The Operations Manager shall have as a minimum a bachelors degree in engineering or the physical sciences or equivalent technical experience, and four years of nuclear experience with at least six months in a gaseous diffusion plant.

The Operations Manager is appointed by the Plant Manager with concurrence by the General Manager and the Vice President, Operations.

6.1.1.12 Maintenance Manager

The Maintenance Manager reports to the Plant Manager.

The Maintenance Manager is responsible for providing safe and reliable performance of preventive, predictive, and corrective maintenance and support services on plant facilities and equipment. This includes workplanning, troubleshooting, maintenance of logs and records, interfacing with Scheduling to initiate, screen, evaluate, prioritize, and schedule maintenance work, and coordinating shop maintenance. The manager shall have the authority to stop work and/or shut down operations in any part of the operation for which he/she has responsibility.

The Maintenance Manager shall have as a minimum a bachelor's degree in engineering or the physical sciences or equivalent technical experience and four years of nuclear experience with at least six months in a gaseous diffusion plant.

The Maintenance Manager is appointed by the Plant Manager with concurrence by the General Manager and by the Vice President, Operations.

6.1.1.13 Section Deleted

6.1.1.14 Radiation Protection Manager

The Radiation Protection Manager reports to the Environmental, Safety, and Health Manager.

The Radiation Protection Manager is responsible for the implementation, maintenance, and effectiveness of the health physics, radiation protection, and environmental sampling programs. These duties include training personnel in the use of radiological program support equipment, controlling radiation exposure of personnel, determining the radiological status of the facility, determining the need for issuing and closing out radiation work permits, conducting the radiological occupational monitoring and environmental sampling programs. The Radiation Protection Manager has direct access to the General Manager and the Plant Manager concerning radiation protection matters and has stop work authority for activities not being conducted in accordance with radiation protection requirements and policies.

The Radiation Protection Manager shall have as a minimum a bachelors degree in engineering, health physics, radiation protection, or the physical sciences or equivalent technical experience, and four years experience in radiation protection including six months at a uranium processing facility.

The Radiation Protection Manager is appointed by the Environmental, Safety, and Health Manager with concurrence by the General Manager.

6.1.1.15 Text deleted.

6.1.1.16 Shift Operations Manager

The Shift Operations Manager reports to the Operations Manager.

The Shift Operations Manager coordinates the activities of the Plant Shift Superintendents, Cascade Coordinators, and the Fire Chief, and provides technical and administrative support.

The Nuclear Criticality Safety Manager is responsible for developing and implementing the nuclear criticality safety program for the facility. These duties include technical oversight of nuclear criticality safety; nuclear criticality safety training; evaluation and approval of current and proposed changes to process conditions, equipment, and procedures involving fissile material operations; and conducting assessments of program implementation. The Nuclear Criticality Safety Manager has direct access to the General Manager concerning nuclear criticality safety matters and has stop work authority for any activity that could cause a criticality concern.

The Nuclear Criticality Safety Manager shall have as a minimum a bachelors degree in engineering or physical sciences, and four years nuclear criticality experience or nuclear engineering experience (e.g., core load design, fuel design, reactor engineering) with at least six months at a uranium processing facility where nuclear criticality safety was practiced.

The Nuclear Criticality Safety Manager is appointed by the Regulatory Affairs Manager with concurrence by the General Manager.

6.1.1.20 GDP Procurement and Materials Manager

The GDP Procurement and Materials Manager is responsible for packaging and transportation and for receipt, delivery, storage, control, and on-site movement of packaging and transportation SSCs and hazardous chemicals under his cognizance to the point of issuance. This manager interacts directly with the General Manager, other managers and key plant personnel and participates as desired in any discussions related to procurement and materials management. The GDP Procurement and Materials Manager is appointed by and reports to the USEC Director of Procurement and Contracts.

6.1.1.21 Selection Deleted

6.1.1.22 Security Manager

The Security Manager reports to the General Manager.

The Security Manager is responsible for plant police services and security. The Security Manager is governed by and must adhere to the policies established by the Director, Corporate Security. The Security Manager has stop work authority for activities not being conducted in accordance with applicable regulatory requirements. The General Manager is authorized to direct the security resources assigned to plant security by the Security Manager, as necessary, to ensure safe operation of the plant.

The Security Manager shall have as a minimum a bachelors degree or equivalent technical experience and four years security experience or four years nuclear experience.

The Security Manager is appointed by the General Manager with concurrence by the Director, Corporate Security.

6.1.1.23 Fire Chief

The Fire Chief reports to the Shift Operations Manager and is governed by, and must adhere to, policies established by the General Manager.

The Fire Chief is responsible for plant fire services and has stop work authority for activities not being conducted in accordance with applicable fire protection requirements. The Fire Chief is the senior site fire protection officer.

The Fire Chief shall have as a minimum a bachelors degree or equivalent technical experience, four years of fire protection experience, and 6 months of nuclear experience.

The Fire Chief is appointed by the Operations Manager with concurrence by the Plant Manager and the General Manager.

6.1.1.24 Production Support & Product Scheduling Manager

The Production Support & Product Scheduling Manager reports to the Plant Manager. The Production Support and Product Scheduling Manager is responsible for the technical functions in direct support of production activities. This includes laboratory operations, and materials and process technology.

The Customer Service & Product Scheduling Manager is responsible for the management of groups and personnel in several significant functions for customer order filling and scheduling production maintenance work. Scheduling of production maintenance work includes managing daily work control activities, developing an integrated work schedule, and coordinating development of work control guidelines. The Production Support & Product Scheduling Manager also serves as USEC's primary point of contact with the DOT and implements applicable NCS controls for Production Support & Product Scheduling field activities.

The Production Support & Product Scheduling Manager shall have as a minimum a bachelors degree in engineering or the physical sciences or equivalent technical experience, four years of management experience and five years of nuclear experience with at least six months in a gaseous diffusion plant.

The Production Support & Product Scheduling Manager is appointed by the Plant Manager with concurrence by the General Manager and Vice President, Operations.

6.1.1.25 Regulatory Affairs Manager

The Regulatory Affairs Manager reports to the General Manager. The Regulatory Affairs Manager is governed by and must adhere to policies established by the Director, Regulatory Affairs.

As delegated by the General Manager, the Regulatory Affairs Manager is responsible for the day-to-day interface with NRC on matters of regulatory compliance; event investigations, and reporting; and regulatory commitment management. As delegated by the Director, Regulatory Affairs, the Regulatory Affairs Manager has responsibility for coordinating certification related and certificate renewal-related activities. The Regulatory Affairs Manager is also responsible for providing plant management with data to assure the plant's corrective actions and commitments are properly addressed and managed to facilitate compliance with the implementing policies and procedures, for the operating experience review program, for administration of the problem reporting systems, and for alerting plant management to adverse trends as noted for identified deficiencies. In addition, the Regulatory Affairs Manager is the senior site manager responsible for establishment and oversight of the Nuclear Criticality Safety and Nuclear Safety programs (including implementation of the unreviewed safety question determination program and conducting assessments of program implementation), and has stop work authority for any activity that would be or is in violation of the plant safety basis, the Technical Safety Requirements, or the requirement and assumptions of the accident analyses.

The Regulatory Affairs Manager is responsible for preparation, presentation, and recording of employee orientations and for technical and qualification training programs' development and implementation. The Regulatory Affairs Manager is also responsible for the development and implementation of the procedures program and for the records management and document control (RMDC) program.

The Regulatory Affairs Manager shall have as a minimum a bachelor's degree in engineering or the physical sciences or equivalent technical experience, and four years nuclear experience.

The Regulatory Affairs Manager is appointed by the General Manager with concurrence of the Director, Regulatory Affairs.

6.1.1.26 Operations and Maintenance First-Line Managers

First-line operations and maintenance managers report to Group or Section Managers.

First-line operations managers shall meet the employment qualifications as an Operator and have as a minimum one of the following:

1. A high school diploma or satisfactory completion of the General Educational Development (GED) test and 3 years of plant operations experience with at least 6 months in a gaseous diffusion plant.
2. A four year degree with at least two years gaseous diffusion plant experience in an operational, maintenance, or engineering assignment.
3. A two year degree with at least three years gaseous diffusion plant experience in an operational, maintenance, or engineering assignment.
4. A high school diploma or satisfactory completion of the General Educational Development (GED) test and five years of gaseous diffusion plant experience in a maintenance or engineering assignment.
5. A high school diploma or satisfactory completion of the General Educational Development (GED) test and two years Military experience in a technical field and 18 months of experience in an operational, maintenance, or engineering position with at least 6 months in a gaseous diffusion plant.

First-line maintenance managers shall have as a minimum a high school diploma or satisfactory completion of the GED test and 3 years of maintenance-related plant experience with at least 3 months in a gaseous diffusion plant or 11 years maintenance experience in a gaseous diffusion plant. As an equivalent alternative, a first-line maintenance manager may have a four year technical degree with at least two years gaseous diffusion plant experience in an operational, maintenance, or engineering assignment.

First-line operations and maintenance managers are appointed by Group or Section managers with concurrence by the Organization managers.

First-line operations managers can authorize the restart of equipment that has been shutdown in a routine fashion when the prerequisites and limitations of the associated operating procedure are met.

6.1.1.27 Environmental, Safety and Health Manager

The Environmental, Safety and Health Manager reports to the General Manager.

The Environmental, Safety and Health Manager is responsible for oversight functions in the areas of environmental, safety, health and medical services, emergency management, and waste management. The Environmental, Safety and Health Manager is the senior site manager responsible for establishment and oversight of the site environmental protection programs and the environmental monitoring program described in Section 5.1. This manager appoints a site program manager for the Chemical Safety Program.

The Environmental, Safety, and Health Manager is the senior site manager responsible for establishing and implementing the health physics and environmental sampling programs at the facility. This manager shall have the authority to stop work and or shutdown operations in any part of the operation for which he/she has responsibility.

The Environmental, Safety and Health Manager shall have as a minimum a bachelors degree or equivalent technical experience and four years of nuclear experience with at least six months at a GDP.

The Environmental, Safety and Health Manager is appointed by the General Manager.

6.1.2 Management Controls

The management controls established by USEC include policies and directives, management systems, and administrative procedures. USEC establishes policies which are communicated to the plants. Policies related to the protection of health and safety of workers and the public, protection of the environment, and providing for the common defense are discussed in pertinent sections of this application.

Management systems and programs are described in Chapters 5 and 6, the Technical Safety Requirements, and in several program plans and descriptions (notably, the Emergency Plan, Quality Assurance Program, Radioactive Waste Management Program, Fundamental Nuclear Material Control Plan, and Security Plans. The commitment tracking and corrective action management systems are integrated to prioritize plant actions consistent with their safety and safeguards significance. Where safety or safeguards might be adversely impacted by cost or schedule considerations, it is the policy of USEC to subordinate cost and schedular considerations to ensure adequate treatment of safety and safeguards.

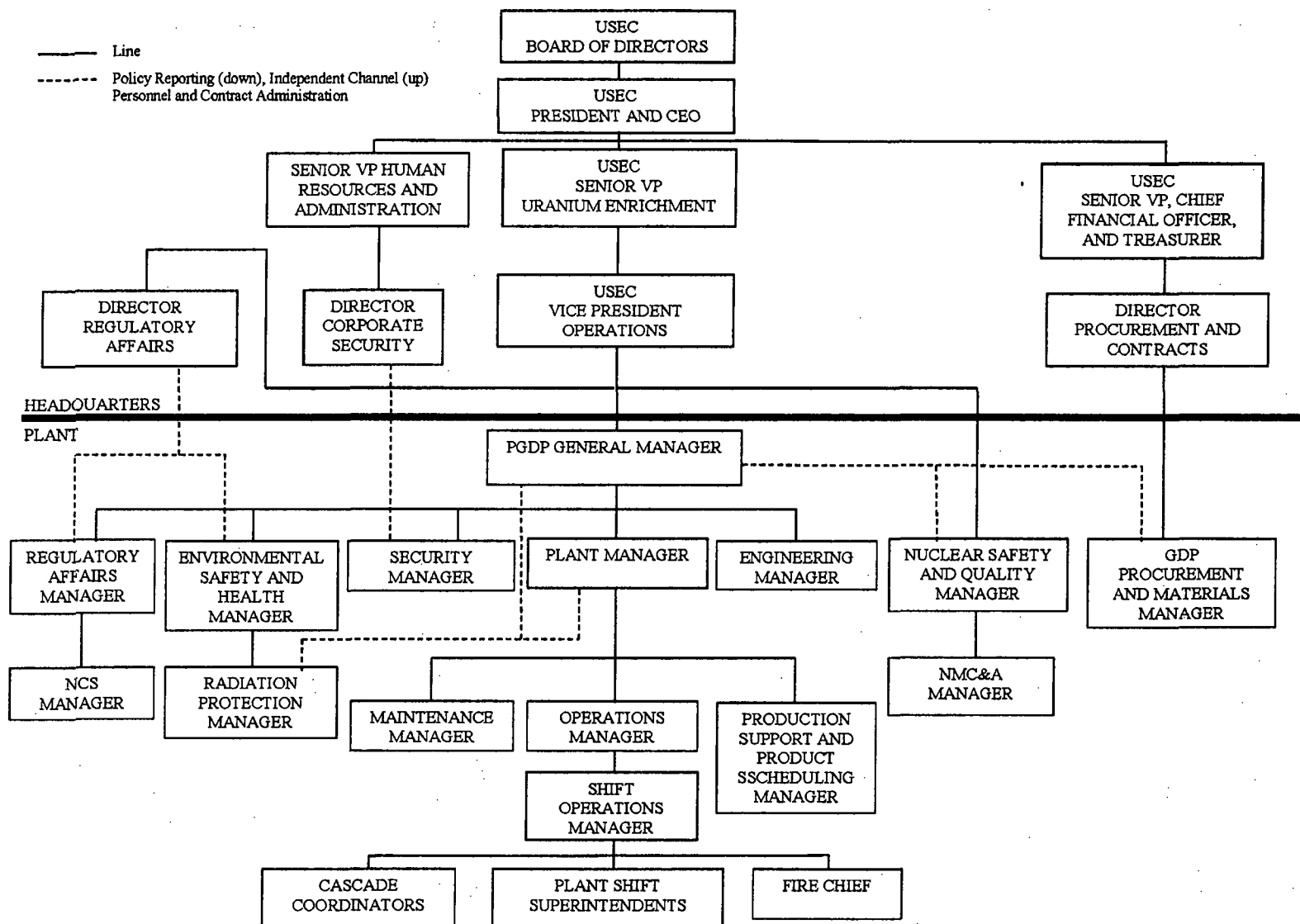


Figure 6.1-1. Uranium Enrichment Facilities Organization Chart

Figure 6.1-2 deleted

- l. Reviews design proposals and modifications;
 - m. Ensures that appropriate documents and procedures are updated to be consistent with modifications; and
 - n. Assists in work control package preparation and identification of post-maintenance test requirements.
- 3. Records Management and Document Control – Regulatory Affairs
 - a. Develops and operates a records management and document control (RMDC) program that controls and issues designated documents and acts as the repository with retrieval capabilities for controlled documents and records necessary to maintain the plant's design history; and
 - b. Maintains an index of documents that are required to be controlled.
- 4. GDP Procurement and Materials
 - a. Develops procedures in accordance with the QAP for procurement and control of item;
 - b. Purchases Q items and replacement parts only from authorized organizations and to requirements and technical specifications as identified by Engineering;
 - c. Ensures that only inspected and accepted items are stored and issued for work; and
 - d. Maintains items in a manner that complies with Engineering issued requirements.
- 5. Maintenance
 - a. Develops and implements procedures to execute a controlled work procedure that provides for verification of data, performance, or documentation where specified by the DA; documentation of material used for identification and to ensure traceability if required; post maintenance testing to ensure design specifications are met; and a process for maintaining equipment history records;
 - b. Ensures maintenance personnel are knowledgeable of requirements for working on Q systems/items;
 - c. Performs work only after receiving an approved maintenance work package; and
 - d. Identifies and furnishes to Documents and Records those work history and traceability requirements for Q items.

6. Operations

- a. Ensures no modifications are made to design or operational configuration without proper review and approval;
- b. Performs and documents operational, post-maintenance tests/checks and post-modification tests to assure items are operating as intended;
- c. Issues work orders or other authorizations prior to maintenance, testing or modifications activities; and
- d. Records the occurrence of tests, calibrations and maintenance activities.

7. Training and Procedures Groups – Regulatory Affairs

- a. Establishes a procedures control program to ensure technical, operations, maintenance and administrative procedures used to apply the CM Program processes are properly developed, received, approved, revised and controlled.
- b. Provides training support to Operations and Maintenance organizations to ensure personnel training is updated to support plant changes.

8. Nuclear Safety and Quality

- a. Assists in the development and implementation of the commercial grade dedication process for Q items;
- b. Assists in the acceptance process for non-commercial grade Q items;
- c. Verifies that Design Authority supplied acceptance criteria is met and that accepted items are appropriately identified;
- d. Establishes a program for in-process inspection of maintenance work packages in accordance with acceptance criteria contained in maintenance procedures or provided by the Design Authority;
- e. Provides oversight of the problem reporting and resolution program of the Regulatory Affairs Organization,; and
- f. Conducts audits and surveillances of processes that implement the CM Program.

6.4 MAINTENANCE

The PGDP Maintenance and Production Support & Product Scheduling organizations provide for the safe, reliable, and cost-effective maintenance of the gaseous diffusion plant. Maintenance for the plant is performed in accordance with Quality Assurance Program and Configuration Management requirements. The maintenance program consists of a mix of corrective maintenance (CM) and preventive maintenance (PM), including instrument calibrations. Trend analysis is used to monitor the effectiveness of the program. Managers have roles and responsibilities that are periodically revised based on corporate goals. Personnel evaluations include the effectiveness of implementation of their responsibilities.

6.4.1 Maintenance Program Coverage

The PGDP maintenance program described in this section applies to those Q and AQ-NCS structures, systems, and components (SSCs) as identified by the design authority in accordance with Section 6.3, described in Section 3.15 and covered by the Quality Assurance Program (QAP). Routine maintenance work is identified, prioritized, planned, scheduled, executed, and closed out in accordance with the work control process.

AQ SSCs are also identified by the design authority in accordance with Section 6.3, described in Section 3.15 and covered by the QAP. Identifying, planning, prioritizing, scheduling, and closing out of AQ SSC maintenance is accomplished in accordance with the work control process. For each AQ SSC, the maintenance requirements that must be followed are established based on the impact on the health and safety of the public and workers, and the environment of specific SSCs. The specific graded requirements for the execution of maintenance on each AQ SSC are developed taking into consideration as appropriate: (1) the requirements of applicable regulations, codes, and standards; (2) the complexity or uniqueness of an item (or activity) and the environment in which it has to function, as determined by specification, design, or fabrication methods; (3) the history of the item in service; (4) the degree to which functional compliance may be demonstrated or assessed by testing, by inspection, and PM methods applied; and (5) the consequence of failure. The configuration management program provides for the identification of AQ SSCs.

6.4.2 Maintenance Organization and Administration

Assuring effective maintenance on GDP identified SSCs requires the following elements:

- Developing policies and procedures for installing, maintaining, and repairing of identified SSCs;
- Performing PM and CM;
- Performing post maintenance testing;
- Performing periodic surveillance activities;
- Identifying required spares, material, and replacement parts in support of maintenance activities;
- Providing planning and technical support for maintenance activities;
- Maintaining the maintenance data system;
- Performing measurement and test equipment maintenance; and
- Implementing on-the-job training (OJT) programs for maintenance personnel.

Implementing these elements is the responsibility of the organizations as described below.

6.4.2.1 The Maintenance Organization

The Maintenance Organization plans and conducts corrective and preventive maintenance including calibrations on identified GDP SSCs. Maintenance activities are performed in the following areas: mechanical, electrical, instrument, calibrations, electronics, support shops, and plant services (e.g., maintenance of site vehicles, cylinder handling, janitorial, etc.). Each group manager is accountable to the Maintenance Manager for the correct and timely maintenance within his scope. The Maintenance Manager reports to the Plant Manager.

The Maintenance Manager provides oversight of enrichment plant maintenance implementation through self-assessments. The self-assessment program is described in SAR Section 6.8.

6.4.2.2 Scheduling Group

The Scheduling Group of the Production Support & Product Scheduling Organization provides scheduling functions for maintenance activities. They also provide Computerized Maintenance Management System (CMMS) oversight and support, PM scheduling and tracking support, and TSR surveillance scheduling and tracking support.

6.4.2.3 Engineering

Engineering provides the technical basis for PM, develops predictive maintenance techniques, evaluates equipment history, tracks and trends performance of designated SSCs, supports root cause analysis of equipment failures, support reliability studies, provides design criteria, provides acceptance criteria and provides post maintenance testing requirements for identified SSCs. Engineering is also responsible for configuration management and technical support to the Maintenance organization.

6.4.2.4 GDP Procurement and Materials

GDP Procurement and Materials is responsible for provisioning including requisitioning, receipt, storage, and issuance of repair materials and components. They verify that catalog numbers and descriptions of identified SSCs are consistent with the latest Engineering Specification Data Sheet (ESDS) revision, ensuring that all identified SSCs have been inspected by appropriate personnel, tagged with a serviceable tag, and placed in a segregated controlled area. This organization also ensures that identified SSCs are stored in a way that will ensure integrity and availability and that they are maintained according to engineering specifications.

6.6 TRAINING

In accordance with 10 CFR 76.35(a), USEC is required to submit as part of its application for a certificate of compliance a training program that meets the requirements of 10 CFR 76.95. Section 76.95 requires USEC to establish, implement, and maintain a training program "for individuals relied upon to operate, maintain or modify the GDPs in a safe manner." Section 76.95 also states that the training program for such individuals "shall be based on a systems approach to training that includes the following:

1. Systematic analysis of the jobs to be performed,
2. Learning objectives derived from the analysis that describe desired performance after training,
3. Training design and implementation based on the learning objectives,
4. Evaluation of trainee mastery of the objectives during training,
5. Evaluation and revision of the training based on the performance of trained personnel in the job setting."

This section provides an overview of the training program in place at PGDP including the training applicable to personnel who are "relied upon to operate, maintain, or modify the GDPs in a safe manner."

Personnel are trained to recognize and cope with safety hazards they may encounter in their jobs. They are also trained on practices important to public safety, safeguard of licensed material, or protection of the environment.

The overall training program at PGDP is comprised of a number of training elements. These elements include:

- **General Employee Training** for persons who require unescorted access, including visitors (Section 6.6.5);
- **Operations and Maintenance Technical Training** for those persons relied upon to operate, maintain, or modify the GDPs in a safe manner (Section 6.6.6);
- **Radiation Worker Training** for those persons who require unescorted access to or perform work in restricted areas - this program is not SAT-based (Section 6.6.7);
- **Health Physics Technician Training** for those persons identified in the Radiation Protection portion of this application - this program is SAT-based (Section 6.6.8);
- **Fire Protection and Emergency Management Training** for those persons who are identified in the Fire Protection and Emergency Plan portions of this application - this program is not SAT-based (Section 6.6.9);
- **Environmental, Safety and Health (ES&H) Training** for those persons required to have the training described in Section 6.6.10 - this program is not SAT-based;
- **Subcontractor Training** for those temporary personnel performing maintenance or modifications to the GDPs - this program is not SAT-based (Section 6.6.11);

- **Nuclear Criticality Safety Engineer/Specialist Training** for those persons identified in the Nuclear Criticality portion of this application - this program is SAT-based (Section 6.6.12);
- **Auditor and Inspector Training** for those persons identified in the Quality Assurance Plan portion of this application - this program is not SAT-based (Section 6.6.13);
- **Manager/Supervisor Training** for those persons who manage and supervise personnel relied upon to operate, maintain, or modify the GDPs in a safe manner - this program is not SAT-based (Section 6.6.14);
- **Cascade Coordinator Training** for those personnel who direct the overall operations of the gaseous diffusion cascade - this program is SAT-based (Section 6.6.15);
- **Plant Shift Superintendent Training** for those persons who provide managerial oversight for the operation of the Plant Uranium Facility and other support activities - this program is SAT-based (Section 6.6.16);
- **System Engineer Training** for those persons who review modifications to Q or AQ-NCS items - this program is SAT-based (Section 6.6.17);
- **Laboratory Technician Training** for persons who work in the Laboratory Technician classification - this program is SAT-based (Section 6.6.18);
- **Waste Management Operator Training** for persons who collect, store, and package hazardous waste for shipment to off-site facilities - this program is SAT-based (Section 6.6.19);
- **Safeguards/Security Training** for those persons identified in the "Security Plan for the Protection of Classified Matter" portion of this application - this program is not SAT-based (6.6.20).

6.6.1 Training Program Organization and Administration

The plant training organization consists of a centralized staff which reports directly to the Regulatory Affairs Manager. The training staff consists of technical trainers, administrative personnel and mid-level managers who are directly responsible for assisting the plant in the design, development, implementation, and auditing of training programs in the following functional areas:

- General employee training,
- Operations and maintenance technical training,
- Radiological protection training,
- Environmental, safety and health training,
- Subcontractor training, and
- Training instructor/developer qualification.

Central Training Staff personnel are assigned by the Regulatory Affairs Manager to interface with functional line managers to coordinate training development and implementation for functional areas.

Additional personnel who work directly for their respective organizations are selected by their respective Organization Managers and are matrixed to the Regulatory Affairs Manager. This group receives guidance from Training and their programs are audited by Training staff to verify these training programs are established consistently with plant training policies and procedures.

The Regulatory Affairs Manager is responsible for establishing procedures that direct the development and implementation of training programs at the PGDP using a systems approach to training (SAT) for development of training for personnel relied upon to operate, maintain, or modify Q or AQ-NCS items.

Organization managers are responsible for defining job specific qualification requirements for personnel within their organizations and approving the required training programs as defined in Training Development and Administrative Guides (TDAGs), which are approved by both the organization and the applicable group training manager. Workers relied upon to operate, maintain, or modify Q or AQ-NCS items are trained and evaluated for qualification based on these programs prior to assignment of duties.

Line managers (group managers or section managers) are responsible for identifying tasks required for qualification. Line management is responsible for identifying new tasks or revisions to existing tasks as a result of equipment/procedure changes and/or modifications. Such changes are communicated and documented using the training change request form defined in the plant training procedures.

Task or duty area qualification is granted by line management based on successful evaluation of the worker's mastery of learning objectives presented during training. Line management is responsible for placing work restrictions or removing employees from duty areas where training is deficient. Maintenance of qualification is contingent upon successful completion of continuing training and/or through on-the-job training (OJT) evaluations.

Attendance is scheduled and pass/fail status is tracked for each attendee by the training organization and line management based on TDAG requirements.

The central training staff personnel as well as personnel matrixed to the Regulatory Affairs Manager notify line management of personnel who have not received initial training (such as employee reassignment or new hire) or who are past due for continuing training (such as an extended absence).

All training programs have two aspects, Initial Training and Continuing Training.

6.6.1.1 Initial Training

Initial training contains the classroom and on-the-job training necessary to provide an understanding of the fundamentals, basic principles, systems, procedures, and emergency responses involved in work to which an employee is assigned. Initial task or duty area qualification is granted by line management based on successful evaluation of the employee's mastery of the learning objectives presented during the training. New employees or employees transferred from other duty areas within the facility may be partially qualified by reason of previous applicable training or experience. The extent of further training for these employees is determined by regulations, performance evaluations, or comprehensive

examinations. Employees may be exempted from portions of a training program through prior education, performance, or testing.

Applicable process safety training (e.g., technical safety requirements training and nuclear criticality safety training) is included in the initial training.

TSR training is provided to facility operators and supervisors specific to their area of responsibility. It is designed to provide a sufficient understanding of the safety limits and limiting safety system settings, limiting conditions for operation, surveillance requirements, design features, and administrative controls necessary for the safe operation of the GDPs. This training is reviewed and approved by the safety analysis technical staff.

Initial NCS training based on ANSI/ANS-8.20-1991, "American National Standard for Nuclear Criticality Safety Training" is provided for personnel who handle or manage the handling of fissile material and work within Fissile Control Areas. This training is reviewed and approved by the Nuclear Criticality Safety Group and includes a discussion of the following:

- The fission process,
- Controllable factors and examples of their application at this facility,
- NCS postings, and
- Consequences of some of the historical criticality accidents.

Managers of personnel described above receive additional training on managerial responsibilities relating to Nuclear Criticality Safety.

Personnel who work under procedures containing NCSA requirements receive additional training on these procedures with emphasis on NCS limits and controls.

6.6.1.2 Continuing Training

Continuing training is provided for employees in the interest of promoting safety, safeguards, security, and environmental protection awareness. Continuing training is also provided as a means to maintain and improve job-related knowledge and skills.

Training Development and Administrative Guides (TDAGs) contain training requirements which delineate continuing training for employees. The number of hours dedicated to this training annually is based on the following factors:

- Periodicity required by regulatory agencies and national standards;
- "Overtrain" tasks related to Q structures, systems, or components that are identified in SAT-Based programs (see SAR Section 6.6.3.1);
- Training needs as determined by line management. This includes, but is not limited to, nuclear criticality safety assessments, facility system changes, component changes, procedure changes, lessons-learned (to include industry and in-house operating experience and event reports), emergency response procedures, and Technical Safety Requirements (TSRs).

- Asbestos Worker Safety,
- Hearing Conservation,
- Heat/Cold Stress,
- OSHA Hazard Communication,
- Hoisting and Rigging,
- Mobile Equipment (Cranes, forklifts, etc.),
- Lockout/Tagout Work Permits,
- Safety & Health Work Permits, and
- RCRA Storage and Handling.

6.6.11 Contractor Training

Contractor training requirements are determined by the applicable site technical representative/training review group project manager. This determination will be based upon the site access requirements and job functions of each specific contract.

6.6.12 Nuclear Criticality Safety Engineer/Specialist Training

Nuclear Criticality Safety Engineer/Specialist training and qualification is administered by the Nuclear Criticality Safety Group. Nuclear Criticality Safety Group procedures and TDAG define education and experience prerequisite for incumbents, required training courses, and continuing training requirements.

6.6.13 Audit and Inspection Personnel Training

The qualification and re-qualification of inspection personnel, auditors, lead auditors and nondestructive examination personnel is performed in accordance with QAP Section 2.2.4.

The Nuclear Safety and Quality Manager is responsible for identifying all qualification and requalification requirements for quality assurance auditors and quality control inspectors.

6.6.14 Manager Training

Manager training is provided for those persons who manage the operations and maintenance personnel relied upon to operate, maintain, or modify Q or AQ-NCS items. The training is not SAT-based but is designed, developed, and implemented to assist facility managers in gaining an understanding of the applicable procedures and

practices specific to the gaseous diffusion process and facility. Also, it is used to develop the managerial and leadership skills necessary to effectively manage personnel. This training includes:

- Management Skills Training,
- Initial and Continuing Process Safety Training for Managers, and
- Applicable elements of the Operations and Maintenance Initial and Continuing training.

6.6.15 Cascade Coordinator Training

Cascade coordinator training is administered by the Operations Organization and provided to those persons who direct the overall operations of the gaseous diffusion cascade. Training provides cascade coordinators an understanding of the overall integration of the process and support systems necessary to operate the GDP. Cascade coordinators also receive manager training.

6.6.16 Plant Shift Superintendent Training

Plant Shift Superintendent Training is administered by the Shift Operations Manager and provided to those persons who provide managerial oversight for the daily operations of the Plant Uranium Enrichment Facility and other support activities. This training is based on the systems approach to training and is designed, developed, and implemented to provide the plant shift superintendent an understanding of the overall integration of the processes, support systems, administrative and emergency procedures, and regulatory reporting requirements necessary to operate the GDP. Superintendent qualification is granted by the Operations Manager upon successful completion of training.

6.6.17 System Engineer Training

System Engineer Training is administered by Engineering and is provided to those persons who provide engineering support and review of the modifications to Q or AQ-NCS items. System Engineers are responsible for reviewing design proposals and modifications, ensuring that the appropriate documents and procedures are updated to be consistent with modifications; and assisting in work control package preparation and identification of post-maintenance test requirements for Q systems. The training is based on a detailed review of job analysis data, training requirements for specific systems, and existing training materials.

6.6.18 Laboratory Technician Training

Laboratory Technician Training is administered by Production Support and Product Scheduling in accordance with the guidelines set down in the Training Development and Administrative Guide for Laboratory Technicians Training. The training is based on a SAT process. The analysis results were used to establish the learning objectives, test items, instructional methods, and instructional settings.

6.6.19 Waste Management Operator Training

Waste management operator training is administered by the Environmental, Safety and Health organization and is provided to those persons who handle, store, and move waste for on-site treatment or package for shipment to off-site TSD facilities. The program includes training on the following:

- Basic knowledge of chemical safety

6.10 RECORDS MANAGEMENT AND DOCUMENT CONTROL

Introduction

Records Management and Document Control programs are established to ensure records and documents required by the QAP are appropriately managed and controlled. These programs are designed to meet the specific recordkeeping and document control requirements set forth in 10 CFR 76 and the applicable provisions of other parts of 10 CFR. These programs provide administrative controls that establish standard methods and requirements for collecting, maintaining, and disposing of records. These programs also ensure that documents are controlled and distributed in accordance with identified written requirements and authorizations. The administrative controls for the generation and revision of records and documents are contained in plant implementing procedures. The principal elements of each of the Records Management and Document Control programs and a brief description of the manner in which the functions associated with each element are performed are provided below, along with a list of the types of records that are retained for the duration of the NRC Certification of Compliance for the plant.

6.10.1 Records Management Program

The Records Management program provides direction for the handling, transmittal, storage, and retrievability of records. Records media may include microfilm, electronic (magnetic or optical), or hard copy. Records are categorized and handled in accordance with their relative importance to safety and storage needs. Special provisions are made for handling contaminated records and ensuring their inclusion in the program. Responsibility for the administration of the Records Management program rests with the Regulatory Affairs Manager. Responsibility for Records Management program compliance rests with the managers generating records. This program is implemented through procedures that provide guidance for the following program elements.

6.10.1.1 Legibility, Accuracy, and Completeness

Documents designated to become records shall be legible, accurate, complete, and contain an appropriate level of detail commensurate with the work being performed and the information required for that type of record.

6.10.1.2 Identification of Items and Activities

Records clearly and specifically identify the items or activities to which they apply.

6.10.1.3 Authentication

Records are authenticated or validated by the Organization Manager of the organization which originates the record, or his designee, as specified in the procedure which controls the generation and revision of these records. This is in the form of a signature and date applied to the record.

6.10.1.4 Indexing and Filing

Methods are specified for indexing, filing, and locating records within the record system to ensure the records can be retrieved in a timely manner.

6.10.1.5 Retention and Disposition

Records retention times are specified in a retention schedule. The process for disposition of records that have reached the end of their retention lifetime is specified by procedures and conforms to applicable requirements.

6.10.1.6 Corrections

Corrections to records are approved by the organization which created the record unless other organizations are specifically designated. Changes are made by clearly indicating the correction, the date of the correction, and the identification of the individual making the correction.

6.10.1.7 Protection of Records

Controls are established for protection of records from deterioration, loss, damage, theft, tampering, and/or unauthorized access for the life of the record. Requirements include instructions on protection of records by the record originator until they are transferred to Documents and Records. Instructions for the protection of special record media such as radiographs, photographs, negatives, microform, and magnetic media are provided to prevent damage from excessive light, stacking, electromagnetic fields, temperature, humidity, or any other condition adverse to the preservation of those records. Records that cannot be duplicated are stored in a fashion that minimizes deterioration.

6.10.1.8 Storage Requirements

Records are stored in authorized facilities or containers providing protection from fire hazards, natural disasters, environmental conditions, infestations of insects, mold, or rodents. Storage facilities are maintained to ensure continuous protection of the records. Requirements are specified for both permanent and temporary storage of records.

Permanent Storage

Records are permanently stored in facilities satisfying the following requirements:

1. Storage in 2-hour-rated Class B fire containers meeting National Fire Protection Association (NFPA) 232-1986 or NFPA 232 AM-1986 or both, or
2. Storage of duplicate copies in separate facilities that are sufficiently remote from each other to eliminate the possibility of exposure to simultaneous hazards, or

6.10.2.9 Change Documents

Change documents are documents that are used to modify controlled documents. Controls are also applied to the change documents to provide revision approval and distribution controls equivalent to the original document until completion of installation, at which time the original document is revised. Documents showing the current configuration are not changed until the modifications are completed.

6.10.2.10 Revision Identification

The controlled document revision level is clearly identified on the document.

6.10.2.11 Document User Responsibilities

Responsibilities of the end user and copyholders are defined. Responsibilities include requirements for the use of controlled documents and working copies. Copyholders of controlled documents update their controlled documents each time a revision or change is sent out, and promptly return the transmittal form acknowledging receipt.

6.10.2.12 Usage and Control of Computer Codes and Data

Computer programs used in the Document Control program are controlled and maintained in accordance with the "Computing and Telecommunications Security Manual" and Information Systems procedures. These requirements provide for virus protection as well as access control to the Document Control program database and ensure continuing usability of the codes as hardware and software technology change. Routine backups of the Document Control database are performed by Documents and Records or Information Services application administrators.

6.10.2.13 Assessment

The overall effectiveness of the Document Control program is evaluated through the audit program described in Section 2.18 of the QAP. Deficiencies identified are corrected in a timely manner in accordance with the PRP.

6.10.2.14 Archiving Documents

The record copy of all revisions of controlled documents are transmitted to Records Management in accordance with the requirements of the Records Management program.

6.10.3 Organization and Administration

The Regulatory Affairs Manager is responsible for the implementation of the Records Management and Document Control programs for the life of the certification at PGDP.

6.10.3.1 Responsibilities

The Regulatory Affairs Manager is responsible for:

- Directing all activities and personnel of the Records Management and Document Control programs.
- Directing the development, implementation, and maintenance of methods and procedures encompassing a records management program.
- Directing the development, implementation, and maintenance of methods and procedures encompassing a document control program.
- Assuring that all laws, codes, standards, regulations, and company procedures pertaining to recordkeeping and document control requirements are met.

6.10.3.2 Training and Qualifications

The Records Management and Document Control Manager requires a minimum of five years experience as a supervisor or manager. No specific experience related to the control of documents or management of records is required, although previous technical or records management and document control experience is recommended.

6.10.4 Employee Training

General training in Records Management and Document Control is provided to employees as part of the general topics covered in General Employee Training (GET), as described in Section 6.6.

6.10.5 Items Addressed by Compliance Plan

Section deleted.

6.10.5.1 Statement of Noncompliance

Section deleted.

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2.5.2 Responsibilities

Text deleted.

The Regulatory Affairs Manager is responsible for the system of preparation, review, approval and use of procedures and instructions in accordance with the requirements of this section of this QAP. (PGDP)

The Engineering Manager is responsible for the system of preparation, review, and approval of drawings in accordance with the requirements of this section and Section 2.3 of this QAP.

Organization/Group Managers are responsible for developing and approving procedures which control functions or activities within their area of responsibility, as defined within this QAP.

All personnel are required to use and adhere to the requirements of applicable procedures, instructions, and drawings for activities within the scope of this QAP.

2.5.3 Requirements

Procedures are established to ensure the following:

1. Q activities affecting safety or quality are prescribed and performed in accordance with documented work instructions, procedures, or drawings of a type appropriate to the circumstances as described in governing procedures. These documents include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities are satisfactorily performed.
2. Activities that require skills normally possessed by qualified personnel do not require detailed step-by-step delineation in a procedure but are performed in accordance with work instructions, procedures, or drawings of a type appropriate to the circumstances for the control of maintenance and modification work. The types of activities otherwise known as "skill-of-the-craft" that do not require detailed step-by-step procedures include but are not limited to: gasket replacement; trouble shooting electrical circuits; changing chart or drive speed gears or slide wires on recorders; seal replacement on small pumps; torquing of flanged covers, pipe connections, etc.; lapping and packing of manual-operated valves, erection of nonpermanent structures such as scaffolding; and rigging of chains, hoists, and slings.
3. Written procedures shall be prepared, reviewed, approved, implemented, and maintained in accordance with the Technical Safety Requirements (TSRs) and SAR Section 6.11.

2.6 DOCUMENT CONTROL

2.6.1 General

A document control system is established for Q items and related activities and services within the scope of the QAP as described in Section 2.2. The document control system is in accordance with ASME NQA-1, 1989, Basic Requirement 6, and Supplement 6S-1. This system ensures that documents defining the performance of quality-related activities are controlled so only current and correct information is available at the location where the activity is performed prior to commencing the work.

2.6.2 Responsibilities

The Regulatory Affairs Manager has the overall responsibility for the development and implementation of the document control system.

Organization Managers are responsible for (1) identifying documents to be included in the controlled document system; (2) ensuring instructions, procedures, drawings, and other specified documents are reviewed for adequacy and approved for release; (3) complying with document distribution requirements; and (4) ensuring these documents are maintained and used by personnel performing the prescribed activity.

2.6.3 Requirements

Procedures for the control of document preparation, review, approval, and issuance are established to ensure the following:

1. Identification of documents to be controlled and their specified distribution.
2. Identification of assignments of responsibility for preparing, reviewing, approving, and issuing documents.
3. Review of documents for adequacy, completeness, and correctness prior to approval and issuance.
4. Drawings depicting as-built conditions, including changes thereto, and related documentation are prepared in a timely manner and accurately reflect the actual design.
5. Document controls used to specify the current revision and any changes to instructions, procedures, specifications, drawings, and procurement documents are identified. This document control system has provisions for updating and for distribution to predetermined personnel.

2.17.2 Responsibilities

The Regulatory Affairs Manager is responsible for the development, maintenance, and implementation of the records control system consistent with the requirements set forth in this section of the QAP.

Organization/Group Managers are responsible for (1) identifying quality assurance records initiated by their organization/group including those received from suppliers of items and services; (2) controlling the records within their jurisdiction; and (3) transferring records, for which their group previously had record copy responsibility, to the Regulatory Affairs Manager for retention consistent with governing procedures meeting the requirements established in this section of the QAP.

2.17.3 Requirements

Procedures for the identification and control of quality assurance records are established to ensure the following:

1. Applicable design specifications, procurement documents, test procedures, operational procedures or other documents specify the records to be generated, supplied, or maintained. These documents are designated to become records and are legible, accurate, and complete;
2. Methods of authentication or validation of documents as records are identified;
3. Documents shall be considered valid records only if stamped, initialed, or signed and dated by authorized personnel or otherwise authenticated;
4. Establishment of a records indexing and classification system, including record retention times, and the location of the record within the record system, which meets the requirements of the Technical Safety Requirements document, the provisions of 10 CFR Part 76, and other regulatory requirements;
5. Methods are established to permit identification between the record and the item(s) or activity(ies) to which it applies;
6. Corrections to records are approved by the originating organization and the corrections include the date and the identification of the individual authorized to issue the correction;
7. Establishment of a record receipt control system which meets the requirements of Supplement 17S-1, Section 3 of ASME NQA-1, 1989;
8. Requirements for records storage, preservation, and safekeeping satisfy the requirements of Supplement 17S-1, Sections 4.1, 4.2, and 4.3 of ASME NQA-1, 1989;

9. Quality Assurance records are stored in facilities which meet the requirements of Supplement 17S-1, Section 4.4 of ASME NQA-1, 1989, except as noted in Appendix C of this QAP;
10. Record requirements for procured non-commercial items or services are identified in applicable procurement documents. These documents contain provisions for the following:
 - a. Assuring that supplier methods for the collection, storage, and maintenance of records is commensurate with the above requirements,
 - b. Identification of required records and the required retention periods,
 - c. A record index which includes sufficient identifying information for record retrieval,
 - d. A record submittal plan,
 - e. The availability, accessibility, and if applicable, the disposition criteria of records retained by the supplier, and
 - f. The accessibility of the supplier's records prior to final transfer to the purchaser and the method of transmittal.
11. The storage system provides for retrieval of information in accordance with planned retrieval times based upon the record type. A list is maintained designating those personnel who have access to the files within the storage system;
12. Single copy records shall only be allowed out of permanent storage if they cannot be copied and then only for a maximum of 90 days.

2.18 AUDITS

2.18.1 General

An audit system is established for Q items and activities and services within the scope of this QAP as described in Section 2.2. The audit system is in accordance with Basic Requirement 18 and Supplement 18S-1 of NQA-1, 1989. This system establishes planned and periodic audits to verify the compliance and the effectiveness of this QAP in meeting quality requirements. Audit personnel have sufficient authority and organizational freedom to make the audit process meaningful and effective. Audits are executed in accordance with established procedures and are performed by personnel having no direct responsibilities in the areas being audited.

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4. RESPONSIBILITIES

USEC is responsible for overall direction and control of NRC-regulated activities at PGDP. USEC is also required to provide site-wide emergency response services to DOE pursuant to Appendix F of the Lease Agreement.

4.1 NORMAL FACILITY ORGANIZATION

While the Vice President, Operations is ultimately responsible for the safe operation of the plant, the General Manager is responsible for the day-to-day management and operation of the plant, including the program of emergency response services. An organizational chart showing the functional levels and reporting responsibilities is provided in the Safety Analysis Report, Section 6.1. The administrative and technical support personnel staffing the plant organization are normally on-site daily, Monday through Friday, holidays excluded. Plant operational personnel are on duty 24 hours per day. Descriptions of the key managers at the plant and their responsibilities are provided below.

4.1.1 General Manager

The General Manager has direct responsibility for operation of the plant in a safe, reliable, and efficient manner. The General Manager is responsible for emergency management and is authorized to declare an emergency and to initiate the appropriate response.

4.1.2 Plant Manager

The Plant Manager provides assistance and support to the General Manager in providing for safe operation of the plant and is assigned specific areas of oversight for day-to-day production operations, and maintenance.

4.1.3 Operations Manager

The Operations Manager is responsible for the operations of the enrichment cascade. This includes such activities as ensuring the correct and safe operations of the plant utility and chemical services, UF₆ processes, proper handling of UF₆, and the periodic testing of equipment to ensure safe and efficient operation.

4.1.4 Section Deleted

4.1.5 Maintenance Manager

The Maintenance Manager is responsible for providing planning and safe and reliable performance of preventive, predictive, and corrective maintenance and support services on plant facilities and equipment.

4.1.6 Security Manager

The Security Manager is responsible plant police services and security. During emergencies, the Incident Commander directs the Security Organization as appropriate. The General Manager and delegated positions have stop work authority on security operations.

4.1.7 Section Deleted

4.1.8 Engineering Manager

The Engineering Manager is responsible for engineering activities in support of operations including design, fabrication, and construction of plant modifications or additions; the configuration management program. Responsibilities also include project management, construction, and coordination of large project plant modifications or additions.

4.1.9 Environmental, Safety and Health Manager

The Environmental, Safety and Health (ES&H) Manager is responsible for the environmental, industrial safety and hygiene programs, emergency management, waste management, and medical services at the facility. This includes activities to protect workers from chemical and physical hazards, and to maintain compliance with OSHA regulations.

The Environmental, Safety and Health Manager is also responsible for developing, maintaining, and updating the emergency plan, ensuring that the emergency management program is designed to comply with federal, state, and local regulations and for the establishment and oversight of the site environmental protection and monitoring programs.

The ES&H Manager is also responsible for establishing and implementing the radiation protection program.

4.1.10 Regulatory Affairs Manager

The Regulatory Affairs manager is responsible for the day-to-day interface with NRC representatives on matters of regulatory compliance. As delegated by the Director, Regulatory Affairs, the Regulatory Affairs Manager has responsibility for coordinating certification related and certificate renewal-related activities. The Regulatory Affairs Manager is also responsible for nuclear criticality safety, nuclear safety, and developing, maintaining, and updating the plant's corrective action and commitment management program, including administration of the problem reporting system. The Regulatory Affairs Manager is also responsible for the training, procedures, and records management and document control (RMDC) programs.

4.1.11 Shift Operations Manager

The Shift Operations Manager oversees the activities of the PSSs and fire services, and has the responsibility and authority to make decisions to assure safe operation of the plant.

4.1.12 Nuclear Safety and Quality Manager

The Nuclear Safety and Quality Manager is responsible for implementing and directing independent assessments, quality control, nuclear material control and accountability, and nuclear safety assurance.

4.1.13 Section Deleted

4.1.14 On-Duty PSS

As the senior manager on shift, the on-duty PSS represents the General Manager and managers and has the authority and responsibility to make decisions as necessary to ensure safe operation, including stopping work and placing the plant in a safe condition.

The on-duty PSS is responsible for making proper notification in regard to abnormal plant conditions, determining the severity of the event, declaring an emergency, and initiating appropriate response. The on-duty PSS may respond to an incident scene as the on-scene incident commander or dispatch other qualified individual in this capacity. The on-duty PSS is the crisis manager until relieved by a member of management designated in the emergency line of executive succession.

4.1.15 Section deleted.

4.1.16 GDP Procurement and Materials Manager

The GDP Procurement and Materials Manager is responsible for managing the projects, programs, and the activities related to packaging and transportation, material control, stores, shipping and receiving, and property disposition.

4.1.17 Nuclear Criticality Safety Manager

The Nuclear Criticality Safety Manager is responsible for implementing the nuclear criticality safety program. This position reports to the Regulatory Affairs Manager.

4.1.18 Production Support & Product Scheduling Manager

The Production Support & Product Scheduling Manager is responsible for production maintenance work scheduling and for establishing and implementing the laboratory operations program.

4.2 ON-SITE EMERGENCY RESPONSE ORGANIZATION

The Emergency Response Organization (ERO) is responsible for taking immediate mitigative and corrective actions to minimize the consequences of an incident to workers, public health and safety, and the environment. The ERO is staffed with trained personnel who respond to events and are required to participate in formal training, drills, and exercises. The incident type and severity dictate the level of ERO activation.

The ERO has the following specific functions and responsibilities, depending on the incident and level of response needed to mitigate the problem: event categorization, determination of emergency class, notification, protective action recommendations, management and decision making, control of on-site emergency activities, consequence assessment, protective actions, medical support, public information, activation and coordination of on-site response resources, security, communications, administrative support, and coordination and liaison with off-site support and response organizations.

The ERO is divided into functional groups as follows:

1. Plant Emergency Squad,
2. EOC cadre, and
3. Joint Public Information Center (JPIC).

Members of these groups are assigned to on-scene response locations and emergency response centers, such as the EOC. Emergency assignments correspond as closely as possible to daily duties. Primary and alternate personnel are assigned to the ERO positions. Assignments are updated periodically. Management ERO positions in each group provide oversight and final authority in the group's decision-making process.

4.2.1 Direction and Coordination

The initial ERO consists of the plant emergency squad with the PSS, or other qualified individual as incident commander (IC) at the scene. Upon classification of the emergency as an Alert or SAE, the PSS becomes the CM and maintains overall control of the plant during the emergency until relieved. When the EOC is operational, a manager designated in the emergency line of executive succession relieves the PSS as CM and the overall control of the emergency shifts from the PSS to the CM.

The PSS conducts transition and turnover of command and control authority and responsibility of the CM function in a formal manner by use of specially developed procedural checklists and, if possible, face-to-face briefings. A primary and alternates are identified for the CM.

The order of succession for the CM position is identified in an EPIP and includes the following:

1. PSS
2. General Manager
3. Plant Manager
4. Others as designated by the General Manager and trained and qualified as CM

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

7.2.3 Section Deleted

7.2.4 Off-Site Emergency Management Training

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, Procedures, 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.

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 EIPs. Exercises use scenarios that are wider in scope than drills and may involve off-site response personnel and agencies.

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 Environmental, Safety and Health 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.

9. RECOVERY AND PLANT RESTORATION

In any emergency, the immediate action is directed toward limiting the consequences of the incident in a manner that affords the maximum protection to plant personnel and the general public. Once the corrective and protective actions have established an effective control over the situation and emergency conditions no longer exist, the emergency response shifts into the recovery phase.

Emergencies may or may not impact plant operations within the scope of NRC-regulated activities.

Therefore, it is possible to continue operations that are not impacted, either directly or indirectly, by an emergency situation.

It is the responsibility of the CM to determine when the recovery phase of the emergency can be initiated. The following criteria for terminating an emergency and beginning recovery operations are considered when appropriate to the circumstances:

- If classified emergency, conditions no longer meet any emergency classification criteria (EAL).
- The affected facility/area is in a stable condition and can be maintained in that condition, indefinitely.
- Fire or other similar emergency conditions no longer constitute a hazard.
- Releases of hazardous materials to the environment have ceased or are controlled.
- Discussions with the ERO and appropriate off-site agencies identify no valid reason to continue in any emergency classification.

9.1 RECOVERY

The nature and extent of the emergency determines what recovery operations are required and the extent of the recovery organization that must be formed. A recovery plan must be flexible enough to adapt to the existing conditions.

It is not possible to anticipate in advance all of the conditions that may be encountered as a result of the emergency. However, recovery and restoration activities will be conducted to maintain exposures as low as reasonably achievable (ALARA). Depending on the nature of the emergency, recovery activities could include decontamination of facility personnel, sampling to determine the extent of material release, or bioassay strategy for exposed or potentially exposed persons.

Recovery includes those actions necessary to return an incident site and the surrounding environment to pre-emergency conditions to the maximum extent practical. General principles addressed in this section serve as a guide for developing a flexible plan of action.

The PSS manager is responsible for ensuring retention of all records associated with an incident relating to an NRC regulated activity or a USEC leased facility.

Specific recovery plans are developed in accordance with applicable EIPs. The DOE site manager is responsible for ensuring the adequacy and appropriateness of recovery operations involving nonleased portions of the facility.

9.2 RECOVERY ORGANIZATION

Prior to termination of an emergency and deactivation of the ERO, a recovery organization is established to implement recovery plans. This organization is managed by a recovery manager who has overall responsibility for recovery activities including checking safety equipment involved in the emergency and restoring it to normal conditions. The recovery manager compiles and evaluates records related to the recovery including ALARA records and delivers these records to the PSS office for retention. The recovery manager is aided by key operating and management positions representing broad functional areas. These include some or all of the following, depending on the nature of the event:

1. Operations,
2. Maintenance,
3. Engineering,
4. Environmental, Safety, and Health,
5. Security,
6. Public Affairs,
7. Administration, and
8. Logistics.