

DOCKET NUMBER: 70-7002

CERTIFICATE NUMBER: GDP-2

CERTIFICATE HOLDER: United States Enrichment Corporation
Portsmouth Gaseous Diffusion Plant
Piketon, Ohio

SUBJECT: COMPLIANCE EVALUATION REPORT FOR PART 76
CERTIFICATE TERMINATION FOR THE UNITED STATES
ENRICHMENT CORPORATION, PORTSMOUTH GASEOUS
DIFFUSION PLANT

1.0 PROPOSED CHANGES

The United States Enrichment Corporation (USEC) plans to terminate all activities related to the gaseous diffusion plant (GDP) in Piketon, Ohio (PORTS). Such activities are authorized under certificate of compliance (CoC) GDP-2, issued by the U.S. Nuclear Regulatory Commission (NRC) pursuant to Title 10 of the *Code of Federal Regulations* (CFR), Part 76. USEC requested termination of the GDP-2 CoC by letters dated March 15, 2011, and June 28, 2011, pursuant to 10 CFR 76.66(b). Upon CoC termination, regulatory authority over GDP-related activities at PORTS will revert back to the Department of Energy (DOE). The letters from USEC are available via NRC's Agencywide Documents Access and Management System (ADAMS) Accession Numbers ML110830077 and ML111940542, respectively.

The PORTS facilities now under CoC GDP-2 are leased to USEC by the DOE. In this action, these facilities will either be returned to DOE using a de-lease process, or will be transferred under a sublease to the American Centrifuge Plant (ACP). The ACP is located at the PORTS site, and is a uranium enrichment facility operated by USEC, Inc. under a 10 CFR Part 70 license issued by the NRC.

The facilities to be transferred to the ACP are described in Appendix 1 of the Master Binding Facility Agreement (MBFA), which is Enclosure 4 to USEC's June 28, 2011 submittal. For example, control of the site-wide Emergency Plan, including the X-1020 Emergency Operations Center (EOC), would be transferred to the ACP, and DOE's contractor (Fluor-B&W Portsmouth, LLC (FBP)) would provide the same services in support of the Emergency Plan as those now provided by USEC's Government Services contractor. In its June 28 submittal, with respect to the ACP, USEC states that USEC Inc. determined that one ACP license amendment would be required in connection with the sublease process. That license amendment request was submitted to NRC for separate review and approval on June 3, 2011 (ADAMS Accession Number ML11160A088), and is not part of this CoC termination action.

The facilities being de-leased in this CoC termination action that contain nuclear material are the X-705 Decontamination Building, the X-700 Converter Maintenance Building, the X-720 Maintenance Building, the X-710 Laboratory Building, the XT-847 Waste Management Staging Facility, and the X-300 Plant Control Facility. Other facilities that do not contain nuclear material (i.e., the facilities providing utilities, support and administrative services to PORTS) are also being de-leased. Upon completion of this CoC termination action, there will be no remaining facilities under the GDP-2 CoC. In USEC's letter dated June 28, 2011, USEC requested that the effective date for the CoC termination be established to coincide with the date that DOE officially accepts turnover of the de-leased facilities specified above.

2.0 BACKGROUND

The GDP uranium enrichment operations at the PORTS site were discontinued in 2001, and the PORTS GDP has been in cold shutdown since that time. Thus, no UF₆ enrichment is being performed at the PORTS facility at this time. In preparation for decontamination and decommissioning (D&D) of the GDP site, cleanup operations are being performed. Surveillance and maintenance activities are being performed as needed to maintain the safety basis of the GDP facility until the commencement of D&D. Activities such as UF₆ feed cleanup, uranium deposit removal, UF₆ cylinder repackaging, and cascade lube oil removal have been performed.

USEC previously received NRC's approval to de-lease all of the PORTS uranium hexafluoride (UF₆) enrichment facilities (process buildings) on September 30, 2010, (ADAMS Accession Numbers ML100610588, ML102250346, ML102250349, and ML102250350), and DOE now regulates these facilities. The scope of USEC's current operations to be de-leased and transferred to DOE's regulatory authority is significantly smaller than the UF₆ facilities transferred in 2010. Radiation safety and chemical safety in the facilities being de-leased and transferred to DOE will be addressed under DOE's regulations. The responsibility for calibration, operation and maintenance of any necessary criticality monitoring alarms in facilities being de-leased will be transferred from USEC to DOE. After the transfer, the present security and safeguards measures required under the GDP-2 CoC would continue to be implemented (*i.e.*, a guard force will continue to provide security services to the ACP under a DOE contract).

As guidance for USEC in developing its CoC termination request, the NRC provided USEC a draft checklist on April 28, 2011 (ADAMS Accession Number ML111040093), and a final checklist on May 27, 2011 (ADAMS Accession Number ML111430628). The checklist was also an aid to the NRC staff's regulatory and technical consideration of the CoC termination request, and allowed the staff to appropriately consider previous NRC experience in terminating licenses.

The NRC held a public meeting (ADAMS Accession Numbers ML111101679 and ML111470332) in Piketon, Ohio, on May 19, 2011, to allow USEC, DOE, relevant stakeholders, and members of the public to inform the NRC process for terminating the GDP-2 CoC.

In a letter from DOE to NRC (ADAMS Accession Number ML11124A176), dated April 29, 2011, DOE stated that it is prepared to assume regulatory oversight, authority, and responsibility for the GDP facilities that are being de-leased. The NRC staff considers this adequate assurance that there will be no regulatory gap when NRC's authority ends, and that the transition of regulatory authority from the NRC to the DOE will be seamless.

3.0 DISCUSSION

The staff conducted its review of USEC's CoC termination request pursuant to 10 CFR Part 76. Specifically, the staff found the provisions in 10 CFR 76.66(b) and 76.35(n) to be applicable here.

Following the de-lease, DOE will be in full possession of the de-leased facilities, and will be responsible for regulatory oversight of the cleanup and later D&D operations to be performed by DOE's contractors.

Material Control

The NRC staff reviewed the USEC submittal dated June 28, 2011 to ensure that adequate control of source, byproduct, and special nuclear material (SNM) would be maintained during the transition to DOE oversight. In its submittal, USEC committed to maintain, follow, and comply with the current NRC approved Fundamental Nuclear Material Control Plan (FNMCP), and implemented a Material Control and Accounting Program (MC&A) during the transition to DOE oversight. USEC has also provided assurance of full control of all source material and SNM under its possession—including recordkeeping and reporting requirements, and that it will successfully transfer all materials to the DOE.

During the September 30, 2010 de-lease action referenced above, USEC demonstrated its ability to maintain, follow, and comply with the current NRC FNMCP and successfully implemented the MC&A program during the transfer of regulatory authority to DOE. The strategy for the final de-lease of the PORTS facilities is to follow the same methodology used for the previous de-lease. The USEC personnel who have developed and implemented the FNMCP will transfer to DOE's contractor FBP when the CoC is terminated. This provides assurance and confidence that control of SNM and source material will continue uninterrupted and in compliance with the requirements of both NRC and DOE. Similarly, the radioactive sources will continue to be tracked with the processes that are currently part of the Radiation Protection Program. This Program and the personnel implementing it will be transferred to FBP when the CoC is terminated.

The staff has determined that USEC has adequately addressed its commitment to control all regulated material by maintaining, following, and complying with its current NRC-approved FNMCP through the date that the CoC is terminated. USEC has provided assurance of full control of all source, byproduct, and SNM under its possession, including recordkeeping and reporting requirements. Furthermore, USEC has committed to successfully transferring ownership and possession, of all licensed material to DOE, and has committed to proper accounting of all such material in the Nuclear Material Management and Safeguards System (NMMSS).

Financial Assurance

At PORTS, USEC is subject to the financial assurance requirements of 10 CFR 76.35(n), until the GDP-2 CoC is terminated. In accordance with 10 CFR 76.35(n), USEC must show that funds will be available to pay for the ultimate disposal of any "waste and depleted uranium" for which USEC has financial responsibility, and which is related to the GDPs. This regulation further requires that the funding mechanism ensure the availability of funds for any activities which are required to be completed "both before or after the return" of the GDPs to the DOE.

In its letter dated July 25, 2011 (ADAMS Accession Number ML11213A020), USEC attached as Enclosure 1 its updated decommissioning funding program description addressing these financial assurance requirements for the GDP-2 CoC, and for the GDP-1 CoC (the latter CoC governs the GDP located at Paducah, Kentucky, and is not further discussed in this CER). USEC attached as Enclosure 2 its updated depleted uranium management plan. In its July 25, 2011 letter, USEC referenced the DOE's plan to take, upon the de-leasing of the remaining GDP facilities at PORTS, possession and title to "all regulated materials and radioactive waste" located in these facilities. In its updated decommissioning funding program description set forth in Enclosure 1 to the letter, USEC states that the DOE "has taken title to depleted uranium."

USEC's updated depleted uranium management plan (Enclosure 2) accordingly shows a zero balance at PORTS for depleted uranium.

By letter to the NRC dated September 12, 2011 (ADAMS Accession Number ML11258A010), the DOE confirmed that upon the de-leasing and return to DOE of USEC's remaining GDP PORTS facilities, DOE will "take ownership, including title to and possession of, any remaining USEC source, special nuclear, and/or byproduct materials" at the PORTS GDP site. Enclosure 1 to DOE's September 12, 2011 letter ("Reverse Work Authorization # 815763," and its attached "Statement of Work," both dated June 27, 2011) is an agreement between USEC and DOE obligating DOE over the next three years to undertake specified clean-up activities regarding the source, special nuclear, and byproduct materials at the PORTS GDP site for which USEC has financial responsibility. The estimated cost of these clean-up activities is approximately \$ 7.81 million, and on or before the date that the CoC is terminated USEC must provide advance payment or a payment bond (or some combination thereof) to cover the estimated cost. USEC is further obligated to "provide additional funds as necessary to ensure DOE is reimbursed full costs for this work." The Statement of Work specifies the disposal sites available to the DOE, to which any source, special nuclear, and byproduct materials may be shipped over the next three years. Enclosure 2 of DOE's September 12, 2011 letter is a DOE letter to USEC dated April 28, 2011, which further describes the materials now at the PORTS GDP site.

Upon de-lease and the CoC termination, USEC will not own or possess any source, special nuclear, or byproduct materials at the PORTS site that is related to its previous GDP operations there, and its financial obligations to pay for the cleanup of these materials will rest with the DOE.

After consideration of the financial arrangements entered into between USEC and DOE regarding the disposal of GDP wastes now located at the PORTS site, as documented in the submittals summarized above, the NRC staff finds that the requirements of 10 CFR 76.35 (n) have been met.

Physical Security and Information Security

The staff has reviewed USEC's submittal and determined that appropriate security requirements applicable to both information security and physical security have been adequately addressed. The staff has also determined that any potential impacts on the physical security and classified matter security plans for the Lead Cascade and ACP resulting from the proposed CoC termination have been adequately addressed. USEC will certify non-possession of classified matter upon de-lease to DOE. USEC, Inc. will maintain physical security for the Lead Cascade and ACP, and DOE will maintain physical security for the de-leased PORTS site.

USEC stated, in Enclosure 3 to its June 28, 2011 letter, that it will continue to implement all of the requirements of the NRC Certificate Classified Matter Plan up to the time of Certificate Termination and transfer of regulatory authority to DOE. USEC's letter also states that DOE security plans are in place to continue the protection of classified information and provide for information security. Personnel currently responsible under the Certificate for the protection of classified information and assuring information security will continue to perform these functions as DOE contractor employees under DOE security requirements.

The NRC staff has determined that at the time of Certificate termination, there will not be a decrease in physical security at the PORTS facility. DOE will be responsible for the security of

the former PORTS GDP and USEC, Inc. will be responsible for security within the Lead Cascade and ACP boundaries on the shared site. The facilities to be de-leased will remain within a fenced, protected area. There is no change to the staffing of the protective security force associated with this action. The proposed action will not involve any decrease in information security or the protection of classified matter at the PORTS facility. Any classified materials related to the facilities to be de-leased will be transferred to DOE. The staff also verified that the DOE contract workers who would provide services to USEC, Inc. regarding the ACP are working under an entity cleared to possess classified matter.

DOE (including their contractors/subcontractors) will obtain USEC Inc.'s approval prior to conducting work in leased spaces. Services being provided as part of a "site service" such as utilities, emergency plan services, fire protection or security services, or laboratory analytical services performed outside of the USEC Inc., leased facilities would be managed by DOE and FBP. USEC Inc. bears the full responsibility for ensuring that the services are available and reliable and that the service provider is meeting the performance requirements specified in the SOWs. Appropriate organization oversight is provided by line management responsible for the particular functional area regardless of whether the work is self-performed or subcontracted to a service provider. The ACP license application delineates the chain of command for the functional organizations. For procured services, USEC Inc. will continue to provide oversight through its proceduralized processes for contractor monitoring and audit and assessments. Through ongoing coordination, USEC Inc. has committed to conduct management oversight of the MBFA and SOWs to ensure the services provided by DOE fully meet USEC Inc.'s NRC license requirements consistent with the level of service currently provided by USEC. Current proceduralized practices ensure those individuals providing services to USEC Inc., are properly authorized (i.e., appropriate clearance, C-24 access, and need-to-know) to access and/or possess classified centrifuge information. USEC Inc. will categorize the individuals providing the services specified in the SOWs as staff augmentation.

The staff found that USEC has provided documentation of a clear management chain for DOE's contracted workers providing services to the ACP where USEC Inc. retains management control over NRC-licensed activities—as well as documentation that personnel are working under an entity cleared to possess classified matter.

4.0 ENVIRONMENTAL CONSIDERATION

The NRC staff has determined that under these unique circumstances here it is not necessary to prepare an environmental assessment to support the termination of the GDP-2 CoC issued to USEC for the Portsmouth facility. This proposed action amounts to a modification of a license under the 10 CFR 51.22(c)(19) categorical exclusion, and to a direct transfer of a license under the 51.22(c)(21) categorical exclusion. DOE, which already owns this facility, is not required to obtain an NRC license to operate or decommission this facility. Furthermore, DOE prepared an environmental impact statement in 1977 that included an evaluation of decommissioning impacts regarding this facility, and the DOE has subsequently conducted additional environmental reviews on this site. The NRC staff has not identified any impacts of USEC's operation of GDP-2 that are not encompassed by these previous DOE evaluations.

In addition, the return of the facilities to DOE's regulatory oversight, and termination of the GDP-2 CoC, does not approve any site clean-up actions to be taken by DOE. This action does not authorize any change in the amounts or significant change in the types of any effluents that may be released offsite. There is no significant increase in individual or cumulative

occupational radiation exposure, no significant construction impact, and no significant increase in the potential for or consequences from radiological accidents.

Therefore, the NRC has determined that neither an environmental assessment nor an environmental impact statement is required or necessary for this action.

5.0 CONCLUSION

The staff concludes that this action will not significantly increase risk to workers at the PORTS site, and that adequate protection of public health, safety, safeguards, security, and the environment will continue to be provided. The staff determined that USEC has adequately demonstrated compliance with all applicable NRC regulations and sufficiently addressed associated regulatory and technical issues. Therefore, the staff concludes that the proposed Certificate Termination is acceptable and consistent with 10 CFR 76.66(b), and 10 CFR 76.35(n).

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