



Department of Energy

Washington, DC 20585

October 15, 2007

Mr. R. B. Starkey
Vice President, Operations
United States Enrichment Corporation
6930 Rockledge Drive
Bethesda, Maryland 20817-1818

Mr. Victor N. Lopiano
Vice President
United States Enrichment Corporation, Inc.
6930 Rockledge Drive
Bethesda, Maryland 20817-1818

Dear Mr. Starkey and Mr. Lopiano:

On September 5, 2007, we responded to your June 1, 2007, letter to the Department of Energy (DOE) Oak Ridge Office (SC-OR) Assistant Manager for Nuclear Fuel Supply requesting an extension to United States Enrichment Corporation's (USEC) and the United States Enrichment Corporation Inc. (USEC Inc.) exemptions from title 10, Code of Federal Regulations, part 820, (10 C.F.R. 820), "Procedural Rules for DOE Nuclear Activities," and 10 C.F.R. 835, "Occupational Radiation Protection." This office responded to the exemption request concerning DOE's 10 C.F.R. 835. DOE's Office of Nuclear Energy responded to your 10 C.F.R. 820 exemption request.

In the September 5, 2007, response, we revised the USEC and USEC Inc. Exemption Decision to extend the term of the temporary Exemption Decision until the initial term of the Gas Centrifuge Enrichment Plant (GCEP) lease; i.e., until June 30, 2009. A condition of the Exemption Decision was that within 90 days of the issuance of the extension DOE will conduct an assessment to evaluate the current status of regulatory controls for GCEP radiation protection activities and to evaluate if these activities have significantly changed since August 13, 2004. After obtaining the results of the assessment, this office would consider any recommendations and suggested modifications to the conditions of the exemption, and modify the conditions of the exemption as necessary.

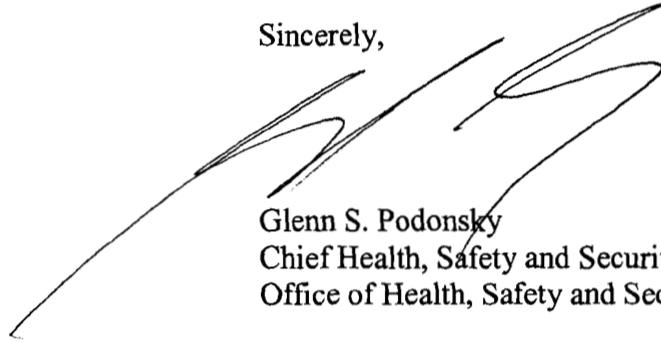


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On September 25-26, 2007, an onsite assessment was conducted to evaluate the current status of regulatory controls for GCEP radiation protection activities. A team, consisting of DOE staff from the Office of Worker Health and Safety, SC-OR, and the Portsmouth Site Office, conducted the assessment (enclosed) and concluded that radiation protection activities in leased areas, exclusive of Nuclear Regulatory Commission regulated areas, have not significantly changed since August 13, 2004. Therefore, the team recommended that no modifications to the conditions of the exemption were necessary.

We agree with this recommendation; therefore, at this time we are not revising the USEC and USEC Inc. Exemption Decision dated September 4, 2007.

Sincerely,



Glenn S. Podonsky
Chief Health, Safety and Security Officer
Office of Health, Safety and Security

Enclosure

cc w/enclosures:

Daniel Minter, Paper, Allied-Industrial,
Chemical and Energy (PACE)
Radiological Control
Coordinating Committee
Price Anderson Amendments
Act Coordinator – DOE/OR
Gerald G. Boyd, Manager, DOE/OR
Dennis R. Spurgeon, DOE/NE-1
Robert J. Brown, DOE/SC-OR (M-2)
James B. McRae, DOE/GC-52
James A. Rispoli, DOE/EM-1
Arnold Guevara, DOE/HS-40
Docketing Clerk, DOE/HS-40

DOE EVALUATION OF THE STATUS OF REGULATORY CONTROLS FOR GAS
CENTRIFUGE ENRICHMENT PLANT RADIATION PROTECTION ACTIVITIES

September 25-26, 2007

On September 5, 2007, the Chief, Health, Safety and Security Officer (HS-1) responded to a June 1, 2007, request for an extension to United States Enrichment Corporation's (USEC) and American Centrifuge United States Enrichment Corporation Inc.'s (USEC Inc.) exemptions from Title 10 Code of Federal Regulations, Part 820, "Procedural Rules for DOE Nuclear Activities," and Part 835, "Occupational Radiation Protection" (10 CFR 820 and 10 CFR 835). HS-1 responded to the exemption request concerning DOE's occupational radiation protection rule (10 CFR 835). The DOE Office of Nuclear Energy responded to the 10 CFR 820 exemption request.

In the September 5, 2007, response, the USEC and USEC Inc. Exemption Decision was revised to extend the term of the temporary Exemption Decision until the initial term of the Gas Centrifuge Enrichment Plant (GCEP) lease, i.e., until June 30, 2009. A condition of the Exemption Decision was that within 90 days of the issuance of the extension DOE will conduct an assessment to evaluate the current status of regulatory controls for GCEP radiation protection activities and to evaluate if these activities have significantly changed since August 13, 2004. After obtaining the results of the assessment, HS-1 would consider any recommendations and suggested modifications to the conditions of the exemption.

On September 25 - 26, 2007, an onsite assessment was conducted to evaluate the current status of regulatory controls for GCEP radiation protection activities. A team, consisting of DOE staff from the Office of Worker Health and Safety, DOE Oak Ridge Operations Office and Portsmouth Site Office conducted the assessment. The assessment consisted of facility tours, observation of ongoing work, review of radiological surveys, discussions with site personnel, and review of selected procedures and other documents.

The team conducted facility tours to observe the areas under the scope of the 10 CFR 835 exemption decision. These areas are limited to the areas not under the NRC Part 70 license, the NRC Part 76 certificate or environmental restoration work being conducted by contractors other than USEC or USEC Inc. The areas are within Buildings X-7725, X-7726 and X-3001 and ranged in size from areas as large as tens of meters in length and width to as small as less than a square meter. The team observed some ongoing work in one of the rooms (Area 4A of Building X-7725). A group was removing some floor material. The team reviewed the radiological work permit for the work, discussed radiological controls with the radiological control technician covering the work and reviewed survey data and had no concerns.

The team noted that improvements were needed in radiological controls posting for some of the areas. Two of the areas reviewed did not have a "Radioactive Materials Area" posting, several areas had obscured "Potential Internal Contamination" postings and one area was not clearly delineated with boundary ribbon so it was difficult to determine the area boundary and it was possible to go into the area without seeing a posting. The contractor promptly corrected the discrepancies.

The team reviewed the "Radiological Characterization Results for the American Centrifuge Plant." USEC Inc. submits these results to the Nuclear Regulatory Commission (NRC) documenting areas which have been radiologically surveyed and the results show that the area meets NRC's requirements. The regulatory oversight for these areas then transfers from DOE to

DOE EVALUATION OF THE STATUS OF REGULATORY CONTROLS FOR GAS
CENTRIFUGE ENRICHMENT PLANT RADIATION PROTECTION ACTIVITIES

September 25-26, 2007

NRC. USEC Inc. submitted several of these results to the NRC between April and August 2007. Procedure “Radiological Review for Fixed Contamination Areas and Contaminated Equipment Removal” documents the process for listing the areas to be transitioned to the NRC, characterizes the radiological hazards, lists the decontamination process and criteria, specifies how personnel are to be monitored and lists the applicable site procedures. The team found the process to be well documented and had no concerns in this area.

The team verified that procedure ACD2-RG-0044 “Nuclear Regulatory Event Reporting” specified reporting specific events to DOE rather than to the NRC as required as part of the original Exemption Decision. The team had no concerns in this area.

The team verified that the existing radiation protection programs licensed by the NRC pursuant to 10 CFR Part 70 were current and judged to be adequate to protect the radiological health and safety of workers. In addition to confirming the status of the NRC’s license reviews via formally issued safety evaluation report, the DOE team reviewed a confirmatory inspection performed by the NRC from June 4 – 8, 2007. The NRC identified no issues nor findings associated with the radiation protection program for Lead Cascade activities. Therefore, the team had no concerns in this area.

Based on the September 25 - 26, 2007 on-site assessment, the team concluded that the GCEP radiation protection activities have not significantly changed since August 13, 2004. The team recommends that no modifications to the conditions of the exemption are necessary.



Department of Energy
Washington, DC 20585

September 5, 2007

Mr. R. B. Starkey
Vice President, Operations
United States Enrichment Corporation
6930 Rockledge Drive
Bethesda, Maryland 20817-1818

Mr. Victor N. Lopiano
Vice President
United States Enrichment Corporation Inc.
6930 Rockledge Drive
Bethesda, Maryland 20817-1818

Dear Mr. Starkey and Mr. Lopiano:

Thank you for your letter of June 1, 2007, to the Department of Energy (DOE) Oak Ridge Office (SC-OR) Assistant Manager for Nuclear Fuel Supply requesting an extension to the United States Enrichment Corporation (USEC) and the United States Enrichment Corporation Inc. (USEC Inc.) exemptions from title 10, Code of Federal Regulations, part 830 (10 C.F.R. 830), "Nuclear Safety Management," and 10 C.F.R. 835, "Occupational Radiation Protection." The requested extension to the exemptions apply to those limited areas where DOE has regulatory oversight of USEC and USEC Inc. to complete radiological activities prior to transition of those areas to the regulatory oversight of the Nuclear Regulatory Commission (NRC). NRC has licensed USEC operations in all other areas of the Gas Centrifuge Enrichment Plant (GCEP) pursuant to 10 C.F.R. 70, "Domestic Licensing of Special Nuclear Material," and is regulating USEC's radiological activities in those areas pursuant to relevant NRC safety regulations. The Chief Health, Safety and Security Officer is authorized to respond to exemption requests concerning 10 C.F.R. 835. The DOE program office responsible for your facility will provide a response to your 10 C.F.R. 830 exemption request.

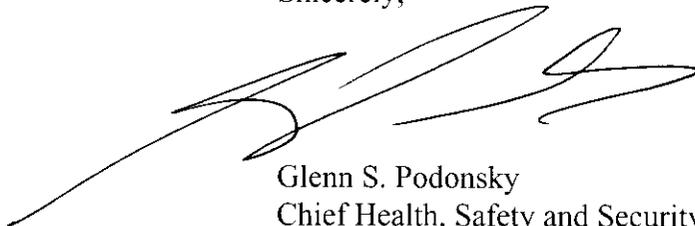
On August 13, 2004, the former Assistant Secretary for Environment, Safety and Health responded to your November 25, 2003, request for a temporary exemption from the provisions contained in 10 C.F.R. 835. The response provided for a temporary exemption, 3 years (36 months), to permit USEC and USEC Inc. workers to perform radiological activities in connection with the removal of equipment and material from GCEP on the Portsmouth Gaseous Diffusion Plant site. The temporary exemption expired on August 13, 2007. In your letter you request an extension of the 10 C.F.R. 835 exemption decision, for GCEP activities not regulated by NRC, until the initial term of the GCEP lease terminates; i.e., until June 30, 2009.



On July 27, 2007, the DOE/SC-OR Site Manager forwarded your request to this office with a recommendation for approval with a condition. DOE requires additional information and verification that the activities covered by an extension to this Exemption Decision have not significantly changed since the last Exemption Decision. The DOE/SC-OR Site Manager recommended that DOE conduct an assessment to evaluate the current status of regulatory controls for GCEP radiation protection activities and to evaluate if these activities have significantly changed since August 13, 2004.

This office agrees with this recommendation and, therefore, we are revising the USEC and USEC Inc. Exemption Decision (enclosure 1) to extend the term of the temporary Exemption Decision until the initial term of the GCEP lease; i.e., until June 30, 2009. Within 90 days of the issuance of this extension, DOE will conduct an assessment to evaluate the current status of regulatory controls for GCEP radiation protection activities and to evaluate if these activities have significantly changed since August 13, 2004. After obtaining the results of the assessment, this office will consider any recommendations and suggested modifications to the conditions of the exemption, and will modify the conditions of the exemption as necessary.

Sincerely,



Glenn S. Podonsky
Chief Health, Safety and Security Officer
Office of Health, Safety and Security

Enclosure

cc w/enclosures:

Daniel Minter, Paper, Allied-Industrial,
Chemical and Energy (PACE)

Radiological Control

Coordinating Committee

Price Anderson Amendments

Act Coordinator-DOE/OR

Gerald G. Boyd, Manager, DOE/OR

Dennis R. Spurgeon, DOE/NE-1

Robert J. Brown, DOE/SC-OR (M-2)

James B. McRae, DOE/GC-52

James A. Rispoli, DOE/EM-1

EXEMPTION DECISION

Pursuant to title 10, Code of Federal Regulations, part 820.61 (10 CFR 820.61), the Chief Health, Safety and Security Officer is authorized to exercise authority on behalf of the U.S. Department of Energy (DOE) with respect to requests for exemptions from nuclear safety rules relating to radiological protection of workers, the public, and the environment.

Under the terms set forth in 10 CFR 820.61, as the individual granted the review and approval authority for exemption requests made with respect to 10 CFR 835, "Occupational Radiation Protection," on August 13, 2004, the Assistant Secretary for Environment, Safety and Health responded to a November 25, 2003, request for a temporary exemption from the provisions contained in 10 CFR 835. The response provided for a temporary, 3-year exemption to permit United States Enrichment Corporation (USEC) and the United States Enrichment Corporation Inc. (USEC Inc.) workers to perform radiological activities in connection with the removal of equipment and material from the Gas Centrifuge Enrichment Plant (GCEP) on the Portsmouth Gaseous Diffusion Uranium Enrichment Plant (Portsmouth GDP) site.

On June 1, 2007, USEC and USEC Inc. requested an extension on their temporary exemption from certain DOE regulations in connection with the removal of equipment and material from the GCEP on the Portsmouth GDP and deployment of USEC's American Centrifuge Demonstration Facility in GCEP.

In particular, USEC and USEC Inc. requested an extension of the 10 CFR 835 Exemption Decision for those limited areas in GCEP where DOE has regulatory oversight of USEC's radiological activities prior to transition of those areas to the regulatory oversight of the Nuclear Regulatory Commission (NRC). NRC has licensed USEC's operations in all other areas of GCEP pursuant to 10 CFR 70, "Domestic Licensing of Special Nuclear Material," and is regulating USEC's radiological activities in those areas pursuant to relevant NRC safety regulations. The extension was requested to remain in effect until the initial term of the GCEP lease terminates, i.e., until June 30, 2009.

I find that the exemption criteria of 10 CFR 820.62 have been met. Also, the requested exemption is not prohibited by law; will not present an undue risk to the public health and safety, the environment, or facility workers; and is consistent with the safe operation of a DOE nuclear facility. I have determined that extending the time period of the temporary exemption continues to meet the special circumstances that constitute a sufficient basis upon which to grant this exemption extension with a condition.

On the basis of the foregoing, I hereby extend the time period of the Exemption Decision for USEC and USEC Inc. temporary exemption from 10 CFR 835. The

conditions as specified in the August 13, 2004, Exemption Decision still apply, with the exception that this temporary exemption shall remain in effect until June 30, 2009, and with the addition that this Exemption Decision is subject to DOE conducting an assessment, within 90 days of the issuance of this extension, to evaluate the current status of regulatory controls for GCEP radiation protection activities and to evaluate if these activities have significantly changed since August 13, 2004. After obtaining the results of the assessment, this office will consider any recommendations and suggested modifications to the conditions of the exemption, and will modify the conditions of the exemption as necessary.

This exemption shall have the same scope as 10 CFR 835 except that it shall apply to byproduct, source, and special nuclear material, as defined by NRC regulation 10 CFR 20.1003 and to radiation-producing devices licensed by the State of Ohio Department of Health.

As stated in the technical review accompanying the January 30, 2004, Exemption Decision, the following is provided for clarification of DOE's oversight authority:

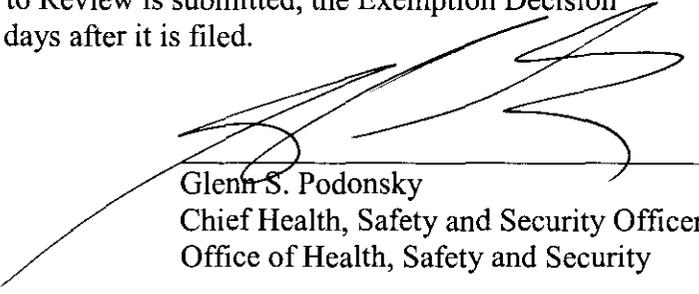
DOE will exercise its oversight authority both by contract and by DOE regulations. Under the Regulatory Oversight Agreement (ROA) in the 1993 Lease, as amended, DOE will provide contractual requirements for health and safety and public defense and security. ROA provides for enforcement by various actions and penalties. DOE provides "DOE Nuclear Safety Requirements" for worker radiation protection under 10 CFR 835 and for nuclear safety management, including quality assurance, under 10 CFR 830. "DOE Nuclear Safety Requirements" are enforced by the procedures in 10 CFR 820 for criminal and civil penalties.

As always, based on this and subsequent evaluations, DOE reserves the right to modify the conditions of this Exemption Decision upon notice to USEC and USEC Inc.

Pursuant to 10 CFR 820.66, USEC and USEC Inc. have 15 days from the date of the filing of this Decision to file a Request to Review with the Secretary. The Request to Review shall state, specifically, the respects in which the exemption determination is claimed to be erroneous, the grounds of the request, and the relief requested. If no Request to Review is submitted, the Exemption Decision becomes a final order 15 days after it is filed.

9/4/07

Date


Glenn S. Podonsky
Chief Health, Safety and Security Officer
Office of Health, Safety and Security



Department of Energy

Washington, DC 20585

August 13, 2004

Mr. Ron Green
Senior Vice President
USEC Inc.
6930 Rockledge Drive
Bethesda, Maryland 20817-1818

Mr. Morris Brown
Vice President
United States Enrichment Corporation
6930 Rockledge Drive
Bethesda, Maryland 20817-1818

Dear Mr. Green and Mr. Brown:

On January 30, 2004, the Assistant Secretary for Environment, Safety and Health responded to your November 25, 2003, request for a temporary exemption from the provisions contained in title 10, Code of Federal Regulations, part 835 (10 CFR 835), "Occupational Radiation Protection." The Department of Energy's (DOE) response provided for a temporary exemption to permit United States Enrichment Corporation (USEC) and USEC Inc. workers to perform radiological activities in connection with the removal of equipment and material from the Gas Centrifuge Enrichment Plant (GCEP) on the Portsmouth Gaseous Diffusion Plant site. One of the conditions of the Exemption Decision was:

"Within 60 days of granting and filing this Exemption Decision, DOE will conduct an assessment to evaluate the adequacy of regulatory controls for GCEP radiation protection activities, make recommendations and suggest modifications, as necessary, to the regulatory controls, and the conditions in the exemption...The assessment will obtain input from the applicable DOE local operations office with a working level knowledge of the site's physical layout, programs, and personnel."

The assessment was conducted March 15-17, 2004, and a copy of the assessment report was provided to the Office of Environment, Safety and Health on April 29, 2004. Based on review of the information that was provided in the report, I am revising the USEC and USEC Inc. Exemption Decision to:

1. Modify the list of applicable Nuclear Regulatory Commission requirements;
2. Delete the requirement for updating the radiation protection program;



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3. Include a requirement for notifying DOE of specified events;
4. Delete the requirement for conducting an assessment of the adequacy of the exemption decision; and
5. Expand the scope of the exemption to include radiation producing devices licensed by the State of Ohio.

These revisions are indicated in an updated Exemption Decision (see enclosure).

Sincerely,



John Spitaleri Shaw
Acting Assistant Secretary
Office of Environment, Safety and Health

Enclosure

cc w/enclosure:
See attached list.

cc w/enclosures:

Daniel Minter, PACE

Radiological Control

Coordinating Committee

Price Anderson Amendments

Act Coordinator – Oak Ridge Operations Office

William D. Magwood, DOE/NE-1

Gerald G. Boyd, DOE/NE-60

Paul M. Golan, DOE/Acting EM-1

Lee Sarah Liberman Otis, DOE/GC-1

Stephen M. Sohinki, DOE/EH-10

Docketing Clerk, DOE/EH-10

EXEMPTION DECISION

Pursuant to title 10, Code of Federal Regulations, part 820.61 (10 CFR 820.61), the Assistant Secretary for Environment, Safety and Health (EH-1) is authorized to exercise authority on behalf of the U.S. Department of Energy (DOE) with respect to requests for exemptions from nuclear safety rules relating to radiological protection of workers, the public, and the environment.

On November 25, 2003, the United States Enrichment Corporation (USEC) and USEC Inc. requested exemption from certain DOE regulations in connection with the removal of equipment and material from the Gas Centrifuge Enrichment Plant (GCEP) on the Portsmouth Gaseous Diffusion Uranium Enrichment Plant (Portsmouth GDP) and deployment of USEC's American Centrifuge Demonstration Facility in the GCEP.

In particular, USEC and USEC Inc. requested an exemption from requirements contained in 10 CFR part 835, "Occupational Radiation Protection," on the condition that GCEP follow plans, programs, and procedures in compliance with U. S. Nuclear Regulatory Commission (NRC) requirements in 10 CFR part 20, "Standards for Protection Against Radiation," and other radiation protection-related requirements.

Under the terms set forth in 10 CFR 820.61, as the Secretarial Officer granted the review and approval authority for exemption requests made with respect to 10 CFR 835, on January 30, 2004, the Assistant Secretary for Environment, Safety and Health responded to the November 25, 2003, request for a temporary exemption from the provisions contained in 10 CFR 835. The response provided for a temporary exemption to permit USEC and USEC Inc. workers to perform radiological activities in connection with the removal of equipment and material from GCEP on the Portsmouth GDP site. One of the conditions of the Exemption Decision was:

"Within 60 days of granting and filing this Exemption Decision, DOE will conduct an assessment to evaluate the adequacy of regulatory controls for GCEP radiation protection activities, make recommendations and suggest modifications, as necessary, to the regulatory controls, and the conditions in the exemption. DOE will conduct the assessment pursuant to the terms of the Regulatory Oversight Agreement (ROA), as amended, in Exhibit D to the 1993 Lease. The assessment will obtain input from the applicable DOE local operations office with a working level knowledge of the site's physical layout, programs, and personnel. After obtaining the results of the assessment, EH-1 will consider any recommendations and suggested modifications to the conditions of the exemption, and will modify the conditions of the exemption accordingly as necessary."

The assessment was conducted March 15-17, 2004, and a copy of the assessment report was provided to the Office of Environment, Safety and Health on April 29, 2004. Based on review of the assessment report, I am amending the conditions of the Exemption Decision as described below.

I find that the exemption criteria of 10 CFR 820.62 still have been met. Also, the requested exemption is not prohibited by law; will not present an undue risk to the public health and safety, the environment, or facility workers; and is consistent with the safe operation of a DOE nuclear facility. I have determined that the exemption continues to meet the special circumstances that constitute a sufficient basis upon which to grant this exemption with conditions.

On the basis of the foregoing, I hereby revise the conditions for the Exemption Decision for the USEC and USEC Inc. request for temporary exemption from 10 CFR 835:

Conditions:

1. USEC and USEC Inc. shall operate the USEC leased portions of the GCEP facilities in accordance with radiation protection requirements in:
 - 10 CFR part 19, "Notices, Instructions and Report to Worker: Inspection and Investigations"
 - 10 CFR part 20, "Standards for Protection Against Radiation"
 - 10 CFR part 34, "Licenses for Industrial Radiography and Radiation Safety Requirement for Industrial Radiographic Operations"
 - 10 CFR part 70, "Domestic Licensing of Special Nuclear Material"
 - 10 CFR part 76, "Certification of Gaseous Diffusion Plant – Subpart D – Safety"
2. The control, inventory, and leak testing of sealed radioactive sources used in the leased portions of GCEP shall be conducted under USEC's 10 CFR part 76 certificate.
3. With the exception of the 10 CFR 20.2206 requirements for reporting individual monitoring to NRC, for activities associated with the leased portions of GCEP, USEC and USEC Inc. shall substitute DOE for NRC when NRC regulations require notification, approvals, submission of information and document, and reporting to NRC.
4. This temporary exemption shall remain in effect for a time period not to exceed 3 years (36 months) from the date of this Exemption Decision.
5. This exemption shall have the same scope as 10 CFR 835 except that it shall apply to byproduct, source, and special nuclear material, as defined by NRC regulation 10 CFR 20.1003 and to radiation producing devices licensed by the State of Ohio, Department of Health.

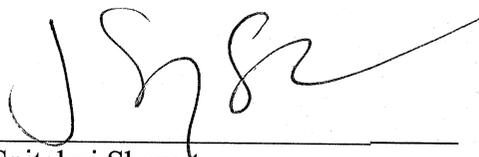
As stated in the technical review accompanying the January 30, 2004, Exemption Decision, the following is provided for clarification of DOE's oversight authority:

DOE will exercise its oversight authority both by contract and by DOE regulations. Under the ROA in the 1993 Lease, as amended, DOE will provide contractual requirements for health and safety and public defense and security. The ROA provides for enforcement by various actions and penalties. DOE provides "DOE Nuclear Safety Requirements" for worker radiation protection under 10 CFR 835 and for nuclear safety management, including quality assurance, under 10 CFR 830. "DOE Nuclear Safety Requirements" are enforced by the procedures in 10 CFR 820 for criminal and civil penalties.

As always, based on this and subsequent evaluations, DOE reserves the right to modify the conditions of this Exemption Decision upon notice to USEC and USEC Inc.

Pursuant to 10 CFR 820.66, USEC and USEC Inc. have 15 days from the date of the filing of this decision to file a Request to Review with my office. The Request to Review shall state, specifically, the respects in which the exemption determination is claimed to be erroneous, the grounds of the request, and the relief requested. If no Request to Review is submitted, the Exemption Decision becomes a final order 15 days after it is filed.

8/13/04
Date



John Spitaleri Shaw
Acting Assistant Secretary
Office of Environment, Safety and Health



Department of Energy

Washington, DC 20585

January 30, 2004

Mr. Ron Green
Senior Vice President
USEC Inc.
Mr. Morris Brown
Vice President
United States Enrichment Corporation
6930 Rockledge Drive
Bethesda, Maryland 20817-1818

Dear Mr. Green and Mr. Brown:

This letter responds to your November 25, 2003, request for a temporary exemption from the provisions contained in Title 10, Code of Federal Regulations, part 835 (10 CFR part 835), "Occupational Radiation Protection." The purpose of the exemption request is to permit United States Enrichment Corporation (USEC) and USEC Inc. workers to perform radiological activities in connection with the removal of equipment and material from the Gas Centrifuge Enrichment Plant (GCEP) on the Portsmouth Gaseous Diffusion Plant site and the deployment of USEC Inc.'s American Centrifuge Demonstration Facility in the GCEP. The work is to be conducted in accordance with plans, programs, and procedures in compliance with U.S. Nuclear Regulatory Commission (NRC) requirements in 10 CFR part 20, "Standards for Protection Against Radiation," and other applicable NRC radiation protection regulations.

The Office of Environment, Safety and Health conducted a technical review (enclosure 1) of the exemption request. Based on this review of the information that was provided, I am granting USEC and USEC Inc. a temporary exemption, with conditions, from the provisions of 10 CFR part 835.

The technical review provides additional information concerning the Exemption Decision (enclosure 2).

Sincerely,

A handwritten signature in black ink that reads "Beverly A. Cook".

Beverly A. Cook
Assistant Secretary
Environment, Safety and Health

2 Enclosures

cc w/enclosures:
See attached list.



cc w/enclosures:

Daniel Minter, PACE

Radiological Control

Coordinating Committee

Price Anderson Amendments

Act Coordinator – Oak Ridge Operations Office

Gerald G. Boyd, Manager , DOE/OR

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Larry W. Brown, DOE/NE-60

Jessie H. Roberson, DOE/EM-1

Lee Sarah Liberman Otis, DOE/GC-1

Stephen M. Sohinki, DOE/EH-10

Docketing Clerk, DOE/EH-10

Technical Review

**United States Enrichment Corporation (USEC) and USEC Inc.,
Title 10 of the Code of Federal Regulations, Part 835 (10 CFR Part 835)
Exemption Request**

On November 25, 2003, USEC and USEC Inc. submitted a request for relief from the requirements contained in 10 CFR part 835, "Occupational Radiation Protection," as they pertain to the removal of equipment and material from the Gas Centrifuge Enrichment Plant (GCEP) at the Portsmouth Gaseous Diffusion Plant site (Portsmouth GDP) and the deployment of USEC's American Centrifuge Demonstration Facility (Lead Cascade) in the GCEP.

As discussed below, a temporary relief from the provisions of 10 CFR part 835 is justified. The Department of Energy (DOE) Office of Worker Protection Policy and Programs (EH-52) recommends granting a temporary exemption to 10 CFR part 835, with conditions, as specifically discussed in this technical review.

Discussion of Exemption Request

General

In particular, USEC and USEC Inc. requested a temporary exemption from the requirements contained in 10 CFR part 835 on the condition that USEC and USEC Inc. follow plans, programs, and procedures in compliance with U.S. Nuclear Regulatory Commission (NRC) requirements in 10 CFR part 20, "Standards for Protection Against Radiation."

Requirements from which Exemption is Sought

USEC and USEC Inc. request temporary exemption from the requirements of 10 CFR part 835 for removal, cleanup, refurbishment, and reinstallation of centrifuge machines and related activities for an advanced centrifuge enrichment facility in accordance with the June 17, 2002, Agreement among DOE and USEC and USEC Inc.

Results of Analysis

Background

Legal and Regulatory Background

The Atomic Energy Act of 1954, as amended by the Energy Policy Act of 1992 (42 U.S.C. §2297-2297g-4), created USEC, a Government corporation, for the purpose of managing and operating the uranium enrichment enterprise owned and previously operated by DOE. The Energy Policy Act of 1992 required NRC to certify USEC's operation of the GDP's periodically to protect the public health and safety from radiological hazard and provide for the common defense and security (42 U.S.C. 2297f). In 1993, USEC subsequently leased from DOE portions of the Portsmouth GDP and the Paducah GDP, which related to the GDP process. In a Regulatory Oversight Agreement (ROA), Appendix D to the Lease, DOE agreed to retain oversight of the plants until NRC finished its certification process and was ready to assume jurisdiction. The ROA contains the framework for DOE to regulate nuclear safety, safeguards, and security at the GDP sites. By Agreement dated October 10, 1995, DOE and USEC agreed that the ROA would continue to be used for regulation after NRC certification for leased facilities or activities that did not fall within the NRC certification. USEC and DOE are amending the ROA to cover the centrifuge project work.

In November 1996, NRC issued certificates of compliance for the plants under 10 CFR part 76, "Certification of Gaseous Diffusion Plants." The final transition to NRC regulatory oversight occurred on March 3, 1997. In 1998, USEC became a private corporation under the USEC Privatization Act, Public Law Number 104-134 (April 26, 1996), 42 U.S.C. 2297f-1 to 2297g-4, and the assets, including the Lease, were transferred to the new corporation.

USEC conducted enrichment activities at the GDP at Portsmouth until May 2001 when it terminated these activities. DOE subsequently awarded a contract to USEC to perform activities to maintain the GDP in cold standby status in accordance with USEC's 10 CFR part 76 certificate of compliance, issued January 29, 1999, as amended. NRC conducts nuclear safety oversight, including worker radiation protection, for the operation of the GDP in cold standby status.

Centrifuge Project

On June 17, 2002, USEC Inc. and DOE signed an Agreement whereby USEC Inc. made long-term commitments to DOE that will ensure stability for the domestic uranium enrichment industry and provide a continued, reliable fuel source for the world's nuclear reactors. According to the June 17th Agreement, USEC must begin commercial operations of a plant using advanced technology at either Portsmouth (by March 2010) or Paducah (by March 2011) pursuant to milestones set in the Agreement. Milestones for USEC's deployment of advanced technology are built around three steps: (1) research and development; (2) centrifuge testing at the Lead Cascade demonstration project; and (3) construction and operation of a commercial plant at either site. This exemption request concerns the second step of this project.

The first step began with design of the project. In September 2002, USEC Inc. signed a Cooperative Research and Development Agreement (CRADA) with UT-Battelle LLC, approved by DOE, to expand cooperative efforts to deploy proven U.S./DOE gas centrifuge uranium enrichment technology. USEC Inc.'s design will use all the advantages of DOE's design while incorporating key technological advancements and cost reductions. The parties are continuing further centrifuge development work at DOE's East Tennessee Technology Park (ETTP) in Oak Ridge, Tennessee, where DOE already has centrifuge test facilities in place. The U.S. Government developed and demonstrated gas centrifuge technology before termination of the project in 1985. The CRADA parties "acknowledge that the Government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States every subject invention throughout the World" (CRADA No. ORNL00-0579, June 22, 2000, Article XV, page 10).

The second step will be a demonstration of the feasibility of a full-scale commercial operation. USEC Inc. announced in December 2002 that it would locate its Lead Cascade centrifuge uranium enrichment demonstration facility at DOE's Portsmouth Site. The Lead Cascade will consist of up to 240 full-scale centrifuge machines in a closed cycle, enriching uranium for the purpose of withdrawing small quantities of low-enriched uranium for sampling purposes. The purpose of the demonstration project is to provide updated cost, schedule and performance data to reduce the financial risks of eventually building a \$1 billion to \$1.5 billion commercial enrichment plant.

To undertake the second step, USEC will lease portions of DOE's GCEP facilities that contain the centrifuge machines to be used in the demonstration project. USEC and DOE are entering an Agreement to add these portions of the GCEP facilities to the 1993 Lease. Before USEC can refurbish and reinstall the machines, however, the machines must be removed and decontaminated and cleanup activities must be performed in various parts of the building. Presently, the areas contain equipment, some of which were operated with uranium compounds, low-level waste, Resource Conservation and Recovery Act waste, and other material. Some of the equipment is contaminated with low levels of radioactive material. Congress has appropriated funds to DOE (approximately \$60 million) to perform this cleanup work on an expedited basis. DOE plans to expend these funds by contracting with USEC under a Memorandum of Agreement for Services (Exhibit F to the Lease Agreement) to perform the cleanup work. After an initial period, DOE and USEC have agreed to work toward implementing a new comprehensive contract for cleanup work performed.

As USEC completes disassembly and decontamination of the existing GCEP machines for DOE, USEC Inc. will begin to refurbish and reinstall the machines. USEC Inc. will conduct the refurbishment and reinstallation following cleanup at its own expense without DOE funding. It should be noted that many of these activities will occur simultaneously throughout the second step beginning December 2003 and continuing until about September 2006, which is a period of about 33 months.

After reinstallation of the machines, actual operation of the demonstration project will begin. The operational process of the demonstration project will be licensed and regulated by NRC under 10 CFR part 70, "Domestic Licensing of Special Nuclear Material," for possession of nuclear material, after the nuclear material is actually introduced to the facility. NRC considers centrifuge enrichment operations to be separate from gaseous diffusion operations. Thus, USEC's 10 CFR part 76 certification does not cover any centrifuge demonstration operations it may conduct at the GCEP facilities.

Regulatory Oversight of Centrifuge Project

DOE will exercise regulatory oversight of the second step activities up until the time that the 10 CFR part 70 NRC license becomes effective. Prior to regulation by NRC, DOE will regulate the DOE contractual activity that USEC performs for DOE for disassembly, cleanup, and waste management. DOE will also regulate the refurbishment and reinstallation activities by USEC Inc., which result in a benefit to the Government under the CRADA and the June 17th Agreement. Specifically, DOE's participation in the CRADA and the June 17th Agreement will advance an important DOE objective of ensuring a domestic supply of uranium. In addition, the CRADA grants DOE intellectual property rights in technology developed by USEC Inc. and includes "the demonstration and evaluation of the cost and reliability of a lead cascade" (CRADA No. ORNL00-0579, Appendix A, September 10, 2002, page A-2). DOE will also be overseeing implementation of the June 17th Agreement, the CRADA and work performed under the Memorandum of Agreement for services to assure that the Government obtains that benefit, which is to assure stability of the domestic uranium enrichment industry in accordance with DOE's Strategic Plan "to improve energy security by developing technologies that foster a diverse supply of reliability, affordable, and environmentally sound energy."

Pursuant to the June 17th Agreement, DOE will monitor USEC's centrifuge milestone progress. If USEC fails to meet a milestone set forth in the June 17th Agreement, DOE has the right to terminate the June 17th Agreement, and invoke other provisions, such as USEC's agreement to waive its statutory right to lease the gaseous diffusion plants.

DOE will exercise its oversight authority both by contract and by DOE regulations. Under the ROA in the 1993 Lease, as amended, DOE will provide contractual requirements for health and safety and public defense and security. The ROA provides for enforcement by various actions and penalties. DOE also provides "DOE Nuclear Safety Requirements" for worker radiation protection under 10 CFR part 835 and for nuclear safety management, including quality assurance, under 10 CFR part 830. DOE nuclear safety requirements are enforced by the procedures in 10 CFR part 820 for criminal and civil penalties.

DOE's regulation would continue until NRC assumes oversight pursuant to a license issued under 10 CFR part 70 for the possession of special nuclear material.

The Lead Cascade would come under NRC regulatory oversight at the time of the introduction of uranium hexafluoride gas. Before introduction of the gas, NRC may make observations for the purpose of obtaining information and knowledge of USEC Inc.'s proposed Lead Cascade operations and is responsible for preoperational inspections and licensing reviews. Specifically, under a 10 CFR part 70 license, NRC is solely responsible for determining the adequacy of the management measures, including quality control, applied to items relied on for safety and other USEC Inc. activities addressed by the Lead Cascade license application under NRC requirements. As a result of such activities, NRC may take regulatory action it deems appropriate for matters within NRC jurisdiction. NRC also has the ability to participate in DOE's regulatory oversight activities for USEC Inc.'s subcontractor/vendor partner facilities performing work related to the Lead Cascade. Thus, NRC observers would be onsite during USEC's activities to refurbish and reinstall the machines. To facilitate the transfer of regulatory oversight from DOE to NRC license upon actual operation of demonstration project, DOE and NRC are negotiating a Memorandum of Understanding (MOU).

In anticipation of the operation of the demonstration project, USEC Inc. submitted a 10 CFR part 70 license application to NRC in February 2003 to possess and use a limited quantity of special nuclear material in the Lead Cascade at the Portsmouth GDP site. NRC is expected to issue the license in early 2004, but would make the license effective on the date of actual possession of nuclear material; i.e., uranium hexafluoride gas.

Discussion

USEC currently operates the Portsmouth GDP pursuant to an NRC-issued certificate under 10 CFR part 76. The ROA and DOE's 10 CFR part 830 apply to DOE activities at the facility that are not covered by NRC certification. USEC Inc. intends to operate a gas centrifuge enrichment facility demonstration project as step two under the June 17, 2002, Agreement between DOE and USEC. As explained above, the demonstration project involves, among other things, the removal, cleanup, refurbishment, reinstallation, and operation of machines to be located at the GCEP facility on the Portsmouth GDP site. The work to be performed in this project is outlined in the June 17th Agreement to facilitate rapid deployment of new enrichment technology. This work constitutes a benefit to DOE, and DOE will provide regulatory oversight until an NRC license becomes effective. NRC has determined that the cleanup and preparation work, including installation of machines, is not within the scope of the 10 CFR part 76 NRC certificate. It considers gaseous diffusion under 10 CFR part 76 to be a separate technology from centrifuge technology for a possession of materials license under 10 CFR part 70, which would become effective upon introduction of gas into the centrifuge machines for the demonstration project. Accordingly, DOE regulatory oversight, including application of 10 CFR part 830, would apply to this project before licensing because it involves nuclear safety management, including quality assurance activities, related to DOE contractual activities and other activities which benefit DOE's mission.

The work for which the exemption is sought will be conducted by employees of USEC and USEC Inc. that are currently working under procedures and programs written in accordance with

NRC radiation protection requirements as required and approved under the NRC certification for the gaseous diffusion leased facilities under 10 CFR part 76. Accordingly, the workers are already trained in accordance with, and knowledgeable of, these procedures and programs.

In its exemption request, USEC and USEC Inc. discuss the burden that would result in needing to rewrite the radiation protection procedures and programs to meet 10 CFR part 835 requirements and the need to retrain USEC and USEC Inc. employees in these procedures and programs. The request states that the burden would not be justified because of the relatively short time period (33 months) before transition to NRC regulatory oversight under 10 CFR part 70.

EH-52 reviewed the exemption request and also compared the requirements specified in 10 CFR part 835 to those specified in 10 CFR part 20 and other NRC regulations. EH-52 noted that some DOE radiological safety issues are not addressed solely by compliance with 10 CFR part 20. In particular, DOE requirements for training of workers, reports to workers, personal nuclear criticality monitoring, control of sealed sources, release of material qualification of workers, written procedures, and emergency exposure situations are not addressed in 10 CFR part 20 to the extent 10 CFR part 835 covers these topics. However, these topics are comparably addressed in other NRC regulations. EH-52 selected the appropriate set of NRC requirements to adequately address the 10 CFR part 835 requirements as conditions of this exemption decision.

In addition, NRC requirements only apply to licensed material; i.e., source material, special nuclear material, and byproduct material. The 10 CFR part 835 also applies to other sources of radiation, such as radiation generating devices (e.g., x-ray machines) and accelerator produced radioactive material. For NRC licensees, these sources typically are regulated by State or local government agencies. To avoid a regulatory gap, the exemption decision should limit the scope of the exemption to byproduct, source, and special nuclear material.

Concurrence

Temporary relief from the requirements in 10 CFR part 835, with conditions, should be provided. This is in recognition of the fact that USEC will be adhering to a comparable set of regulations from NRC for occupational radiation protection and intends to operate the facility, when completed, pursuant to an NRC license.

Conclusion

The above exemption meets the criteria for granting a temporary exemption under 10 CFR 820.62:

1. Granting this exemption would be authorized by law.
2. This exemption would not present an undue risk to public health and safety, the environment, or facility workers.
3. The exemption would be consistent with the safe operation of a DOE nuclear facility.

4. In granting this exemption pursuant to §820.62(d)(2), DOE recognizes that special circumstances exist that justify temporary exemption because application of the requirements in the particular circumstances would not serve, or is not necessary, to achieve its underlying purpose or would result in resource impacts that are not justified by the safety improvements.

Based on the above, EH-52 concurs with the request for exemption with the conditions that:

1. USEC and USEC Inc. shall operate the GCEP in accordance with the radiation protection requirements in:
 - 10 CFR part 19, “Notices, Instructions and Report to Workers: Inspection and Investigations”
 - 10 CFR part 20, “Standards for Protection Against Radiation”
 - 10 CFR part 34, “Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations”
 - 10 CFR part 70, “Domestic Licensing of Special Nuclear Material”
 - 10 CFR part 76, “Certification of Gaseous Diffusion Plants – Subpart D – Safety”
 - 10 CFR parts 30, 32, 36, 39, and 40 for the control, inventory, and leak testing of sealed radioactive sources used at GCEP
2. USEC and USEC Inc. shall update their radiation protection programs in accordance with 10 CFR 20.1101 to reflect the GCEP activities.
3. USEC and USEC Inc. shall substitute DOE for NRC when the NRC regulations require notification, approvals, submission of information and documents, and reporting to NRC.
4. This temporary exemption shall remain in effect for a time period not to exceed 3 years (36 months) from the date of this Exemption Decision.
5. This exemption shall have the same scope as 10 CFR part 835 except that it shall apply only to byproduct, source, and special nuclear material, as defined by NRC regulation, 10 CFR 20.1003.
6. Within 60 days of granting and filing this Exemption Decision, DOE will conduct an assessment to evaluate the adequacy of regulatory controls for GCEP radiation protection activities, make recommendations, and suggest modifications, as necessary, to the regulatory controls, and the conditions in the exemption. DOE will conduct the assessment pursuant to the terms of the ROA, as amended, in Exhibit D to the 1993 Lease. The assessment will obtain input from the applicable DOE local operations office with a working level knowledge of the site’s physical layout, programs, and personnel. After obtaining the results of the assessment, the Assistant Secretary for Environment, Safety and Health will consider any recommendations and suggested modifications to the conditions of the exemption, and will modify the conditions of the exemption accordingly as necessary.

Because of the required interface between DOE and NRC regarding each entity's respective regulatory authorities in the Lead Cascade facilities, DOE reserves the right to modify this Exemption Decision in the event that DOE and NRC fail to sign an MOU prior to the effective date of the 10 CFR part 70 license issued to USEC Inc. or that DOE and NRC modify the terms and conditions of the MOU in a manner that would have a material effect on the conditions in the Exemption Decision.

The Exemption Decision should state that based on this and subsequent evaluations, DOE reserves the right to modify the conditions of this Exemption Decision upon notice to USEC and USEC Inc.

EXEMPTION DECISION

Pursuant to Title 10 of the Code of Federal Regulations, part 820.61 (10 CFR 820.61), the Assistant Secretary for Environment, Safety and Health (EH-1) is authorized to exercise authority on behalf of the U.S. Department of Energy (DOE) with respect to requests for exemptions from nuclear safety rules relating to radiological protection of workers, the public, and the environment.

On November 25, 2003, the United States Enrichment Corporation (USEC) and USEC Inc. requested exemption from certain DOE regulations in connection with the removal of equipment and material from the Gas Centrifuge Enrichment Plant (GCEP) on the Portsmouth Gaseous Diffusion Plant site (Portsmouth GDP) and deployment of USEC's American Centrifuge Demonstration Facility in the GCEP.

In particular, USEC and USEC Inc. requested an exemption from requirements contained in 10 CFR part 835, "Occupational Radiation Protection," on the condition that the GCEP follow plans, programs, and procedures in compliance with U. S. Nuclear Regulatory Commission (NRC) requirements in 10 CFR part 20, "Standards for Protection Against Radiation," and other radiation protection related requirements.

Under the terms set forth in 10 CFR 820.61, I am the Secretarial Officer granted the review and approval authority for exemption requests made with respect to 10 CFR part 835. Based on a review of the supporting documentation, I find that the request set forth above has been justified for relief. Specifically, I find that the exemption criteria of 10 CFR 820.62 have been met. Also, the requested exemption is not prohibited by law; will not present an undue risk to the public health and safety, the environment, or facility workers; and is consistent with the safe operation of a DOE nuclear facility. I have determined that the exemption meets the special circumstances, described in the technical review prepared by the Office of Worker Protection Policy and Programs, that constitute a sufficient basis upon which to grant this exemption with conditions.

On the basis of the foregoing, I hereby approve the USEC and USEC Inc. request for temporary exemption from 10 CFR part 835, with conditions:

Conditions:

USEC and USEC Inc. shall operate the GCEP in accordance with the radiation protection requirements in:

1. USEC and USEC Inc. shall operate the GCEP in accordance with the radiation protection requirements in:
 - 10 CFR part 19, "Notices, Instructions and Report to Workers: Inspection and Investigations"
 - 10 CFR part 20, "Standards for Protection Against Radiation"
 - 10 CFR part 34, "Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations"
 - 10 CFR part 70, "Domestic Licensing of Special Nuclear Material"
 - 10 CFR part 76, "Certification of Gaseous Diffusion Plants – Subpart D – Safety"
 - 10 CFR parts 30, 32, 36, 39, and 40 for the control, inventory, and leak testing of sealed radioactive sources used at GCEP
2. USEC and USEC Inc. shall update their radiation protection programs in accordance with 10 CFR 20.1101 to reflect the GCEP activities.
3. USEC and USEC Inc. shall substitute DOE for the NRC when the NRC regulations require notification, approvals, submission of information and documents, and reporting to the NRC.
4. This temporary exemption shall remain in effect for a time period not to exceed 3 years (36 months) from the date of this Exemption Decision.
5. This exemption shall have the same scope as 10 CFR part 835 except that it shall apply only to byproduct, source, and special nuclear material, as defined by NRC regulation 10 CFR 20.1003.
6. Within 60 days of granting and filing this Exemption Decision, DOE will conduct an assessment to evaluate the adequacy of regulatory controls for GCEP radiation protection activities, make recommendations and suggest modifications, as necessary, to the regulatory controls, and the conditions in the exemption. DOE will conduct the assessment pursuant to the terms of the Regulatory Oversight Agreement (ROA), as amended, in Exhibit D to the 1993 Lease. The assessment will obtain input from the applicable DOE local operations office with a working level knowledge of the site's physical layout, programs, and personnel. After obtaining the results of the assessment, EH-1 will consider any recommendations and suggested modifications to the conditions of the exemption, and will modify the conditions of the exemption accordingly as necessary.

As stated in the technical review accompanying this Exemption Decision, the following is provided for clarification of DOE's oversight authority:

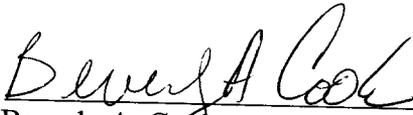
DOE will exercise its oversight authority both by contract and by DOE regulations. Under the ROA in the 1993 Lease, as amended, DOE will provide contractual requirements for health and safety and public defense and security. The ROA provides for enforcement by various actions and penalties. DOE provides "DOE Nuclear Safety Requirements" for worker radiation protection under 10 CFR part 835 and for nuclear safety management, including quality assurance, under 10 CFR part 830. "DOE Nuclear Safety Requirements" are enforced by the procedures in 10 CFR part 820 for criminal and civil penalties.

Because of the required interface between DOE and NRC regarding each entity's respective regulatory authorities in the Lead Cascade facilities, DOE reserves the right to modify this Exemption Decision in the event that DOE and NRC fail to sign a Memorandum of Understanding (MOU) prior to the effective date of the part 70 license issued to USEC Inc., or that DOE and NRC modify the terms and conditions of the MOU in a manner that would have a material effect on the conditions in the Exemption Decision.

The exemption decision should state that based on this and subsequent evaluations, DOE reserves the right to modify the conditions of this Exemption Decision upon notice to USEC and USEC Inc.

Pursuant to 10 CFR 820.66, USEC and USEC Inc. have 15 days from the date of the filing of this decision to file a Request to Review with the Secretary. The Request to Review shall state, specifically, the respects in which the exemption determination is claimed to be erroneous, the grounds of the request, and the relief requested. If no Request to Review is submitted, the Exemption Decision becomes a final order 15 days after it is filed.

2/3/04
Date


Beverly A. Cook
Assistant Secretary
Environment, Safety and Health