RAS 13319

NRC STAFF EXHIBIT 9

LA-3605-0001

DOCKETED
USNRC

March 27, 2007 (11:30am)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Docket No. 70-7004-ML

# License Application

## for the American Centrifuge Plant

### in Piketon, Ohio


Revision 17 Deleted: 4

Deleted: March

August 2006

Docket No. 70-7004

Information contained within
does not contain
Export Controlled Information

Reviewer: G. Peed
Date: 08/30/06

U.S. NUCLEAR REGULATORY COMMISSION
In the Matter of USEC, Inc.
Docket No. 70-7004-ML Official Exhibit No. Staff 9
OFFERED by: Applicant/Licensee Intervenor
NRC Staff Other
IDENTIFIED on 3/15/07 Witness/Panel
Action Taken: ADMITTED REJECTED WITHDRAWN
Reporter/Clerk

TEMPLATE = SEC4-027

SEC4-02

**Table 1.2-2 Authorized uses of NRC-regulated materials**

| Material Class | Authorized Use |
|---|---|
| A. Source Material, Element 92[a, b] | 1. Enrichment of uranium up to 10 percent enrichment by weight $^{235}U$ |
| | 2. Receipt, storage, inspection, acceptance, and sampling of cylinders containing uranium |
| | 3. Filling and storage of cylinders of normal uranium and uranium depleted in $^{235}U$ |
| | 4. Cleaning and inspection of cylinders used for the storage and transport of process product and tails containing source or Special Nuclear Material |
| | 5. Storage of process wastes containing uranium, transuranic elements, and other contaminants and decay products |
| | 6. Process, characterize, package, ship, or store low-level radioactive and mixed wastes |
| | 7. Radiation protection, process control and environmental sample collection, analysis, instrument calibration, and operation checks |
| | 8. Maintenance, repair, and replacement of process equipment |
| | 9. Laboratory analysis and testing |
| | 10. Heating cylinders and feeding contents into the enrichment process |
| | 11. Transfer between cylinders |
| B. Source Material, Element 90 | 1. Calibration and use of portable radiation protection and fixed laboratory equipment |
| | 2. Laboratory analysis and testing |
| | 3. Process, characterize, package, ship, or store low-level radioactive and mixed wastes |
| C. Special Nuclear Material [a,b] | 1. Filling, assay, storage, and shipment of cylinders and other Nuclear Criticality Safety approved containers containing uranium enriched up to 10 percent by weight $^{235}U$ |
| | 2. Nondestructive testing and analyses of product and process streams |

**Table 1.2-2 Authorized uses of NRC-regulated materials**

| Material Class | Authorized Use |
|---|---|
| | 3. Receipt, storage, inspection, and acceptance sampling of cylinders containing uranium enriched up to 10 percent by weight $^{235}U$ |
| | 4. Cleaning and inspection of cylinders used for the storage and transport of process feed, product, and tails containing source or Special Nuclear Material |
| | 5. Storage of process wastes containing uranium, transuranic elements, and other contaminants and decay products |
| | 6. Process, characterize, package, ship, or store low-level radioactive and mixed wastes |
| | 7. Radiation protection, process control and environmental sample collection, analysis, instrument calibration, and operation checks |
| | 8. Maintenance, repair, and replacement of process equipment |
| | 9. Laboratory analysis and testing |
| | 10. Heating cylinders and feeding contents into the enrichment process |
| | 11. Transfer between cylinders |
| | 12. Material remaining in cylinders and facilities as a result of previous operations |
| D. By-product Material, Elements 3-89, 91 | 1. Radiation protection, process control, and environmental sample collection, analysis, instrument calibration, and operation checks |
| | 2. Laboratory analysis and testing |
| | 3. Nondestructive testing of product and product streams |
| | 4. Storage of process wastes containing uranium, transuranics, process contaminants, and decay products |
| | 5. Material remaining in equipment and facilities as a result of feeding reprocessed uranium |
| | 6. Process, characterize, package, ship, or store low-level radioactive and mixed wastes [C] |

**Table 1.2-2 Authorized uses of NRC-regulated materials**

| Material Class | Authorized Use |
|---|---|
| Elements 93, 95 to 100 | 1. Calibration and use of portable radiation protection and fixed laboratory equipment |
| | 2. Laboratory analysis and testing |
| | 3. Nondestructive testing of product and product streams |
| | 4. Storage of process wastes containing uranium, transuranics, process contaminants, and decay products |
| | 5. Material remaining in cylinders and facilities as a result of feeding reprocessed uranium |
| | 6. Process, characterize, package, ship, or store low-level radioactive and mixed wastes[c] |
| $^{43}_{99}Tc$ | 1. Material remaining in cylinders and facilities as a result of feeding reprocessed uranium |
| | 2. Storage of process wastes as a result of feeding reprocessed uranium |

[a] Uranium to be fed to the enrichment plant will meet the requirements of ASTM Standard C996, "Standard Specification for Uranium Hexafluoride Enriched to Less Than 5% $^{235}U$ or ASTM standard C787, "Standard Specification for Uranium Hexafluoride for Enrichment" for reprocessed $UF_6$. Other uranium that does not meet the requirements of ASTM C996 or C787 for reprocessed $UF_6$ may be accepted for storage and subsequent disposition but will not be introduced to the enrichment process, with the exception of small amounts (e.g., 50 pounds $UF_6$) associated with sampling, subsampling, and analyses required to establish receiver's values.

[b] Includes the feed and processing of Paducah Product and any "stockpile" $UF_6$ transferred from DOE to USEC for enrichment.

[c] Includes the potential return of material (waste) generated at the ACP, sent off-site, and subsequently returned.