[redacted]

NRC FORM 374 U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. BWX Technologies, Inc. Nuclear Products Division	3. License Number SNM-42
2. P.O. Box 785 Lynchburg, Virginia 24505-0785	4. Expiration Date: March 29, 2027
	5. Docket No. 70-27 Reference No.

6. Byproduct Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum amount that Licensee May Possess at Any One Time Under This License
A. Uranium enriched in U-235	A. [redacted]	A. [redacted]
B. Uranium enriched in U-235	B. [redacted]	B. [redacted]
C. U-233	C. [redacted]	C. [redacted]
D. Plutonium	D. [redacted]	[redacted]
E. Plutonium	E. [redacted]	[redacted]
F. Source material	F. [redacted]	F. [redacted]
G. Am-241	G. [redacted]	[redacted]

Enclosure 1

[redacted]

[redacted]

NRC FORM 374A U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE SUPPLEMENTARY SHEET

License Number
SNM-42

Docket or Reference Number
70-27

Renewal

H.	NP-237	H. [redacted]	H. [redacted]
I.	Any byproduct materials	I. [redacted]	I. [redacted]
J.	Byproduct material with At. Nos. 1-83	J. [redacted]	J. [redacted]
K.	Fission products and transuranium elements	K. [redacted]	K. [redacted]
L.	Fission products and transuranium elements	L. [redacted]	L. [redacted]
M.	Fission products and transuranium elements	M. [redacted]	M. [redacted]
N.	Fission products and transuranium elements	N [redacted]	[redacted]
O.	In-114m	O [redacted]	O. [redacted]
P.	Yb-169	P. [redacted]	P. [redacted]
Q.	Cf-252	Q. [redacted]	Q. [redacted]
R.	H-3	R. [redacted]	R. [redacted]
S.	H-3	S. [redacted]	S. [redacted]
T.	H-3	T. [redacted]	T. [redacted]

[redacted]

[redacted]

NRC FORM 374A U.S. NUCLEAR REGULATORY COMMISSION	3
MATERIALS LICENSE SUPPLEMENTARY SHEET	License Number SNM-42
	Docket or Reference Number 70-27
	Renewal

U.	U-232	U. [redacted]	U. [redacted]
V.	Po-210	V. [redacted]	V. [redacted]
W.	Pu-239 in greater than Class C waste from Parks Township	W. [redacted]	W. [redacted]
X.	Transuranium elements in greater than Class C waste from Parks Township	X. [redacted]	[redacted]

9. Authorized place of use: The licensee's existing facilities along the James River, approximately 8 miles east of Lynchburg, Virginia, as described in the referenced application.

10. This license shall be deemed to contain two sections: Safety Conditions and Safeguards Conditions. Each section is a part of the license and the licensee is subject to compliance with all listed conditions in each section.

FOR THE NUCLEAR REGULATORY COMMISSION

Date: 3/29/07

By: /RA/
Gary S. Janosko, Deputy Director
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

[redacted]

[redacted]

NRC FORM 374A U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE SUPPLEMENTARY SHEET

License Number
SNM-42

Docket or Reference Number
70-27

Renewal

SAFETY CONDITIONS

S-1 Authorized use: For use in accordance with the statements, representations, and conditions in Chapters 1 through 11 of the application submitted on the following dates, or as revised, pursuant to 10 CFR 70.32 or 10 CFR 70.72: October 24, 2006.

S-2 The licensee shall maintain and execute the response measures in the Emergency Plan, Revision 18, dated May 1, 2006, as revised by the licensee in accordance with 10 CFR 70.32(i).

S-3 The volume of a unit in the [redacted] shall be no larger than a nominal [redacted] container. Multiple containers in [redacted] shall be specifically shown to be critically safe by the licensee.

S-4 In [redacted], no more than [redacted] may be in transit within each cubicle at any one time.

S-5 The former 10 CFR 20.304, "Old Recovery" disposal area is released for unrestricted use in accordance with letter dated January 31, 1997, A.F. Olsen to M.F. Weber of NRC.

S-6 The "Cold" Surface Impoundment Pond was surveyed and evaluated in accordance with letters dated April 29 and May 24, 1999, from A.F. Olsen to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission (NRC) and documented in Amendment 42 dated June 24, 1999.

The "Hot" Surface Impoundment Pond was remediated in accordance with the letter dated April 28, 2000, from A.F. Olsen to the Director, Office of Nuclear Material Safety and Safeguards, U.S. NRC and documented in Amendment 58 dated October 11, 2000.

The results from the above actions may be reassessed at the time of license termination in order to include any possible dose from these areas in the dose assessment for the entire site. BWX Technologies shall control licensed material which could migrate and re-impact the area and shall keep records of all work done in these areas.

S-7 The Final Status Survey Report (FSSR) for the Industrial Waste Landfill 1, submitted by application dated August 10, 2005, has been determined by the NRC staff to meet the requirements of 10 CFR 70.38 in that the landfill has been remediated in accordance with the decommissioning plan approved on November 21, 2003. At the time of license termination, however, the results of the FSSR may be re-assessed in order to include any dose from this landfill in the site dose assessment. BWX Technologies shall also control licensed material which could migrate and impact the area, and keep records of all work done in the area.

S-8 The Final Status Survey Report (FSSR) for Industrial Waste Landfills 2A and 2B, submitted in application dated December 22, 2000, has been reviewed by the NRC staff and determined to meet the requirements of 10 CFR 70.38 in that the landfills have been remediated in

[redacted]

accordance with a decommissioning plan approved by NRC letter dated February 25, 1998. However, at the time of license termination, the results from the FSSR may be reassessed in order to include any possible dose from these landfills in the dose assessment for the entire site. BWX Technologies shall also control licensed material, which could migrate and re-impact the area, and keep records of all work done in these areas.

S-9 The licensee is granted an exemption to 10 CFR 20.1201(d) and is authorized to use Annual Limit on Intake (ALI) and Derived Air Concentration (DAC) values based on dose coefficients adopted by the International Commission on Radiological Protection (ICRP), and published in ICRP Publication No. 68 for determining occupational dose, and for determining dose to individual members of the public, pursuant to 10 CFR 20.1302.

S-10 BWX Technologies, is exempt from fissile material classification and from the fissile material package standards of 10 CFR 71.55 and 10 CFR 71.59 for the transport of certain bulk materials. The materials are listed in Table 1 of the attachment to BWX Technologies' application dated May 23, 2003, as modified by letter dated October 30, 2003, and are subject to the additional limits and controls listed in notes 1 through 11 in Table 1. Shipment of the materials is subject to all other requirements of 10 CFR Part 71.

S-11 "Systems involving [redacted]" shall be deemed to include only workstations containing one or more machined and assembled [redacted] by themselves, or in conjunction with other components that are not [redacted]. This shall apply to [redacted] areas only.

SAFEGUARDS CONDITIONS

Section 1.0 - ABRUPT LOSS DETECTION

There are no license conditions in this section. The necessary information and commitments are contained in the Plan identified in Safeguards Condition SG-5.1.

Section 2.0 - ITEM MONITORING

There are no license conditions in this section. The necessary information and commitments are contained in the Plan identified in Safeguards Condition SG-5.1.

Section 3.0 - ALARM RESOLUTION

There are no license conditions in this section. The necessary information and commitments are contained in the Plan identified in Safeguards Condition SG-5.1.