



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

December 12, 2011

Br. 4

10 CFR 30.38

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

RECEIVED
REGION 1
2011 DEC 14 AM 10:34

Tennessee Valley Authority
Material License No. 01-25284-01
Docket No. 030-33440

Subject: **BY-PRODUCT MATERIAL LICENSE AMENDMENT APPLICATION FOR
TENNESSEE VALLEY AUTHORITY'S MIXED WASTE FACILITY LICENSE**

The purpose of this letter is to request an amendment of Tennessee Valley Authority's (TVA's) Mixed Waste Facility License No. 01-25284-01. The amendment is necessary to change the authorized use description in License Condition 9 to provide a more comprehensive basis for determining the chemically hazardous constituents of the low level radioactive waste that is possessed and stored at the TVA's Mixed Waste Facility in Muscle Shoals, Alabama.

In the current License Condition 9, the determination of the chemically hazardous constituents is based on the reference in the parenthetical (40 CFR 261). The parenthetical is based upon the description provided in License Application Item No. 6, Purpose(s) For Which Licensed Material Will Be Used, submitted in TVA's July 30, 2010, license renewal application. Item 6 stated that the hazardous waste determination will be performed based on 40 CFR 261 requirements. The 40 CFR 261 requirements are contained in Subchapter I – Solid Wastes, Code of Federal Regulations (CFR) Title 40 - Protection of Environment, Chapter I – Environmental Protection Agency.

TVA has recently identified the need to store some low level radioactive waste that contains polychlorinated biphenyls (PCBs), which is regulated under 40 CFR 761, at the Mixed Waste Facility. The PCB requirements are found in Subchapter R – Toxic Substances Control Act of 40 CFR, Chapter I – Environmental Protection Agency. TVA has amended Item No. 6 of the application (Enclosure 2) to base the determination of the chemically hazardous constituents of

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the low level radioactive waste on Subchapter I - Solid Wastes and Subchapter R – Toxic Substances Control Act of CFR Title 40, Chapter I.

TVA has reviewed and prepared this amendment application in accordance with the guidance provided in NUREG-1556, Volume 18, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses."

Enclosure 1 is the original, signed NRC Form 313 requesting amendment of the subject license. Enclosure 2 includes the supporting information for Item 6 of NRC Form 313 consistent with Volume 18 of NUREG-1556.

If you have any questions regarding this license amendment request, please contact me at (423) 751-6887.

Respectfully,

A handwritten signature in black ink, appearing to read "J. W. Shea", is written over the word "Respectfully,".

J. W. Shea
Enclosures:

1. NRC Form 313, "Application for Materials License", Material License No. 01-25284-01
2. Detailed Information Supporting NRC Form 313, Item 6

cc (Enclosures):

NRC Document Control Desk
EDMS

Enclosure 1

NRC Form 313
"Application for Materials License"
Material License No. 01-25284-01

(3-2009)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION.
SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND
ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA,
KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY,
NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH
CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,
SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND
APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,
LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH
DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS,
UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
612 E. LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 76011-4125

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED
MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☐ A. NEW LICENSE
☒ B. AMENDMENT TO LICENSE NUMBER **01-25284-01**
☐ C. RENEWAL OF LICENSE NUMBER

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

Tennessee Valley Authority
LP 4B
1101 Market Street
Chattanooga, Tennessee 37402-2801

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Mixed Waste Facility
Reservation Road on TVA Reservation
Muscle Shoals, AL 35662-1010

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

J. W. Shea

TELEPHONE NUMBER

(423) 751-6887

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

- a. Element and mass number; b. chemical and/or physical form; and c. maximum amount
which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR
TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY

AMOUNT
ENCLOSED \$13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING
UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN
CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND
CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO
ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

J. W. Shea, Manager, Corporate Nuclear Licensing

SIGNATURE

DATE

12 Dec 2009

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		

APPROVED BY

DATE

Enclosure 2

**Tennessee Valley Authority
Application for Materials License Amendment of Nuclear By-Product
Material License No. 01-25284-01**

**Detailed Information Supporting
NRC Form 313, Item 6**

LICENSE APPLICATION ITEM NO. 6

PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED

The purpose for this license is for possession and storage of mixed fission/activation products as low level radioactive waste and chemically hazardous constituents. The mixed waste will be received in sealed storage containers and stored prior to being transferred for final processing and disposal. The waste will be packaged in a form ready for transport and disposal when it arrives at this facility. The contents of each drum will be clearly labeled in accordance with NRC regulations. The sealed storage containers may be opened for visual inspection purposes as determined necessary by the Radiation Safety Officer; however, the mixed waste will not be processed or sorted.

Mixed waste is governed by both NRC and EPA. The low-level radioactive waste will be classified based on 10 CFR 61.55 regulations. The hazardous waste determination will be performed based on Code of Federal Regulations (CFR) Title 40, Chapter I – Environmental Protection Agency, Subchapter I – Solid Wastes and Subchapter R – Toxic Substances Control Act.

The mixed wastes presently held at TVA's nuclear sites that may be shipped to this facility are Class A low-level radioactive wastes mixed with hazardous wastes. The mixed wastes include, but may not be limited to:

1. Solid, characteristic waste (based on lead content), paint stripper, paint chips, and paint chips mixed with rags.
2. Liquid, characteristic waste (based on lead content); waste oil.
3. Liquid, flammable (ignitable); waste paint, paint thinner, waste oil, flammable liquid, Varsol, oil/water mixture, diesel fuel, waste liquid, alcohol, and scintillation fluid in glass vials.
4. Liquid, corrosive; citric acid and phosphoric acid.
5. Liquid, listed waste, grease and spent halogenated degreasing.
6. Polychlorinated biphenyls (PCBs).

This is to acknowledge the receipt of your letter/application dated

12/12/2011, and to inform you that the initial processing which includes an administrative review has been performed.

☒ Amendment (01-25284-01)
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 576543.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.