



Department of Energy  
Office of Legacy Management



SEP 12 2005

Fernando Renaud, PhD  
Biology Department  
University of Puerto Rico  
P.O. Box 23360  
San Juan, PR 00931

Subject: Amendment of U.S. Nuclear Regulatory Commission Materials License 52-01986-04

Dear Dr. Renaud:

In February 2005, during our telephone conversation with Michael Widdop of S.M. Stoller Corporation, U.S. Department of Energy (DOE) Legacy Management's Technical Assistance Contractor, you indicated your concurrence with the removal of the cesium-137 (Cs-137) injected tree at Study Area 4 from the University of Puerto Rico (UPR) radioactive materials license. On June 17, you indicated to Mr. Widdop that you would accept support from the DOE to prepare an application for amendment of the UPR license to possess and use radioactive materials.

Enclosed are materials to request amendment of U.S. Nuclear Regulatory Commission (NRC) Materials License 52-01986-04, granted to UPR. Enclosures include a draft letter requesting a license amendment and supporting materials for the amendment request to remove the cesium-137 (Cs-137) injected tree at Study Area 4 from the license. In a conversation between S.M. Stoller and Ms. Betsy Ulrich of the NRC (March 10, 2005), she indicated that a letter requesting a license amendment, rather than the submittal of a license termination form, was the appropriate vehicle for removing Study Area 4 materials and requirements from the current license.

Supporting materials for license amendment include a description of site background, a discussion of previous decommissioning activities, and the results of subsequent site characterization and risk assessment. We believe that the information contained in this package provides a sound technical basis for discontinuing monitoring activities and land use restrictions at Study Area 4.

Thank you for the cooperation between UPR and DOE in pursuing this activity to delicense the Cs-137 in the tree in Study Area 4. If you wish to discuss this amendment package or if you have any other questions, please call me at (304) 285-4991 or e-mail me at [Ron.Staubly@lm.doe.gov](mailto:Ron.Staubly@lm.doe.gov).

Sincerely,

Ron Staubly  
Site Manager

19901 Germantown Road, Germantown, MD 20874

3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507

1000 Independence Ave., S.W., Washington, DC 20585

2597 B 3/4 Road, Grand Junction, CO 81503

626 Cochran's Mill Road, P.O. Box 10940, Pittsburgh, PA 15236

REPLY TO: Grand Junction Office

ELV 000 V4

Enclosures

cc w/o enclosures:

A. Daniel, Informática International

M. Ferré, DOE Oak Ridge Operation Office

A. Gonzalez, DOE Oak Ridge Operation Office

L. McGee, LM-50

R. Plieness, LM-50

C. Carpenter, Stoller

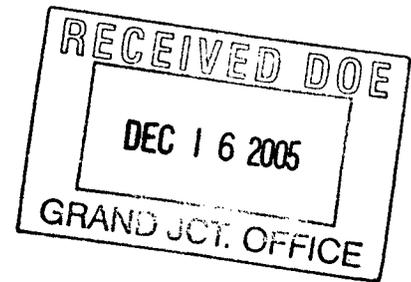
M. Widdop, Stoller

Project File: YYY ELV (A) D. Roberts

Staubly/ELVerde letter DOE to UPR 7-2005DOECover rev1.doc



November 16, 2005



Ms. Elizabeth Ulrich  
U.S. Nuclear Regulatory Commission  
Commercial and R & D Branch  
División of Nuclear Materials Safety, Region I  
King of Prussia, PA 19406

Dear Ms. Ulrich:

The University of Puerto Rico (UPR) requests an amendment to the Materials License 52-01986-04, dated November 9, 2004. The amendment would remove cesium-137 (CS-137) (contained in a living tree) located at Study Area 4, at the UPR El Verde Research Station, by deleting items 6.h (CS-137), 9.H (the use is incorrectly indicated as storage in two trees), and conditions 10.B UPR submits that the Cs-137 in the tree in Study Area 4 satisfies the requirements set forth in 10 CFR 20 for license termination without restrictions for decommissioned facilities.

License Item 6.H was previously addressed under Materials License 52-19434-02 and subsequently incorporated into the current license. The source material is residual Cs-137 that was injected into a tree as part of U.S. Atomic Energy Commission- (AEC) sponsored research conducted in the 1960s. When the U.S. Department of Energy (DOE), the successor agency to AEC, decommissioned the facility and transferred research station responsibilities to UPR in the early 1980s, UPR obtained a Materials License for the residual Cs-137 to conduct field studies. No further studies were undertaken at the El Verde Research Station, and the license was amended for storage only of the residual Cs-137.

DOE decommissioned the El Verde Research Station in the 1980s and conducted soil removal and additional radiological assessments at Study Area 4 through 1997. In accordance with License Conditions 10.B and 22.B, the DOE Office of Environmental Management (EM) has maintained a fence and warning signs at Study Area 4.

The DOE Office of Legacy Management (LM) is responsible for required long-term surveillance and maintenance (LTS&M) at remediate sites and facilities where DOE used or stored radioactive materials. DOE is transferring responsibility for the radioactive materials in the tree at the El Verde Research Station from DOE-EM to DOE-LM. The DOE conducted an evaluation of LTS&M requirements at Study Area 4 in conjunction with the transfer to DOE-LM. To determine its LTS&M requirements, DOE reviewed results of environmental surveys, risk assessments, and dose assessments previously completed for the site. Based on this review, DOE concludes, and UPR concurs, that Study Area 4 does not pose unacceptable health risks; Study Area 4 meets DOE and NRC criteria for unrestricted use; and access controls for that area no longer required. The DOE-LM will continue to maintain records for the site and respond to public inquiries regarding past activities at the site, consistent with LTS&M practices employed by DOE-LM at other sites that have been released for unrestricted use.

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Ms. Elizabeth Ulrich  
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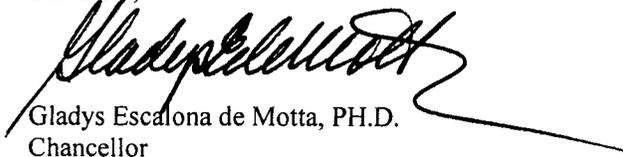
Because UPR has no plans to conduct future radioisotope research in this area, UPR requests that Materials License 52-01986-04 be amended to remove material 6.H, use 9.H, and conditions 10.B and 22.B This will remove requirements for restricting access to the area and fencing and signs will no longer be required. The U.S. Forest Service (USF) administers the land containing the El Verde Research Station and Study Area 4. UPR intends to maintain the El Verde Research Station on USFS land, so public recreation facilities and associated traffic is not anticipated near Study Area 4 for the foreseeable future. UPR Will provide unfettered Study Area 4 access to DOE and NRC.

Attached to this request is supporting information copiled by DOE during its evaluation of LTS&M requirements for the site. Enclosures include:

1. A summary of site activities and radiological conditions
2. A 1994 evaluation of the site that includes a human health risk assessment
3. A 1996 Phase I Environmental Assessment
4. A 1997 independent verification of radiological conditions authored by Jim Burger (the primary author of NUREG 5849, *Manual for Conducting Radiological Surveys in Support of License Termination*).

If you have any questions or if you would like any further information, call me at (787) 764-0000, extensión 2037.

Sincerely,



Gladys Escalona de Motta, PH.D.  
Chancellor

yn

Enclosure

c: P. Cruz, Superintendent, Caribbean Nation Forest, USFS  
R. Staubly, Site Manager, DOE-LM  
Dr. Fernando Renaud  
Ms. Mildred Ferré  
Ms. Brenda L. Tolley