#### **NUCLEAR REGULATORY COMMISSION**

[Docket No. 70-157]

Notice of Environmental Assessment and Finding of No Significant Impact for License Amendment for University of Texas at Austin, Austin, Texas

**AGENCY:** Nuclear Regulatory Commission

**ACTION:** Environmental Assessment and Finding of No Significant Impact for license amendment.

FOR FURTHER INFORMATION CONTACT: Don Stout, Fuel Cycle Facilities Branch, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Mail Stop T8-A33, Washington D.C. 20555-0001. Telephone: (301) 415-5269; email des1@nrc.gov.

# **SUPPLEMENTARY INFORMATION:**

#### I. Introduction:

The U.S. Nuclear Regulatory Commission (NRC) is considering the issuance of an amendment to NRC Materials License SNM-180 (SNM-180), to allow the University of Texas at Austin (UT), to receive, possess and store of special nuclear material (SNM) that is currently stored at Manhattan College in Riverdale, New York. The NRC has prepared an Environmental Assessment (EA) in support of this action in accordance with the requirements of 10 CFR Part 51. Based upon the EA, the NRC has determined that a Finding of No Significant Impact (FONSI) is appropriate.

### II. Environmental Assessment:

#### Background

The Nuclear Engineering Teaching Laboratory (NETL) at the University of Texas (UT) uses special nuclear material to supplement training and instruction programs in the field of nuclear engineering. UT's license SNM-180, currently authorizes them to possess of uranium-235 (U-235). Under SNM-180, UT is also authorized to possess of plutonium contained in sealed plutonium-beryllium neutron sources. Independent of license SNM-180, UT has a research reactor, which operates under NRC Reactor License R-129 and a charged particle accelerator which operates under a Certificate of Registration from the Texas Department of Health, Bureau of Radiation Control (License TDH L00485).

The NRC staff has received an amendment request (Ref. 1), dated May 3, 2004, to allow receipt, possession, and storage of formal of SNM. The purpose of this document is to assess the environmental consequences of the proposed amendment.

# Review Scope

The purpose of this EA is to assess the environmental impacts of an amendment request that would allow UT to receive, possess and store an additional of SNM under their existing Part 70 license. The scope of this EA is limited to the receipt, possession and storage of SNM at UT. The transportation of the SNM to UT is not part of this EA and is being handled

separately by the U.S. Department of Energy or an approved alternate. This EA does not approve or deny the amendment request. A separate Safety Evaluation Report (SER) will be issued at a later date in support of approval or denial of the amendment request. The SER will document the safety review in the areas of radiation protection, nuclear criticality safety, material control and accountability, and security.

The existing conditions and operations for UT were evaluated by NRC in March 1998, during renewal of the UT license (Ref. 2). At that time, the licensee was granted a categorical exclusion under 10 CFR § 51.22(c)(14)(v) because their license authorized the use of radioactive materials for research and development and for educational purposes. This amendment requests receipt, possession, and storage of SNM. The use of this SNM for research and development is still being developed and is not part of this EA. This assessment will determine whether to issue or prepare an Environmental Impact Statement (EIS). Should the NRC issue a FONSI, no EIS will be prepared.

#### Proposed Action

The proposed action is to grant an amendment to SNM-180 to receive, possess and store SNM in accordance with 10 CFR Part 70 and 10 CFR Part 20. There are no effluent releases associated with the SNM in this amendment request. The SNM is encased in aluminum. Initially, the material will be stored in U.S. Department of Transportation approved 6M shipping containers in a secure location at UT. After completion of storage racks, the SNM will be moved to another area within the same secure location. The licensee has committed to maintaining doses as low as reasonably achievable (ALARA) and is required to review radiation dose data at least annually and report the findings of the assessment to the Radiation Safety Committee or the Reactor Committee.

# Purpose and Need for Proposed Action

UT currently possesses and uses of U-235 for sub-critical research and development experiments at the NETL. UT is requesting permission to receive, possess, and store additional SNM that will be used in future research and development sub-critical experiments. Future research and development utilizing this SNM will require another license amendment. Allowing UT to possess and store this material will assist Manhattan College by removing the SNM from their site and permit them to complete decommissioning. UT will benefit from the receipt of this material by providing them with additional SNM to conduct future research and development for educational purposes.

# **Alternatives**

The alternatives available to the NRC are:

- 1. Approve the amendment request as submitted; or
- 2. No action (i.e., deny the amendment request).

### Affected Environment and Environmental Impacts of Proposed Action

The affected environment for Alternative 1 is the UT site. A full description of the UT site and its characteristics was given in the license application related to the March 1998 renewal of the UT license (Ref.2). The NETL of the UT at Austin is located at the J.J. Pickle Research Campus. The proposed action will not result in the release of any chemical or radiological constituents to the environment because the SNM is a sealed source (metallic SNM encased in aluminum). Similarly, because the SNM is a sealed source and will remain in a secure location at UT, the proposed action will not cause any adverse impacts to local land use, biotic resources, or cultural resources.

# Environmental Impacts of No Action Alternative

As an alternative to granting the proposed license amendment, the staff considered denying the amendment (the no action alternative). Under the no action alternative, Manhattan College in Riverdale, NY would be the affected environment. The for SNM would continue to be stored at a site that no longer has an active nuclear engineering program. While continued storage of the material at Manhattan College would not have any immediate environmental significance, the facility cannot complete decommissioning until the SNM has been removed. The no action alternative would not have any environmental impacts associated with the UT affected environment.

# Conclusion

Based on its review, the NRC staff has concluded that the environmental impacts associated with the proposed action and no action alternative are insignificant. The preferred action would be to relocate this unused material to a facility that could utilize it. Thus, the staff considers that Alternative 1 is the appropriate alternative for selection.

### Agencies and Persons Contacted

On July 9, 2004, the NRC staff provided the Texas Department of Health (TDH), Bureau of Radiation Control (TDH) a copy of the EA. In an e-mail dated July 13, 2004, TDH indicated that they did not have any comments regarding the EA.

The NRC staff has determined that consultation under Section 7 of the Endangered Species

Act is not required because the proposed action will occur entirely within the existing facility and will not affect listed species or critical habitat.

The NRC staff has determined that the proposed action is not a type of activity that has potential to cause effect on historic properties because it will occur entirely within the existing facility. Therefore, consultation under Section 106 of the National Historic Preservation Act is not required.

# **III.** Finding Of No Significant Impact:

Pursuant to 10 CFR Part 51, the NRC staff has considered the environmental consequences of amending SNM-180 to allow UT to receive, possess and store 3.88 kilograms of SNM. On the basis of this assessment, the Commission has concluded that the environmental impacts associated with the proposed action would not be significant and the Commission is making a FONSI. Accordingly, the NRC has determined not to prepare an EIS for the proposed action.

#### IV. Further Information:

A copy of this document will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system. From this site, you can access the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. However, the documents related to this proposed licensing action will not be available electronically for public inspection in the NRC Public Document Room or from the PARS component of ADAMS due to the sensitive nature of the information regarding SNM specifics and detailed storage locations. The documents related to this notice are:

University of Texas - Austin, Letter dated May 3, 2004. to U.S. Nuclear Regulatory
Commission, "Amendment Request for Special Nuclear Material License at The
University of Texas at Austin." Accession Number ML041320555 (not publicly
available).

 The NRC, March 4, 1998, "Safety Evaluation Report: Renewal Application Dated October 24, 1997."

If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737 or by email to <a href="mailto:pdr@nrc.gov">pdr@nrc.gov</a>. Documents may also be viewed electronically on the public computers located at the NRC's Public Document Room (PDR), O 1 F21, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852. The PDR reproduction contractor will copy documents for a fee.

Dated at Rockville, Maryland, the 21st day of July 2004.

FOR THE NUCLEAR REGULATORY COMMISSION

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