



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 14 TO

FACILITY OPERATING LICENSE NO. R-83

TEXAS ENGINEERING EXPERIMENT STATION

TEXAS A&M UNIVERSITY SYSTEM

DOCKET NO. 50-128

1.0 INTRODUCTION

By letter dated April 15, 1997, as supplemented on May 26, 1997, the Texas Engineering Experiment Station (TEES)/Texas A&M University System (the licensee), requested that the scope of the reactor license be amended to clarify the possession and use of byproduct materials within the Nuclear Science Center (NSC), which is part of the TEES, and to allow possession of byproduct material until they decay sufficiently to be disposed of as ordinary trash.

2.0 EVALUATION

The license was amended in October 1993 (Amendment No. 13) to allow possession of byproduct material that was within the NSC site boundary, and at that time was under the state license. This change was made because the State of Texas requested that their byproduct material within the NSC perimeter be the responsibility of the reactor licensee. By so doing, the uncertainties that arise as to which licensee is responsible for violations while the material is on the NSC site would be eliminated. Also, tracking of the material on the NSC site would be more efficient.

Amendment No. 13 accomplished this change by changing license condition II.B.(3) to read as follows:

Pursuant to the Act and 10 CFR, Chapter I, Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," to receive, possess, and use in amounts as required, any byproduct material without restriction to chemical or physical form, for analysis or instrument calibration but not to separate such byproduct material as may be produced by operation of the reactor.

It was noted in a recent inspection that some of the byproduct material that is now considered to be under the reactor license is not being used for "analysis or instrument calibration" as license condition II.B.(3) requires. The licensee has proposed to modify this license condition to better define the possession and use of byproduct material. The licensee states in his letter of April 15, 1997, that it would be impossible to operate the reactor and only produce radioactive material for "analysis and instrument calibration." Activated structures and experiment materials are produced in and around the reactor during the normal daily operations. Experimental devices that have failed or become obsolete are stored onsite for decay or possible reuse. During routine handling operations, an amount of low-level radioactive waste is produced and is stored at the facility. High-activity isotopes are regularly produced and shipped for commercial purposes. The licensee has proposed in his letter of May 26, 1997 to modify license condition II.B.(3) to read as follows:

Pursuant to the Act and 10 CFR, Chapter I, Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," to receive, possess, and use in amounts as required any byproduct material without restriction to chemical or physical form in connection with operation of the reactor that has a definite research and development purpose and any byproduct material generated by the licensed activities, but not to separate such byproduct material except for byproduct material produced in reactor experiments.

It is noted that the phrase "analysis or instrument calibration" has been replaced with "in connection with operation of the reactor that has a definite research and development purpose."

This revision more accurately describes the possession and use of byproduct material at the NSC for reasons cited previously by the licensee. Also, the licensee is required to abide by the regulations in 10 CFR Parts 20 and 30, in addition to Technical Specifications dealing with experiments. Therefore, the staff finds that the use of byproduct material as specified in the new II.B.(3) is acceptable.

In order to account for byproduct material at the NSC that is outside the scope of license condition II.B.(3) a new license condition is being proposed by the licensee as follows:

License Condition II.B.(7)

Pursuant to the Act and 10 CFR, Chapter I, Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," to possess and store for decay such byproduct material as are within the facility at the time of Amendment No. 14.

This license condition is being proposed to account for material that was formally under the Texas State license that would not fit the definition of material that can be possessed and used under the new license condition II.B.(3). Some of this material was on the NSC site under the Texas State license since 1970 and the licensee misinterpreted the license condition in II.B.(3) approved in Amendment 13 to mean that this material could be possessed under that license condition. The licensee points out that it is currently cost prohibitive to dispose this material in a commercial landfill.

The licensee requests that this license condition be added to allow storage and decay of the byproduct material that is already on the NSC site. Future possession and use of byproduct material will be governed by the new license condition II.B.(3). The staff notes that some of this material has been at the NSC since 1970, and since the licensee is required to abide by 10 CFR Parts 20 and 30, finds that this license condition is acceptable.

Finally, the licensee proposes to include in the license the provision for disposal of low level waste, which has decayed to acceptable levels, as ordinary waste as permitted by 10 CFR 35.92, and as is permitted in materials licenses. The staff finds this acceptable and is modifying license condition II.C to include the reference to 35.92.

### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in a requirement with respect to the installation or use of facility components located within the restricted areas defined in 10 CFR Part 20. The staff has determined that this amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

### 4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously evaluated, or create the possibility of a new or different kind of accident from any accident previously evaluated, and does not involve a significant reduction in a margin of safety, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes, and (3) such activities will be conducted in compliance with the Commission's regulations, and the issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public.

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Date: July 15, 1997