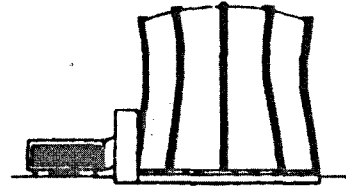


TEXAS ENGINEERING EXPERIMENT STATION

TEXAS A&M UNIVERSITY

3575 TAMU
COLLEGE STATION, TEXAS 77843-3575



NUCLEAR SCIENCE CENTER
979/845-7551
FAX 979/862-2667

May 24, 2006

2006-0036

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington D.C 20555-0001

SUBJECT: Reply to a Notice of Violation; EA-06-113
NRC Special Inspection Report # 50-128/2006-203, Facility License R-83.

This letter is the required response to the violation cited during the Special Nuclear Regulatory Commission (NRC) inspection on March 27-29, 2006 at the Texas A&M University Nuclear Science Center Research Reactor facility. We appreciate the detailed report and hope that our prompt corrective actions with respect to the cited violation are acceptable.

Each item addressed in the Commission's report is addressed below including: 1) reason for the violation, or if contested, the basis for disputing the violation or severity level, 2) the corrective steps that have been taken and the results achieved, 3) the corrective steps that will be taken to avoid further violations, and 4) the date when full compliance will be achieved.

1. Violation- Severity Level IV

- a. Licensee failed to make reasonable surveys to evaluate the magnitude and extent of shallow dose equivalent radiation levels following the initial trial runs of vials containing plastic disks and following the first indication of a possible overexposure of February 24, 06.

1a. Reason: Trial runs of vials containing plastic disks were performed on several occasions in the year 2005. The experimental protocol was correctly followed and the employee's monthly Shallow Dose Equivalent (SDE) was carefully monitored. The experiments were performed by another employee in the year 2005. The SDE noted for this type of work by NSC employees was minimal. Another employee performed the above type of work in the year 2006 following

the training from the previous employee. This employee's handling practices must have differed from previous workers.

We do not contest the violation.

1b. Corrective step that have been taken: Nuclear Science Center (NSC) has taken various corrective actions to improve the radiation protection program.

- The employee is restricted from all radiation duties and classified as "non-radiation" worker during calendar year 2006 and his dosimetry was cancelled.
- The employee has undergone a medical examination and a follow up check with laboratory work and the results indicate "no abnormalities".
- We have built holders and manipulators that will eliminate beta dose for this type of Neutron Activation Analysis (NAA) work.
- We have conducted a briefing for NSC Pneumatics certified personnel with emphasis on handling beta sources with the use of tools, tongs and beta shields.
- We have conducted general training for all radiation workers on safe handling of compact sources.
- We have developed step by step handling procedures for pneumatics (NAA) work. This is incorporated in the Pneumatics training module and also posted on the pneumatics hood.
- NSC Radiation Work Permit is revised and notes the use of handling tools and shielding during pneumatics work.
- We have implemented two extremity badges for NAA workers. The badge processing period is still monthly (as per Texas A&M contract).
- NSC has evaluated the current NAA worker's dose report for the month of April following the implementation of new handling procedures, handling tools, etc, and noted that the SDE was "M".
- Based on the above consideration, NSC believes that monthly dose reporting is adequate for the purposes of compliance.
- We have ordered a radiation detector (indicating both beta and gamma) that will be permanently mounted inside the pneumatic hood so that NAA workers will be able to note any unusually high radiation levels.
- NSC has purchased a dedicated portable beta sliding window ion chamber for the purposes of noting contact beta doses.
- The dosimetry vendor was requested to include two NSC contact points in case the first person on the list cannot be notified to minimize any time delay in overexposure notification. Fax and e-mail notification was also requested.

1c. Corrective steps that will be taken to avoid further violations:

Event notification to the NRC was carefully reviewed and a copy of the SOP detailing reporting was posted in NSC RSO office and on the NSC bulletin board.

NSC has already started observing work practices and talking to individuals on the safety aspects and correcting deficiencies.

NSC has reemphasized on the restrictions on material storage cabinet in the pneumatics laboratory by locking all cabinets.

1d. Date when full compliance is achieved: Based on the above considerations on all the corrective actions performed, we believe that this type of event will not happen in future and the Nuclear Science Center facility is in full compliance. We will permanently install the new beta-gamma detector in the pneumatics hood upon receipt.

In conclusion, except for the Severity Level IV violation identified in the NOV on procedure violation, the radiation safety program satisfied the regulatory requirements and all the applicable features of the program were adequately implemented. The NSC management will provide increased attention and oversight of all licensed activities.

If you require additional information, please contact me or Latha Vasudevan at (979) 845-7551.

Sincerely,



Dr. W. D. Reece, Director
Nuclear Science Center

LV/jg

Xc: 211/ Central File
NRC Inspection File
Craig Bassett/ NRC Inspector
Brian Thomas, Chief, Research and Test Reactors Branch
Theresa Maldonado/Deputy Director, TEES