



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

January 24, 2009

TO: Docket File 030-03732

FROM: Robert Evans, CHP, PE, Senior Health Physicist
Nuclear Materials Safety Branch B
Division of Nuclear Materials Safety

SUBJECT: TECHNICAL REVIEW OF LICENSE AMENDMENT REQUEST

RSE 1/24/09

By letter dated December 16, 2008 (ML090070461), the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), submitted a license amendment request to the NRC. The licensee requested NRC approval of several changes to the "Plutonium Spill Recovery Work Plan for NIST Campus Boulder Colorado" (Work Plan).

Following an initial review of the December 16, 2008 submittal, the NRC requested additional information from NIST by email dated January 7, 2009 (ML090070461). The licensee submitted a response by email dated January 9, 2009 (ML090240003). The NRC requested additional information via a teleconference call conducted on January 21, 2009. The licensee submitted additional information by email dated January 22, 2009 (ML090240002).

I conducted a detailed review of the three submittals, and I conclude that the request agrees with the guidance provided in several NUREG documents. I recommend that the NRC amend the license to approve the proposed changes in the Work Plan. Details of my review are provided in the attachment to this Memorandum.

Docket File 030-03732
License No. 05-03166-05

Enclosure: Technical Review of License Amendment Request

Technical Review of License Amendment Request

Background

The licensee submitted a license amendment request to revise the "Plutonium Spill Recovery Work Plan for NIST Campus Boulder Colorado" (Work Plan). Following NRC review and comment, the licensee forwarded two supplemental responses to the NRC. These supplemental responses provide clarifying information for the original submittal.

Requested Changes

The licensee proposed adding a new category of worker, Field Technicians. At the request of the NRC, the licensee provided additional information that met the intent of NUREG-1757, Volume 1, Revision 2, Page 17-14. The licensee explained the duties, work responsibilities, qualifications, and reporting responsibilities for these workers. The NRC staff has determined that this new class of worker will be properly trained prior to conducting work and supervised during work activities. Therefore, the NRC staff approves this new classification of worker.

The licensee requested to change their previous commitment for assignment of dosimetry to agree with the requirements of 10 CFR 20.1502. Since the proposed change is in agreement with regulatory requirements, the change is acceptable to the NRC staff.

The licensee added a new work activity to the Work Plan, the excavation and remediation of the sink drain pipe. The work was described in sufficient detail to ensure that the work will be conducted with radiation protection controls and supervisory oversight. The proposed work activity, with the radiological controls that will be established by the licensee, is protective of worker safety and the environment. The NRC staff approves this change to the Work Plan.

The licensee proposed to conduct final surveys using building surface and soil derived concentration guideline levels (DCGLs) of 696 dpm/100 cm² and 0.42 pCi/g, respectively. The licensee provided justifications for these DCGLs with RESRAD, DandD, and COMPASS computer program printouts. The NRC staff conducted reviews of the programs, including verification of program inputs, to ensure that the results are accurate. Any changes to the programs' default parameters were sufficiently justified. The NRC also verified the background information that was used as input into the programs. The NRC staff concluded that the licensee's analyses were conducted in accordance with NRC guidance documents. In summary, the NRC staff approves the site-specific DCGLs because they were calculated using NRC-approved computer programs with standardized screening criteria as inputs.

Conclusions

The NRC staff recommends approval of the license amendment request. The information provided by the licensee agrees with NRC guidance, and the licensee's proposed activities are protective of worker safety and the environment.

bcc w/Enclosure:

ATHowell
JEWhitten
RJEvans
RSBrowder
JDCook
VHCampbell
NMSB-B
RIV Nuclear Materials File - 5th Floor

ML090240005

SUNSI Review Completed: RJE ADAMS: Yes No Initials: RJE
 Publicly Available Non-Publicly Available Sensitive Non-Sensitive

DOCUMENT NAME: S:\DNMS\NMSB-B\RJE\NIST Technical Justification.doc final: r:_dnms\2009

RIV:DNMS/NMSB-B			
RJEvans			
<i>RJEvans</i>			
01/24/2009			

OFFICIAL RECORD COPY