



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064

September 26, 1996

Douglas Posson, Regional Director  
U.S. Department of the Interior  
U.S. Geological Survey  
P.O. Box 25046  
Denver Federal Center M/S 205  
Denver, Colorado 80225

SUBJECT: RESPONSE TO NRC INSPECTION REPORTS 030-03728/96-01, 070-00121/96-01  
AND NOTICES OF VIOLATION

Dear Mr. Posson:

Thank you for your letter of September 19, 1996, in response to our letter and Notices of Violation dated August 21, 1996. We have reviewed your reply and find it responsive to the concerns raised in our Notices of Violation. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely,

A handwritten signature in cursive script, reading "Linda L. Howell", is written over a horizontal line.

Linda L. Howell, Chief  
Nuclear Materials Inspection and  
Fuel Cycle/Decommissioning Branch

Docket Nos.: 030-03728, 070-00121  
License Nos.: 05-01399-08, SNM-111

cc:  
Colorado Radiation Control Program Director

9610030055 960926  
PDR ADOCK 03003728  
C PDR

bcc w/copy of Licensee's Ltr dtd 9/19/96:

DMB - Original (IE-07)

LJCallan

CLCain

DBSpitzberg

LLHowell

JCruz

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09/25/96		09/26/96							

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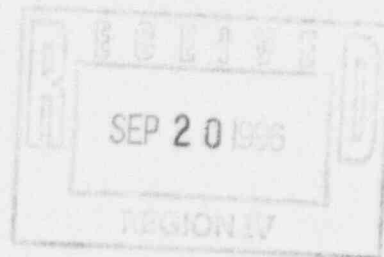
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# United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Box 25046 M.S. 205  
Denver Federal Center  
Denver, Colorado 80225



September 19, 1996

U.S. Nuclear Regulatory Commission  
Attn.: Document Control Desk  
Washington, D.C. 20555

Subject: Reply to a Notice of Violation -- Reports 030-03728/96-01 and 070-00121/96-01;  
License Nos. 05-01399-08, and SNM-111.

Dear Sir:

This letter is in reply to your NRC Inspection Reports and Notices of Violation dated August 21, 1996, in which the US Geological Survey (USGS) was cited for five severity level IV violations. The USGS takes these violations very seriously and is committed to running a safe radioactive materials research program and will take all necessary actions to maintain this program in compliance with NRC requirements. The root cause of all violations is the same and is therefore addressed once rather than for each violation.

Two of the violations were common to both licenses. For clarity, these violations shall be referred to in this letter as Items A and B. The response is combined because the corrective action is the same for both licenses. Item C is a violation of the 05-01399-08 license and will be addressed separately.

**Background:** In the past year the USGS has undergone unprecedented change in its 117 year history. The Bureau has reorganized its management structure and suffered the first Reduction-in-Force (RIF), in its history. These unprecedented organizational changes, coupled with early retirements, Government shutdowns, and relocations caused major disruptions in the routine operations at every level of the USGS.

The radiation safety program was affected by these changes. The RIF resulted in 80 of 165 badged workers leaving on one day including the previous RSO. The majority of the radioisotope permits had to be rewritten as new personnel took over programs from those people who had retired or been RIFed. The current RSO was inundated with requests to change permits and to take possession of unneeded sources and waste materials.

**Root Cause:** The RSO and management failed to recognize the impact these changes would have on the radiation safety program. The RSO had insufficient resources to process all the required changes and to maintain scheduled license requirements.

96-1996

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**Immediate Corrective Action:** The Radiation Safety Committee (RSC) identified that the RSO needed additional support because of the unusually high work load. The committee presented the problem to me at the January 23, 1996 RSC meeting. I presented the issue to the Central Region Council at their February 20, 1996 meeting. The Council agreed to fund contract health physics support to assist the RSO. Contract assistance began in mid May, 1996.

**Long Term Corrective Action:** The USGS will maintain on-call contract health physics support for the RSO. These services will be drawn upon to assist the RSO during periods of heavy work load so the program can maintain compliance.

**Item A:** "Make appropriate surveys or evaluations of radioactive material in air emissions released to unrestricted or controlled areas to demonstrate compliance with dose limits for individual members of the public." A violation of both the 05-01399-08 and SNM 111 licenses.

**Corrective action:** The RSO has developed a process to assess and monitor airborne radioactive effluents following the procedures outlined in NCRP Commentary 3, "Screening Techniques for Determining Compliance with Environmental Standards," published January, 1989 and recommended in NRC Regulatory Guide 8.37, published July, 1993. The program will be a part of the Radioisotope Utilization Permit issue and review process.

**Item B:** "Conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license." A violation of both the 05-01399-08 and SNM 111 licenses.

**Corrective action:** The RSO, with the assistance of the contractor health physicist, has updated inventory records for 87 sealed sources located in the radiation storage building 10. These sources will be transferred to the RSO's permit for long term storage, transfer to other licensees, or disposal. Each source has been leak checked, source serial numbers recorded, and condition of the storage container noted.

A new inventory data base is being constructed that will contain sufficient information such as isotope quantity, inventory completion dates, and other information pertinent to program management. Once this data base is completed and all existing information is input, each radioisotope user will be sent a copy of their inventory and asked to update the information every six months. A system will be established to track radioisotope inventories to ensure that they are performed on schedule

**Item C:** "Failure to conduct leak tests of sealed sources at the required intervals." A violation of the 05-01399-08 license.

**Corrective action:** The RSO will send a memorandum to each permittee every six months to remind them that leak tests are due. A system will be established to track leak test reports to ensure they are performed on schedule.

**Date of compliance:** The USGS shall have all violations identified in this report corrected by December 27, 1996.

Should you have any questions concerning this report, please contact William Andrie, Radiation Safety Officer at (303) 236-5900 ext. 413.

Sincerely,



Doug Posson  
Regional Director, Central Region

cc: Regional Administrator,  
Region IV, NRC  
611 Ryan Plaza Dr.  
Suite 400  
Arlington, TX 76011