



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

1450 MARIA LANE
WALNUT CREEK, CALIFORNIA 94596-5368

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U. S. Department of Interior
Bureau of Mines
Reno Research Center
1605 Evans Avenue
Reno, Nevada 89512-2295

Attention: Mr. R. E. Siemens
Research Director

SUBJECT: COMMENTS ON DEPARTMENT OF INTERIOR'S DECOMMISSIONING SURVEY REPORT,
DATED JANUARY 21, 1993

This letter is in reference to your decommissioning survey report, dated January 21, 1993. The Region V staff has reviewed the report and have the following comments. These comments must be satisfactorily addressed before scheduling ORISE to conduct a confirmatory survey.

1. The guidelines for exposure rate and surface contamination, which the decommissioning activities are to meet, are not identified. For example, were the guidelines of Regulatory Guide (RG) 1.86, "Termination of Operating Licenses for Operating Reactors," and NRC Document, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of License for Byproduct, Source, or Special Nuclear Material," of May 1987 implemented or were some other guidelines implemented. It should be noted that these two documents are referenced in the copy of NUREG/CR-5849 that was provided to you during the inspection performed on October 1, 1992.
2. The report does not provide the necessary survey data to support the release of room 402, 404, 406, 408, and 410. During the October 2, 1992, inspection your staff informed the inspector that a complete closeout survey of rooms 402, 404 and 406 would be performed if your previously closeout surveys could not be located (see Region V Inspection Report 030-20378/92-01). Rooms 408 and 410 have been included because of the new information provided in your January 21, 1993, report regarding the use of these rooms. It is not clear as to the types and quantities of radionuclides that were handled in rooms 408 and 410 and if the room were used for performing the analysis of samples associated with activities that were also performed in rooms 402, 404, 406 and 113C.
3. The report does not provide any historical information regarding any spills or releases that may have occurred and the types and quantities of

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radionuclides handled in each room.

4. It is not clear from reading the report if any floor drains are located in room 113C and if the drains were surveyed.
5. A table of instruments and analytical procedure detection/sensitivities, i.e., Minimum Detectable Limits, should be provided (in the same units identified in the guidelines) along with a description of how these values were used.
6. The description of the methodology used to evaluate non-removable activity is not clearly described in the report. Measurement at current guideline levels for H-3 by direct field methods is not possible or practical, because of limitations of commercially available instrumentation. It would appear that removable contamination levels should be determined by collecting smears and comparing the results of your contamination surveys to representative samples obtained from the locations to determine the total activity present and thus establish a relationship for removable-total-activity. Based on this relationship, an estimate of the total activity level can be calculated and compared with the guidelines that were implemented.
7. Drawings of rooms 402, 404, 406, 408, and 410 should be included in the report.
8. The description of the sample and data collection, tabulation and presentation is not consistent with that required for comparison to the guidelines. Sample and measurement results should be reported in the units in which the guidelines are stated (e.g., dpm/100 cm²). Describe the methods used for interpreting data and comparing it with the guidelines.
9. Page two report states that a final beta-gamma survey were taken of rooms 402 and 406 - The report does not include the methodology which was used to perform the measurements (e.g., scan, direct, contamination). In addition the report does not include information regarding the instrument calibration data such as the applicable MDA's and types of calibration check sources that were used (e.g., was the instrumentation capable of detecting the radionuclides identified on page 1 of your January 21, 1993, report). The report should also state if inlets/outlets of the sinks and hoods were surveyed.
10. Page 1 of the report indicates that alpha emitters were authorized for use; however, no results of any alpha monitoring (direct and contamination surveys) was included in the report.
11. It appears that all surfaces in room 113C are not readily accessible for monitoring. These include the two walls and the surface between the concrete shield and floor that the shield rests on. To what detail were these areas monitored? How closely were the painted surfaces of the cave inspected to ensure that the paint still provide a good seal? If not monitored what's the basis for saying they are clean?
12. There is an apparent "typo" on page 2 of the report which states that

acceptable guidelines such as NUREG/CR 5829 were utilized to conduct the surveys. The correct reference should be NUREG/CR 5849.

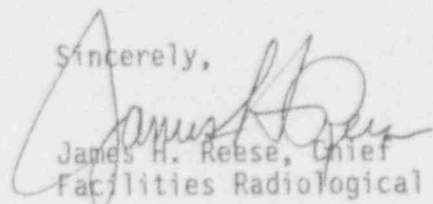
13. The Historical Background Section of the report states that radioisotopes previously stored in room 402 and used in rooms 404 and 406 were moved to the unused generator room, 113C. Were any of these radioisotopes used in room 113C? Did any spills result because of usage or transfers of these radioisotopes to and from the storage container? The closeout surveyed only included an assessment for H-3, however, it did not include an assessment for the isotopes that were in the storage container. Why?
14. The note in Table 1 states: "*Net dpm/100 cm² using 80 as an average background." The question is "80 what," (e.g., cpm, dpm, or some other unit)?
15. Different reporting 'units' are used throughout the report, Table-1 uses "dpm/100 cm² and dpm," for example Table-2 uses "pCi/gm," and Table-3 uses "cpm." The report should show how the your survey results compared with the levels reported in the Tables 1, 2 and 3, with the applicable levels provided in the guidelines?

In your responses to the above questions if you are able to justify why certain functions were not implemented or performed, you may do so provided that your rationale is consistent with the guidelines that were implemented.

It is requested that the decommissioning report be revised accordingly to include all of the information that has been requested so that the final report will become a stand-alone-document.

If you have any questions regarding these comments, please direct them to Mike Cillis at (510) 975-0228 or Jim Reese at (510) 975-0237.

Sincerely,



James H. Reese, Chief
Facilities Radiological Protection Branch

bcc:

John Martin
Bobby Faulkenberry
G. Cook
D. Tiktinsky
Tin Mo, NMSS
Docket File

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McIllis
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JR
Reese
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REQUEST COPY	REQUEST COPY	SEND TO PDR
YES / NO	YES / NO	YES / NO

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