

JAN 15 1997

Mr. Paul Bach  
General Manager  
EG&G, Inc.  
35 Congress Street  
Salem, MA 01970-6521

SUBJECT: INSPECTION NO. 030-04625/96-001 and 030-22545/96-001

Dear Mr. Bach:

This letter refers to your December 23, 1996 correspondence, in response to our November 27, 1996 letter.

Your response to violation A.2. appears to be a record of the spot checks of the operability of survey meter E-467 rather than the record of standard calibrations. An example of an acceptable survey meter calibration is described in "Guide for the Preparation of Licenses for the Use of Radioactive Materials in Calibrating Radiation Survey and Monitoring Instruments" (Task FC 413), enclosed. Please ensure that all future survey meter calibrations are performed in accordance with this guide, and that appropriate records of these survey instrument calibrations are retained for review.

Thank you for informing us of the corrective and preventive actions documented in your letter. These actions will be examined during a future inspection of your licensed program.

Your cooperation with us is appreciated.

Sincerely,

**ORIGINAL SIGNED BY:**

John D. Kinneman, Chief  
Nuclear Material Safety Branch 2  
Division of Nuclear Materials Safety

Docket Nos. 030-04625  
030-22545  
License Nos. 20-02804-01  
20-02804-03E

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P. Bach  
EG&G, Inc.

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Enclosure:  
Guide for the Preparation of Licenses for  
the Use of Radioactive Materials in  
Calibrating Radiation Survey and Monitoring  
Instruments (Task FC 413)

cc:  
Denise Cataldo, Radiation Safety Officer  
Commonwealth of Massachusetts

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**EG&G**

35 CONGRESS STREET, P.O. BOX 5006, SALEM, MASSACHUSETTS 01970-6521  
TEL: (508) 745-3200 TLX: 6617405 FAX: (508) 745-0894

December 23, 1996

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

Dear Sir/Madam:

This is in response to the Notice of Violation received as a result of the audit of EG&G's Radioactive Protection Program performed on November 1, 1996 (reference inspection nos. 030-04625/96-001 and 030-22545/96-001).

As a result of the Notice, the following corrective and preventive actions were taken:

1. *Finding: Monthly and quarterly surveys were not performed in areas where licensed material is used or stored since 1992.*

Monthly and quarterly inspections of areas using Carbon-14 were not done since February 1992. During the 2nd quarter of 1992, all production in which C-14 was used had ceased. At this time, the area where C-14 was applied had been closed. All equipment remained in the area in the event that production was resumed. In May, 1996, we hired an outside agency, Radiation Safety Associates Inc., to decommission the rooms where carbon-14 was stored and/or used. At this time, they conducted sampling to ensure that the areas were free of radioactive contamination. On June 14, 1996, they issued a report of their findings. In October, 1996, Radiation Safety Associates removed all of the waste drums of radioactive materials from our facility. We failed to notify the NRC that we had eliminated C-14 from our processes and had decommissioned those areas where carbon 14 was stored and/or used. We are reviewing the NRC document "Timeliness in Decommissioning of Material Facilities". We will notify the NRC of the decommissioning by forwarding the sampling data and other requirements per the NRC document. This will be completed by 3/1/97.

2. *Finding: Two survey meters (E463 and E285) were not calibrated at 6 month intervals as required by our license.*

E#285: This meter was calibrated on April 10, 1996. Prior to that, it had not been calibrated since March 22, 1993. EG&G possesses two of these monitors. When one needs repair, the second is then put in operation. From 3/22/93 through 4/10/96, the second unit, E#467, was in operation. A review of the calibration data (see attached) for this unit shows that E#467 was calibrated at maximum, every 6 months. This was an oversight during the NRC audit.

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E#463: This meter has been calibrated at yearly intervals. Calibration records show that it should have been calibrated every 6 months. The Calibration department has been issued a memo indicating the error in their calibration cycles. They will ensure that the unit be put on a 6 month calibration schedule.

3. *Finding: Training of radiation workers was not conducted since February, 1992. Training is required at least every 2 years.*

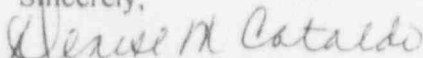
No system was in place to ensure that appropriate personnel received training at stated intervals. The management of the department will implement a system in which the employees requiring training are identified. The type of training that these employees will need will be documented and become part of EG&G's present training database. The management of the department will work with the Environmental/Safety Manager and the department's Assistant Radiation Safety Officer to develop and present the training to the employees. This will be accomplished by 2/15/97.

4. *Finding: Audits of the content of and implementation of the radiation protection program have not been conducted since Feb. 1992.*

As part of our Environmental Management System, audits of production areas are done on a monthly basis (a different area each month.) Our audit trails and reports of the areas using radioactive materials do not indicate that audits of the radioactive protection program have been done. We are changing the manner in which environmental/safety audits are performed. Starting 1/97, we will conduct quarterly facility-wide audits. These audits will include radiation safety. Checklists will be developed for auditor reference. Audits will be conducted in the following months: March, June, September, December. Auditors will receive training prior to conducting the audit. The training will include the radiation safety auditing checklist.

If there are any further explanations required, please contact me at 508-734-3209 x566.

Sincerely,



Denise M. Cataldo

Environmental/Safety Manager

CC: Regional Administrator, Region I

# CALIBRATION RECORD

CAL. IDENT. NO. E-467 CAL. PROCEDURE NO. MFG. SPEC.

## CHECK POINTS

DATE CALIBRATED	$\mu\text{Ci}/\text{m}^3$	CALC. $\mu\text{Ci}/\text{m}^3$						NOTES
4-14-92	3.9	3.86					12	OUTLET PRESSURE 0.25
6-2-92	3.9	3.82					12	" "
7-31-92	3.7	3.61					12	" "
9-29-92	3.7	3.58					12	" "
* 11-24-92	3.6	3.45					12	" "
1-22-93	3.6	3.42					12	" "
3-25-93	3.0	2.86					12	" "
5-20-93	3.0	2.799					12	" "
7-26-93	3.2	2.953					12	" "
* 9-21-93	3.4	3.112					12	" "
11-18-93	3.0	2.729					12	" "
1-12-94	3.2	2.873					12	" "
4-11-94	3.3	2.919					12	" "
6-29-94	3.2	2.793					12	" "
* 9-26-94	2.7	2.333					12	" "
12-19-94	2.7	2.301					12	" "
16 MAR 95	2.4	2.007					12	" "
13 JUN 95	3.2	2.653					12	" "
5 SEP 95	3.5	2.860					12	" "
* 30 NOV 95	3.5	2.835					12	
27 FEB 96	3.5	2.794						