

MAY 22 1985

Docket No. 030-21248
Control No. 103706

Alicia Research & Testing Labs, Inc.
ATTN: Michael Kozak
President
Stafford Forge Road RR1 Box 150AA
West Creek, New Jersey 08092

Gentlemen:

This is in reference to your application dated April 17, 1985 for a byproduct material license. In order to continue our review, we need the following additional information:

1. Section 8.D.1. - "Radiation Safety Training Program" of your Radiation Safety and Control Manual you provide the requirements to be an assistant radiographer. However, you did not specify that a written examination was required and the minimal passing score. Please note that individuals must be qualified as a radiographer's assistant prior to entering the on-the-job training phase of your program.
2. Section 8.D.2 - "Radiation Safety Training Program" of your Radiation Safety and Control Manual you provide the requirements to be a radiographer. However, you did not specify that a written examination and a field examination will be given. An individual with no previous experience should receive a minimum of three months on-the-job training.
3. Section 8.D.2 - "Radiation Safety Training Program" of your Radiation Safety and Control Manual you provide the requirements for personnel with previous radiographic experience. However, you did not specify that a written examination and field examination will be given. If you will be giving an examination similar or the same as that which you give to qualify individuals as radiographer's assistants, please specify.
4. Item 3.2.5 - "Radiation Detection Instruments" of your Radiation Safety and Control Manual you state that the area monitor must be turned on. The alarm must be operational 24 hours per days. Please confirm that the alarm will sound a warning whenever radiation is present and the door to the exposure room is opened without having to turn on or connecting the alarm.
5. Attachment 6 - "Description of Calibration Procedure" of your Radiation Safety and Control Manual you state that you will determine the distance from the source at which the radiation intensity would be 800 mr/hr. In a like manner how to determine the radiation intensities for 200 mr/hr, 80 mr/hr, 20mr/hr, 8mr/hr and 2mr/hr. However, Attachment 5 - "Sample Calibration Data Sheet" you specify the calibration point to be 2.5

OFFICIAL RECORD COPY

879DAVIS/13/85 - 0001.0.0
05/21/85

8507230342 850702
REG1 LIC30
29-20838-01 PDR

ML10

mr/hr, 7.5 mr/hr, 25mr/hr, 75mr/hr, 250mr/hr and 750 mr/hr. Please resolve this conflict. In addition, please note that mr/hr should be in lower cast letter not capitals. Furthermore, please specify who will do the calibrations of the survey meters.

6. Section 4 - "Personnel Monitoring Equipment," of your Radiation Safety and Control Manual you do not specify what radiation source you will be using to calibrate the pocket dosimeters. In addition please specify who will do the calibrations of the pocket dosimeters.
7. Item 7.5.1.B. - "Excessive Radiation Exposure to Personnel" of your Radiation Safety and Control Manual you state that radiographic personnel are limited to 3 rem per calendar quarter and adults are limited to 1.25 rem per calendar quarter. However, Section 20.101 of 10 CFR Part 20 requires individuals in a restricted area to be limited to 1.25 rem per calendar quarter unless a NRC Form 4 is completed, then a licensee is permitted to receive 3 rem per calendar quarter. Please explain who these "Adults" are?
8. Item 6.6.4.1.B(f) - "General Operating Procedure" of your Radiation Safety and Control Manual you state ... "so that oper -". Please complete this sentence.
9. Item 6.6.4.1.B. (t) - "General Operating Procedure" of your Radiation Safety and Control Manual you state the Transportation Index is the number of millirem per hour at three feet. However, Section 173.411(bb) of 49 CFR Part 173 specifies that the transport index is the number expressing the maximum radiation level in millirem per hour at one meter (3.3 feet) from the external surface of the package. Please modify your instructions.
10. The Radiation Safety Internal Audit Form does not contain all of the elements of an acceptable internal inspection program. Exhibit 1 is an internal inspection checklist for a field radiography jobsite. Please modify your audit form to contain all of these elements.

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I office and refer to Mail Control No. 103706.

Sincerely,

Original Signed By:
Jack Davis

Jack Davis
Nuclear Materials Safety Section A
Division of Radiation Safety
and Safeguards

Enclosures:

1. 10 CFR Part 20, 34
2. Exhibit 1 Internal Inspection Checklist

RI:DRSS

Davis/mlb

5/22/85 *J*

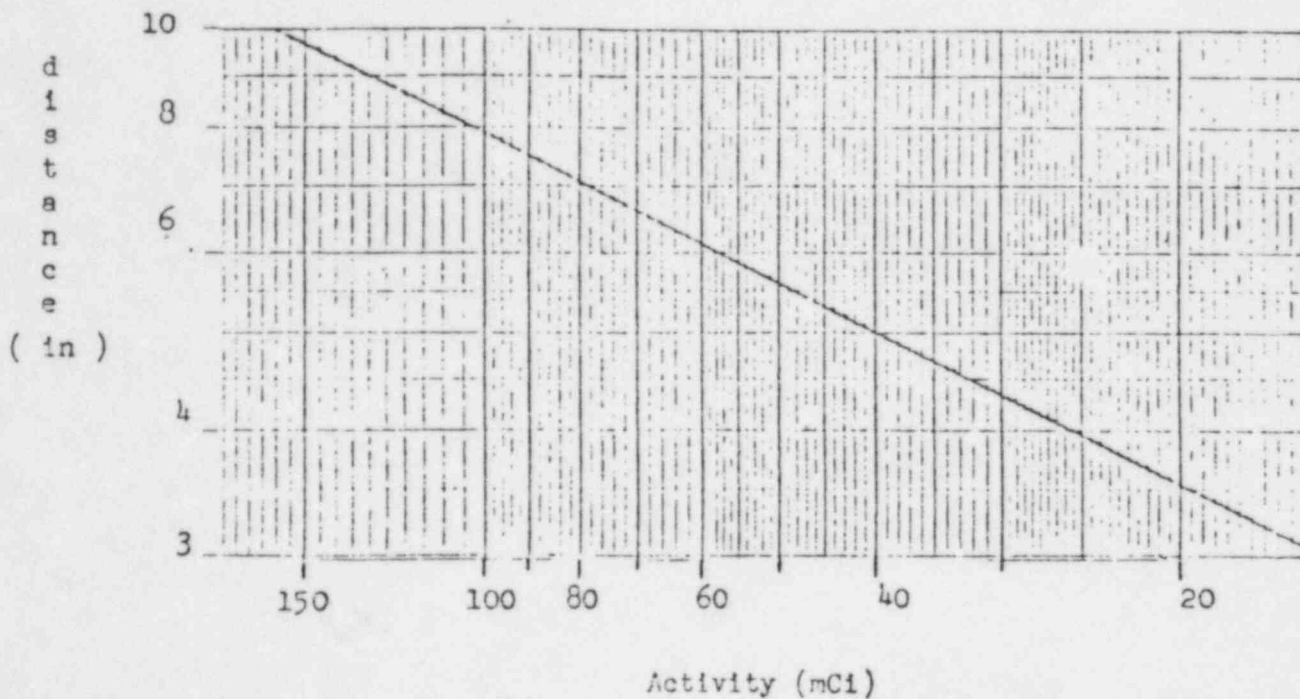


Figure 3

Distance to 800mR/hr isodose line as a Function of Activity

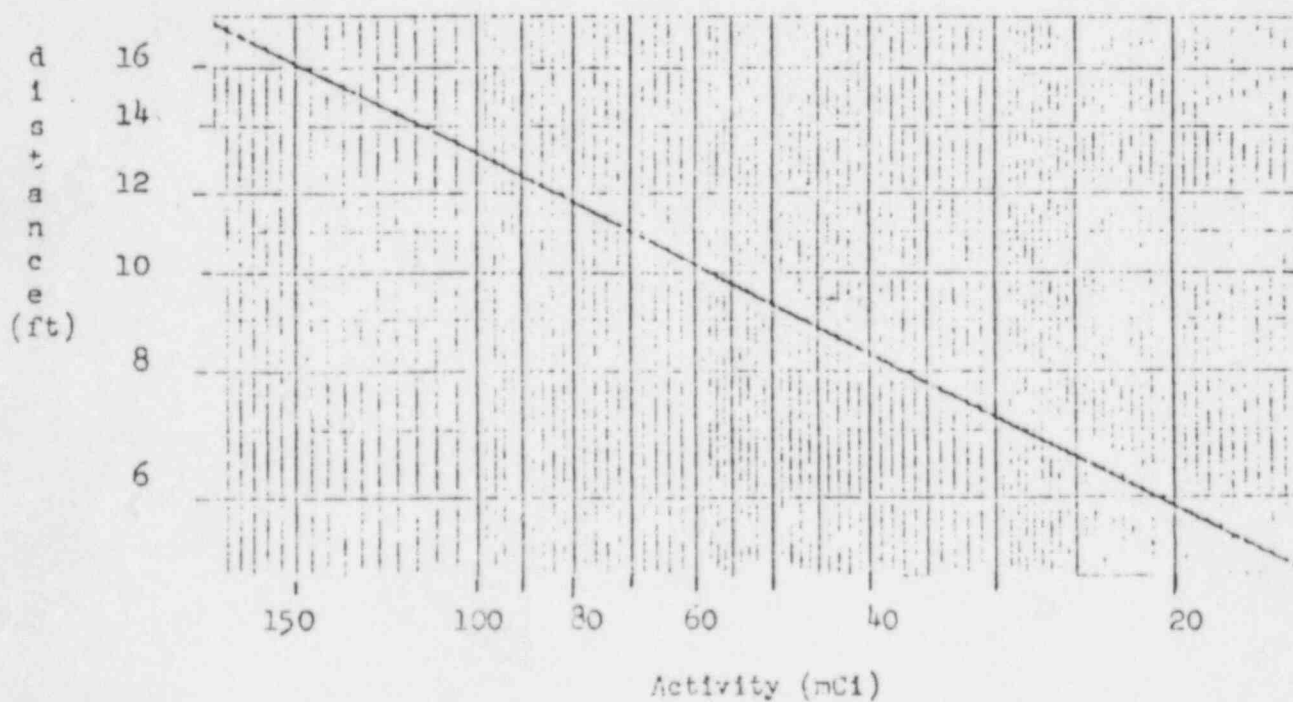


Figure 4

Distance to 20R/hr isodose line as a Function of Activity

EXHIBIT 1

Field Radiography

Internal Inspection Checklist

Radiographic Location _____ Date _____ Time _____
Radiographer _____ Inspector _____
Radioisotope _____ Curies _____ Serial No. _____
Projector Serial No. _____ Projector Model No. _____
Survey Meter Model No. _____ Serial No. _____ Calibration Due Date _____

Yes

No

1. Was the radiographer wearing a film badge and dosimeter?
2. Were other individuals working within the restricted area wearing film badges and dosimeters?
3. Was the restricted area posted with "CAUTION (or DANGER) RADIATION AREA" signs?
4. Was the restricted area properly controlled to prevent unauthorized entry?
5. Was the high radiation area posted with "CAUTION (or DANGER) HIGH RADIATION AREA" signs?
6. Did the radiographer have a calibrated and properly operating survey meter?
7. Was the utilization log properly filled out?
8. Did the radiographer have sufficient knowledge of safety rules? (Ascertained by oral questions.)
9. Was the radiographer working with defective equipment?
10. Did the radiographer properly survey the source projector and source tube and take a radiation reading 1 foot (0.3 m) in front of the source following the radiographic exposure?
11. Were radioactive isotopes stored properly and kept locked to prevent unauthorized removal?

EXHIBIT 1, continued

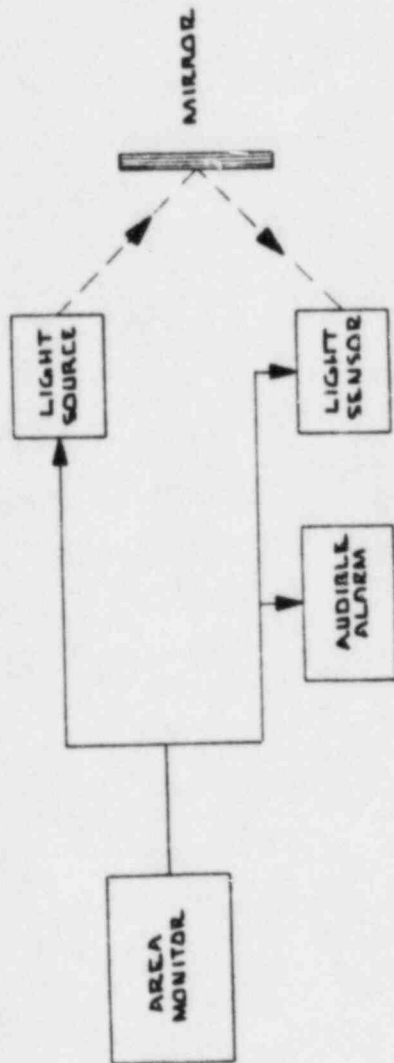
Yes

No

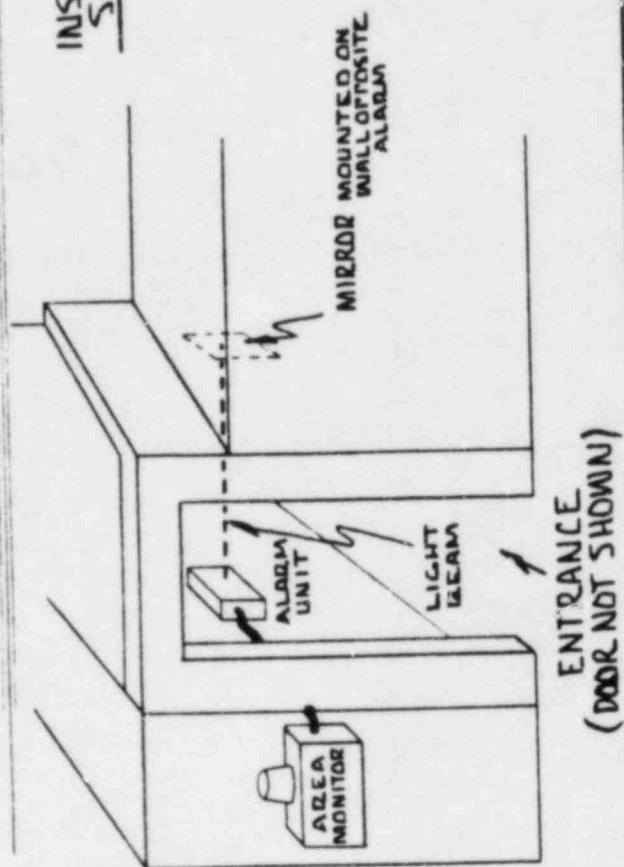
12. Was the storage area posted with "CAUTION (or DANGER) RADIOACTIVE MATERIAL" signs?
13. Did the radiographer possess a copy of the applicant's operating and emergency procedures and, as applicable, State or NRC rules and regulations for protection against radiation?
14. Were there any items of noncompliance other than those listed on this form? (If any, explain in remarks.)

Remarks _____

CIRCUIT DIAGRAM



INSTALLATION SKETCH



Alicia Research & Testing Labs. Inc.
West Creek, New Jersey

SCALE: NONE	APPROVED BY:	DATE: 10-1-84
DRAWING NUMBER: ART-0002		

ALARM SYSTEM

ART-0002

03706



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

MAY 22 1985

Docket No. 030-21248
Control No. 103706

Alicia Research & Testing Labs, Inc.
ATTN: Michael Kozak
President
Stafford Forge Road RR1 Box 150AA
West Creek, New Jersey 08092

Gentlemen:

This is in reference to your application dated April 17, 1985 for a byproduct material license. In order to continue our review, we need the following additional information:

1. Section 8.D.1. - "Radiation Safety Training Program" of your Radiation Safety and Control Manual you provide the requirements to be an assistant radiographer. However, you did not specify that a written examination was required and the minimal passing score. Please note that individuals must be qualified as a radiographer's assistant prior to entering the on-the-job training phase of your program.
2. Section 8.D.2 - "Radiation Safety Training Program" of your Radiation Safety and Control Manual you provide the requirements to be a radiographer. However, you did not specify that a written examination and a field examination will be given. An individual with no previous experience should receive a minimum of three months on-the-job training.
3. Section 8.D.2 - "Radiation Safety Training Program" of your Radiation Safety and Control Manual you provide the requirements for personnel with previous radiographic experience. However, you did not specify that a written examination and field examination will be given. If you will be giving an examination similar or the same as that which you give to qualify individuals as radiographer's assistants, please specify.
4. Item 3.2.5 - "Radiation Detection Instruments" of your Radiation Safety and Control Manual you state that the area monitor must be turned on. The alarm must be operational 24 hours per days. Please confirm that the alarm will sound a warning whenever radiation is present and the door to the exposure room is opened without having to turn on or connecting the alarm.
5. Attachment 6 - "Description of Calibration Procedure" of your Radiation Safety and Control Manual you state that you will determine the distance from the source at which the radiation intensity would be 800 mr/hr. In a like manner how to determine the radiation intensities for 200 mr/hr, 80 mr/hr, 20mr/hr, 8mr/hr and 2mr/hr. However, Attachment 5 - "Sample Calibration Data Sheet" you specify the calibration point to be 2.5

mr/hr, 7.5 mr/hr, 25mr/hr, 75mr/hr, 250mr/hr and 750 mr/hr. Please resolve this conflict. In addition, please note that mr/hr should be in lower cast letter not capitals. Furthermore, please specify who will do the calibrations of the survey meters.

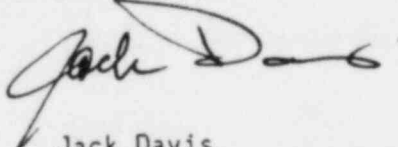
6. Section 4 - "Personnel Monitoring Equipment," of your Radiation Safety and Control Manual you do not specify what radiation source you will be using to calibrate the pocket dosimeters. In addition please specify who will do the calibrations of the pocket dosimeters.
7. Item 7.5.1.B. - "Excessive Radiation Exposure to Personnel" of your Radiation Safety and Control Manual you state that radiographic personnel are limited to 3 rem per calendar quarter and adults are limited to 1.25 rem per calendar quarter. However, Section 20.101 of 10 CFR Part 20 requires individuals in a restricted area to be limited to 1.25 rem per calendar quarter unless a NRC Form 4 is completed, then a licensee is permitted to receive 3 rem per calendar quarter. Please explain who these "Adults" are?
8. Item 6.6.4.1.B(f) - "General Operating Procedure" of your Radiation Safety and Control Manual you state ... "so that oper -". Please complete this sentence.
9. Item 6.6.4.1.B. (t) - "General Operating Procedure" of your Radiation Safety and Control Manual you state the Transportation Index is the number of millirem per hour at three feet. However, Section 173.411(bb) of 49 CFR Part 173 specifies that the transport index is the number expressing the maximum radiation level in millirem per hour at one meter (3.3 feet) from the external surface of the package. Please modify your instructions.
10. The Radiation Safety Internal Audit Form does not contain all of the elements of an acceptable internal inspection program. Exhibit 1 is an internal inspection checklist for a field radiography jobsite. Please modify your audit form to contain all of these elements.

Alicia Research & Testing Labs, Inc.

3

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I office and refer to Mail Control No. 103706.

Sincerely,



Jack Davis
Nuclear Materials Safety Section A
Division of Radiation Safety
and Safeguards

Enclosures:

1. 10 CFR Part 20, 34
2. Exhibit 1 Internal Inspection Checklist

03706

BETWEEN: William O. Miller, Chief
License Fee Management Branch
Office of Administration -

John E. Glenn, Chief
Nuclear Materials Section B
Division of Engineering and
Technical Programs

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: Alicia Research + Testing Labs, Inc.

Application Dated: 4/17/85

Control No.: 03706

License No.: New

2. FEE ATTACHED

Amount: \$700.00

Check No.: 1185

3. COMMENTS

Signed Brenda Blatchek

Date 4/24/85

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount: 30 \$700

2. Correct Fee Paid. Application may be processed for:

Amendment _____

Renewal _____

License ✓

Signed Frances Brown

Date 4/30/85

109 5/3/85