

NOV 10 1993

License No. 44-28698-01
Docket No. 030-32526
Control No. 118355

Health Physics Services
ATTN: Bob N. Leach
Radiation Safety Officer
83 Pine Street
Brattleboro, Vermont 05301

Dear Mr. Leach:

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I office, the Licensing Assistance Section, (215) 337-5093 or 5239, so that we can provide appropriate corrections and answers. Note that your license has been rewritten to conform with current licensing policies. License Conditions 10, 11.A., and 13 have been changed and Condition 12 has been added.

Please note that since you do not possess a radioactive source to perform calibrations of your survey meters, this authority has not been put into your license. Your survey meters must be calibrated by an outside vendor licensed for the activity.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Until your license is terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Not possess and use materials authorized in Items 6, 7, and 8, on the license until:
 - a. you have constructed the facilities and obtained the equipment described in the license application and supporting documentation; and

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- b. you have notified the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406 in writing, that activities authorized by the license will be initiated.
3. Notify NRC, in writing, within 30 days:
 - a. when an authorized user or Radiation Safety Officer, permanently discontinues performance of duties under the license or has a name change; or
 - b. when the licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).
4. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:
 - a. when you decide to terminate all activities involving materials authorized under the license; or
 - b. if you decide not to complete the facility, acquire equipment, or possess and use authorized material.
5. Request and obtain a license amendment before you:
 - a. permit anyone to work as an authorized user under the license;
 - b. change Radiation Safety Officers;
 - c. order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
 - d. add or change the areas of use or address or address of use identified in the license application or on the license; or
 - e. change ownership of your organization.
6. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

You will be periodically inspected by the NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

Thank you for your cooperation.

Sincerely,

Original Signed By:
Judith A. Joustra

Judith Joustra
Nuclear Materials Safety Branch
Division of Radiation Safety
and Safeguards

Enclosures:

- 1. Amendment No. 01
- 2. Requirements for Materials Licensees
- 3. Agreement State List

DRSS:RI
Courtemanche/mlb
SR
10/27/93

DRSS:RI
Joustra *[Signature]*
10/27/93

CONVE... JN RECORD

TI
2:10 PM

DATE
11/9/93

TYPE

VISIT

CONFERENCE

TELEPHONE

INCOMING

OUTGOING

ROUTING

NAME/SYMBOL INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Robert Lenz

ORGANIZATION (Office, dept., bureau, etc.)

Health Physics Service

TELEPHONE NO.

(802) 257-7467

SUBJECT

Confirmation of TLO's (44-28698-01)

SUMMARY

I called Mr. Lenz to confirm that it was TLO's that were being exchanged quarterly. He stated that he would be using TLO's to monitor personnel exposure and would exchange them quarterly.

I also explained that his license would read "Any byproduct material" instead of Atomic Abs. 3-83 and 84-103 because of a policy change in the Region.

ACTION REQUIRED

Document

NAME OF PERSON DOCUMENTING CONVERSATION

Steven Courtemanche

SIGNATURE

Steven Courtemanche

DATE

11/9/93

ACTION TAKEN

SIGNATURE

TITLE

DATE

50271-101

U.S. G.P.O. 1983-381-526/8346

CONVERSATION RECORD

OPTIONAL FORM 271 (12-76)
DEPARTMENT OF DEFENSE

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118355

BOB N. LEACH
Health Physics Services

83 Pine Street
Brattleboro, Vermont 05301
Tel. 802-257-7467

MS16
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030-32526

October 19, 1993

Walter J. Pasciak, Chief
Industrial Applications
Division of Radiation Safety and Safeguards
United States Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, Penn. 19406-1415

License No. 44-28698-01
Docket No. 030-32526
Control No. 118355

Dear Mr. Pasciak:

The additional information you requested is as follows:

NRC

1. Your letter request authorization for analysis of unsealed material in samples provided to you by licensees. 10 CFR 19.12 requires, in part, that individuals working in or frequenting any portion of a restricted area be instructed in, and instructed to observe, to the extent within the worker's control, the applicable provisions of the Commission regulations and licenses for the protection of personnel from exposure to radiation or radioactive materials occurring in such area. Please confirm that your training program will include those areas specified in 10 CFR 19.12.

Response

The training program will include the requirements of 10 CFR 19.12.

NRC

2. You state on page 2 of the July 5, 1993 letter that radioactive material will be returned to the licensee form which it originated. Confirm that all packaging, labeling, and packaging requirements of the NRC and DOT will be met. Also, confirm that prior to shipping the samples to the licensee, you will, in accordance with 10 CFR 30.41, confirm that the licensee is authorized by the NRC or Agreement State to receive and possess that sample in that particular form. If the licensee is not authorized to receive the samples, confirm that you will dispose of the samples as waste in an authorized manner.

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Response

All packaging, labeling, and packaging requirements of the NRC and DOT will be met.

A copy of the licensee's license will be obtained and a determination made that the licensee is authorized to receive the samples. If the samples cannot be returned, they will be disposed of as authorized by the NRC.

NRC

3. Your request to add unsealed material to your license did not include possession limits for the licensed material. Please state the maximum possession limit for which you want authorization for Atomic Numbers 3 through 83, inclusive, and Atomic Numbers 84 through 103 inclusive.

Response

The amount of radioactive material in dispersible form that will be in the possession of this licensee shall not exceed 10 millicuries for radioactive isotopes with an atomic number of 3 to 83. In addition, for all other radioactive isotopes including source and special nuclear material the amount shall not exceed 1000 times the applicable quantities of appendix C to paragraphs 20.1-20.601 of 10 CFR part 20. (For a combination of these isotopes over atomic #83, the fractions, of each isotope divided by its respective limit, when added together, shall not exceed one.) These limits are less than the quantities defined in 10 CFR 40.36, and 70.25 which require a decommissioning plan.

NRC

4. In Items 5.3 and 6 of your application dated February 10, 1991, you requested authorization to possess beta sources from your customers. Please provide the following information if you want authorization for the beta sources or confirm that you no longer want the authorization:
 - a. It is unclear whether your possession of the sealed sources is to calibrate the instruments or to perform a leak test analyses of the sealed sources. Please clarify.
 - b. Your request for sealed sources does not include the manufacturer's name(s), the model number(s), or possession limits that you want to be authorized for. Please note that some beta thickness gauge sealed sources also have a gamma ray component and must be handled appropriately.

Response

I no longer want the authorization to receive sealed beta sources for leak testing.

NRC

5. Since you are requesting authorization for unsealed material, you must provide your basis for not providing personnel monitoring equipment in accordance with 10 CFR 20.1502 or commit to providing personnel monitoring equipment naming the processor of the equipment and the exchange frequency.

Response

R.S. Landauer Jr. & Co. service will be used, and the monitoring equipment will be changed quarterly. In the event that conditions change such that it becomes impractical to continue the use of Landauer service, a new vender will be selected that is NAVLAP certified.

NRC

6. Item 10.2 of your application dated February 10, 1991, contains your procedures for the calibration of survey meters. These procedures only require that the survey meters be calibrated using an electronic pulse generator. Since you will be using your survey meters to assure compliance with NRC requirements (i.e., surveys), then the survey meters must be calibrated using a radioactive source and not just with an electronic pulse generator. The procedure in Item 10.3 in Regulatory Guide FC 413-4 (Enclosed) are acceptable to the NRC or you may develop your own. If you decide to have your instruments calibrated by an outside firm, then please provide their name, address and license number that authorizes the service. Alternatively, you may send the survey meter back to the manufacturer for recalibration.

Response

Instruments used for dose rate measurements will be calibrated using the procedure in Item 10.3 in Regulatory Guide FC 413-4, or they will be calibrated by Ludlum Instrument Co., license # (Texas)LO 1963. In the event that conditions change such that it becomes impractical to continue the use of Ludlum Instrument Co., a new vender will be selected to calibrate the instruments that is licensed by the NRC, or the manufacturer of the instrument will be used.

NRC

7. Your July 5, 1993 letter makes reference to the revision to 10 CFR 20 which will become effective on January 1, 1994. you may choose to make an early implementation of these

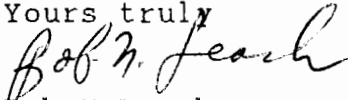
regulations through notification of the Director of the NRC Office of Nuclear Materials Safety and Safeguards in accordance with 10 CFR 20/1008(a). Please confirm if you wish to make an early implementation of the revised 10 CFR 20.

Response

I will be implementating the revised 10 CFR 20 before January 1, 1994.

In hopes that you find this response adaquate, I remain

Yours truly



Bob N Leach
Health Physicist

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License No. 44-28698-01

Docket No. 030-32526

Control No. 118355

Health Physics Services

ATTN: Robert Leach

Radiation Safety Officer

83 Pine Street

Brattleboro, Vermont 05301

Dear Mr. Leach:

This is in reference to your letter dated July 5, 1993, to amend License No. 44-28698-01. In order to continue our review, we need the following additional information:

1. Your letter requests authorization for the analysis of unsealed material in samples provided to you by licensees. 10 CFR 19.12 requires, in part, that individuals working in or frequenting any portion of a restricted area be instructed in, and instructed to observe, to the extent within the worker's control, the applicable provisions of the Commission regulations and licenses for the protection of personnel from exposure to radiation or radioactive materials occurring in such area. Please confirm that your training program will include those areas specified in 10 CFR 19.12.
2. You state on page 2 of the July 5, 1993 letter that radioactive material will be returned to the licensee from which it originated. Confirm that all packaging, labeling, and packaging requirements of the NRC and DOT will be met. Also, confirm that prior to shipping the samples to the licensee, you will, in accordance with 10 CFR 30.41, confirm that the licensee is authorized by the NRC or Agreement State to receive and possess that sample in that particular form. If the licensee is not authorized to receive the samples, confirm that you will dispose of the samples as waste in an authorized manner.
3. Your request to add unsealed material to your license did not include possession limits for the licensed material. Please state the maximum possession limit for which you want authorization for Atomic Numbers 3 through 83, inclusive, and Atomic Numbers 84 through 103, inclusive.

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4. In Items 5.3 and 6 of your application dated February 10, 1991, you requested authorization to possess beta sources from your customers. Please provide the following information if you want authorization for the beta sources or confirm that you no longer want the authorization:
 - a. It is unclear whether your possession of the sealed sources is to calibrate the instruments or to perform a leak test analysis of the sealed sources. Please clarify.
 - b. Your request for sealed sources does not include the manufacturers' name(s), the model number(s), or possession limits that you want to be authorized for. Please note that some beta thickness gauge sealed sources also have a gamma ray component and must be handled appropriately.
5. Since you are requesting authorization for unsealed material, you must provide your basis for not providing personnel monitoring equipment in accordance with 10 CFR 20.1502 or commit to providing personnel monitoring equipment naming the processor of the equipment and the exchange frequency.
6. Item 10.2 of your application dated February 10, 1991, contains your procedures for the calibration of survey meters. These procedures only require that the survey meters be calibrated using an electronic pulse generator. Since you will be using your survey meters to assure compliance with NRC requirements (i.e., surveys), then the survey meters must be calibrated using a radioactive source and not just with an electronic pulse generator. The procedures in Item 10.3 in Regulatory Guide FC 413-4 (Enclosed) are acceptable to the NRC or you may develop your own. If you decide to have your instruments calibrated by an outside firm, then please provide their name, address and license number that authorizes the service. Alternatively, you may send the survey meter back to the manufacturer for recalibration.
7. Your July 5, 1993 letter makes reference to the revision to 10 CFR 20 which will become effective on January 1, 1994. You may choose to make an early implementation of these regulations through notification of the Director of the NRC Office of Nuclear Materials Safety and Safeguards in accordance with 10 CFR 20.1008(a). Please confirm if you wish to make an early implementation of the revised 10 CFR 20.

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. 118355. If you have any technical questions regarding this deficiency letter please call Steven R. Courtemanche at (215) 337-5075.

Health Physics Services

-3-

If we do not receive a reply from you within 30 calendar days from the date of this letter, we shall assume that you do not wish to pursue your application.

Sincerely,

Original Signed By:
Judith A. Joustra

WJ Walter J. Pasciak, Chief
Industrial Applications Section
Division of Radiation Safety
and Safeguards

Enclosure:
Regulatory Guide FC 413-4

DRSS:RI
Courtemanche/cmm
SRC

10/13/93

DRSS:RI
WJ Pasciak
WJ

10/13/93

BOB N. LEACH
Health Physics Services

83 Pine Street
Brattleboro, Vermont 05301
Tel. 802-257-7467

030-32526

EXPEDITE

REQUESTED

05 July 1993

James Dwyer
Industrial Applications Section C
Division of Radiation Safety and Safeguards
United States Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, Penn. 19406-1415

Log	July 10 '93
Remitter	Bob N. Leach
Check No.	409514752
Amount	\$2207.75
Fee Category	3F
Type of Fee	PM
Date Charged	
Date Completed	7/10/93
By:	[Signature]

Ref. License No. 44-28698-01

Dear Mr. Dwyer:

I would like to request an interpretation of the above license regarding the receiving of small beta sources, and a modification to the above licensee to receive contaminated hazardous materials samples for analysis.

Interpretation of the license

Section 13 of the license includes the application as part of the license. The original application for the above license, under Item 9, states:

"but on occasion, small beta sources used in thickness measuring devices may be received at the facility listed in Item 3"

The following statement was added to this paragraph at the request of your department:

"These sources will be shipped in accordance with DOT regulations."

The license states under Section 7:

A. Analytical samples.

I am sure your original intent was to allow these sources to be received under this license, but the wording under Section 7 of the license does not appear to allow this to happen.

Would you please provide a written statement that will allow these sources to be received under this license?

Modification of the License

118355

There is a need among facilities with radioactive materials

licensees to have hazardous materials samples, such as asbestos and lead paint, analyzed for the hazardous material. In some cases these samples are also contaminated with radioactive material.

To accomodate this need, I would like to request that Health Physics Services' license be amended to allow the receipt of analytical samples other than for purposes of leak testing sealed sources.

These samples will be received and analyzed for the hazardous material at the Health Physics Services facility at 83 Pine Street or, in some cases after receipt, escorted to other facilities for special analyses. The radioactive material will be received and controlled per the attached procedure.

Health Physics Services procedures may only be modified after a thorough review and approval of the RSO.

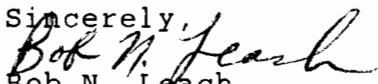
All radioactive material will be returned to the licensee from which it originated. This is with the understanding of the NRC that licensed material may be returned to the original licensee regardless of the restrictions in the original licensee's license. This will insure that radioactive waste does not become a problem of Health Physics Services.

If radioactive samples are to be taken off site, for analysis, they will be under constant control of the RSO, or a qualified individual who meets the following requirements:

1. Has at least four years' experience in the field of Radiation Protection, with at least two of those four years directly related to handling or analyzing radioactive material.
2. Has been trained and is familiar with the procedure for "Handling Hazardous Material Samples that are Radioactive", and the Health Physics Services license.
3. Has at least one year of experience handling hazardous materials other than radioactive material. This year may also be one of the four years above, (i.e. handling mixed hazardous waste).

A check for \$280 is enclosed for this Amendment.

Thank you for your consideration of this request.

Sincerely,

Bob N. Leach
Radiation Safety Officer

Proc. No. OP 0002
Issue Date 7/06/93
Approved by BJA

HANDLING HAZARDOUS MATERIAL SAMPLES THAT ARE RADIOACTIVE

PURPOSE

To establish a procedure for the handling of hazardous material samples in a manner that will insure the safety of all personnel involved, and maintain positive control of all the radioactive materials.

DISCUSSION

Hazardous material samples that are also contaminated with licensed radioactive material must be handled such that the licensed material is controlled under the jurisdiction of an NRC license by properly qualified individuals. Occasionally some of these samples may have to be taken to other facilities for analysis of the hazardous material. When this is required, the samples will be in the continuous control and/or under the direct supervision of the RSO or a qualified individual approved by the RSO.

ATTACHMENTS

1. Sample Control Form

REFERENCES

1. 10 CFR 20 "Standards for Protection Against Radiation"
2. 10 CFR 30 "Rules for General Applicability to Domestic Licensing of Byproduct Material"
3. 49 CFR "Transportation"

DEFINITIONS

Qualified Individual: An individual that meets the following criteria:

- a. Has at least four years documented experience in the field of Radiation Protection, with at least two of those four years directly related to handling or analyzing radioactive material.
- b. Has been trained and is familiar with this procedure, and the applicable license.

- c. Has at least one year of experience handling hazardous materials other than radioactive material. This year may also be one of the four years above, (ie handling mixed hazardous waste).
- d. Has been evaluated and approved by the RSO.

Mixed Hazardous Material: Material that is classified as hazardous by the EPA or OSHA, and is contaminated with radioactive material.

Continuous Control: Licensed radioactive material is considered under continuous control of the Licensee if one of the following criteria is met:

- a. The radioactive material is stored in the designated facility at 83 Pine St. Brattleboro, Vt. or
- b. The radioactive material is being physically controlled by, or handled under the direct supervision of a Qualified Individual, or
- c. The radioactive material is secured such that only a Qualified Individual has access to it.

PROCEDURE

CAUTION

Before radioactive samples are received from a contractor Licensee, a copy of the contractor's license shall be obtained. This license shall be reviewed to ensure that there will be no problems returning the sample materials to the contractor licensee.

1. Obtain a copy of the contractor's Radioactive Materials license. Forward it to the RSO for review. The RSO shall ensure that the samples may be returned to the contractor.
2. Determine from the contractor the total amount of radioactive material and isotope to be shipped. Forward this information to the RSO.

CAUTION

Do not allow any Contractor Licensee to ship radioactive material to Health Physics Services without the specific approval of the RSO.

3. The RSO will verify that this quantity will not exceed the total inventory allowed by Health Physics Services license, and if appropriate, authorize the shipment.

4. Provide a copy of Health Physics Services license to the Contractor Licensee.

CAUTION

All radioactive samples must be shipped to:

Health Physics Services
83 Pine St.
Brattleboro, Vt. 05301

5. Notify the Contractor Licensee to ship the samples to Health Physics Services.
6. When the samples arrive perform a receipt inspection as per 20.1906 (b&c), and make necessary notifications per 20.1906 (d).
7. Initiate the Radioactive Material Control Form, and enter all appropriate data in the Radioactive Material Inventory Log.

RADIOACTIVE MATERIAL CONTROL FORM

1. Initiated by _____ Time _____ Date _____
2. Sample Arrival Date _____ Time _____ Initials _____
3. Survey Package to insure compliance with 10 CFR 20.1906 (b).
Time _____ Date _____ Initials _____
4. Received From _____
Address _____

License no. _____
Address on license if different than above

5. Total activity received _____ number of samples _____
6. Total activity in inventory with this shipment _____
7. Has the license limit been exceeded _____ If yes, notify the
RSO immediately. Initials _____
8. Are these samples to be analyzed at the 83 Pine St.
facility _____ If yes, skip step 9.
9. If the samples are to be analyzed elsewhere, complete the
following:

NOTE

Maintain a log on a separate sheet of paper or on the back of this form for additional information for which there may not be enough room on this form.

- a. List the Qualified Individual/individuals to be responsible

b. Location where samples are to be analyzed:

c. Leave a copy of this form with the RSO Initials_____

d. Instruments to be taken to facility:
Minimum requirement, one RM-14/HP-210 or
equivalent.

NOTE

The activity of these samples will be low enough such that dose rates from these samples will not expose personnel working with these samples to radiation levels that would require personnel monitoring per 10 CFR 20.1502.

e. Verify that personnel monitoring will not be required per 10 CFR 20.1502. Initials_____

f. Obtain Approval from facility where samples will be analyzed. Initials_____

Approval given by_____

Title_____

g. List personnel other than Qualified individuals that will handle samples:

NOTE

An area shall be defined and posted per 10 CFR 20.1902 (e) where radioactive samples are to be handled. Appropriate personnel protection practices shall be

established before the samples are to be handled.

- h. Establish contamination control, and personnel protection requirements. Initials_____
- i. Discuss contamination control and personnel protection requirements with the personnel listed in 9.f above.

Initials of personnel listed above, indicating that they have received this discussion, understand these requirements, and agree to fully comply with them.

- _____
- j. Proceed with the analysis.
 - k. When the analysis is complete, gather up all of the samples and sample specimens. Place them in the original container, if practical, or similar container.

Initials_____

- l. Wipe down the entire area where the samples were handled with a masslin, or similar cloth and survey the cloth with the RM-14/HP-210 or similar instrument. This wipe should include but is not limited to all tables, chairs and the floor in the immediate area. If there is any indication of contamination (i.e. 100 cpm above bkg) wipe the area again. Repeat this wiping process until no contamination is detected on the dust cloth.

Initials_____

- m. Direct frisk the entire area where the samples were handled, and any equipment that came in contact with the samples with the RM-14/HP-210 and insure that there is no detectable contamination (i.e. >100 cpm above bkg).

Initials_____

- n. Direct frisk all tools used, and any protective clothing (i.e. gloves) that may have come in contact with the samples with the RM-14/HP-210. All contaminated material (>100 cpm above bkg) shall be collected and placed in an appropriate container with the samples.

Initials_____

- o. Direct frisk all personnel that were involved with the analysis of the samples with the RM-14/HP-210. If any personnel are found contaminated (i.e. >100 cpm above bkg) notify the RSO as soon as practical, and start

decontaminating the individuals. Be sure to collect all wash water in a suitable container.

Initials_____

- p. When it has been determined that there is no detectable contamination remaining, attach all additional logs/ pertinent notes to this form, and return it with all contaminated material to the Health Physics Services facility at 83 Pine St.

Initials_____

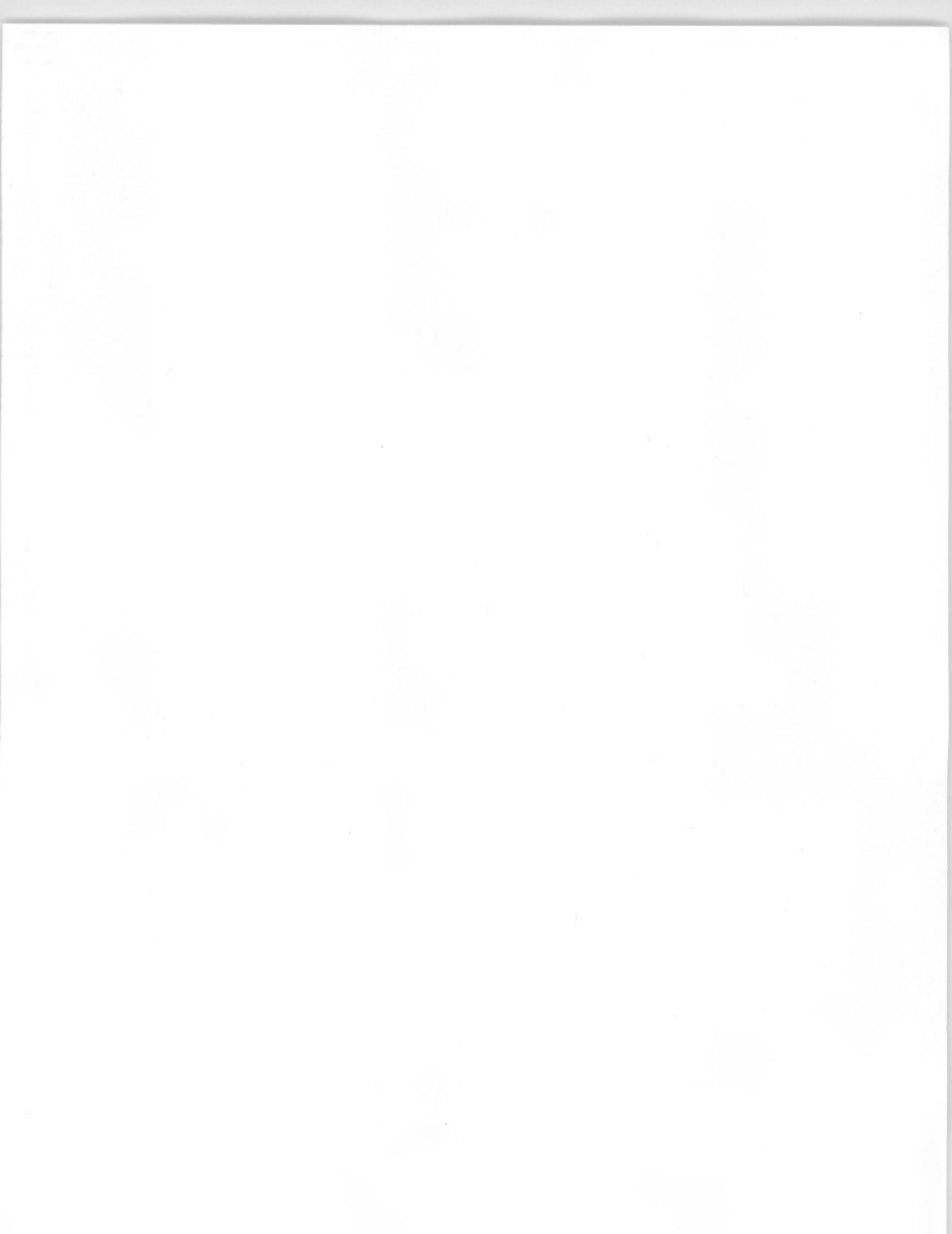
10. After all analysis of the samples have been completed, repackage the radioactive material per 49 CFR, and return it to the contractor licensee.

Initials_____

11. Update the Radioactive Material Inventory Log.

Initials_____

Reviewed by_____



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