

VOID SHEET

TO: License Fee Management Branch

FROM: RIII - COLLEEN C. CASEY

SUBJECT: VOIDED APPLICATION

Control Number:

302296

Applicant:

DEPT. OF THE ARMY

License Number:

12-00722-10

Docket Number:

030-20107

Date Voided:

MARCH 31, 1997

Reason for Void:

Licenses needs to resubmit request  
in entirety to include information in Reg. Guide FC-412-4.  
P50 agreed to reactivate request with response in a few weeks or so.

Signature

Colleen C. Casey

Date

3/31/97

Attachment:

Official Record Copy of  
Voided Action

FOR LFMB USE ONLY

- ☐ Refund Authorized and processed
- ☐ No Refund Due
- ☒ Fee Exempt or Fee Not Required

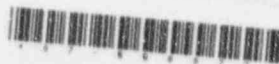
Comments:

110106

Log completed ☒

Processed by:

SAC 4/9/97 olli



ML 30 SD

(FOR LFMS USE)  
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

Program Code: 03225  
Status Code: 0  
Fee Category: EX 3P  
Exp. Date: 20040331  
Fee Comments: 2C DEL W/7&8/95 APP  
Decom Fin Assur Req'd: N  
.....

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED  
Applicant/Licensee: ARMY, DEPARTMENT OF THE  
Received Date: 970207  
Docket No: 3020107  
Control No.: 302296  
License No.: 12-00722-10  
Action Type: Amendment

2. FEE ATTACHED

Amount: \_\_\_\_\_  
Check No.: ~~0~~ \_\_\_\_\_

3. COMMENTS

Signed \_\_\_\_\_  
Date 2-11-97

*D. Hersey*  
2-11-97

B. LICENSE FEE MANAGEMENT BRANCH (Check when Milestone 03 is entered /\_\_/) **FEE EXEMPT**

1. Fee Category and Amount: \_\_\_\_\_  
2. Correct Fee Paid. Application may be processed for:  
Amendment \_\_\_\_\_  
Renewal \_\_\_\_\_  
License \_\_\_\_\_

3. OTHER \_\_\_\_\_

Signed \_\_\_\_\_  
Date \_\_\_\_\_

\_\_\_\_\_



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY

ROCK ISLAND ARSENAL  
ROCK ISLAND, ILLINOIS 61299-5000

February 6, 1997

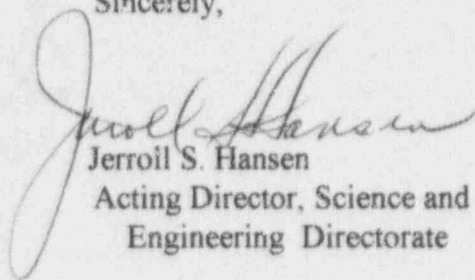
SIORI-SE

U.S. Nuclear Regulatory Commission Region III  
801 Warrenville Rd.  
Attn: Mr. James L. Cameron  
Lisle, IL 60532-4351

Dear Mr. Cameron:

This letter is in regards to amending Rock Island Arsenal (RIA) NRC License No. 12-00722-10 in order to be authorized to perform radioisotope analysis for various Department of Defense activities. The Rock Island Arsenal Materials Laboratory Division will provide a service to these activities. The information you requested during your inspection on January 28-29, 1997 is provided in the enclosure. If you have any questions regarding this request, please contact Mr. Thomas G. Gizicki, RIA Radiation Protection Officer at 309-782-7889.

Sincerely,

  
Jerroil S. Hansen  
Acting Director, Science and  
Engineering Directorate

Enclosure

FEE EXEMPT

RECEIVED  
FEB 07 1997  
REGION III

302296

## **Information to amend RIA NRC license (12-00722-10) to perform wipe test analysis**

The Rock Island Arsenal Material Laboratory Division (SIORI-SEL) will provide laboratory service to various DOD activities in conducting radioisotope analysis. The DOD activities serviced will include all active Army, Army Reserve, National Guard Units, Marine Corps, and the Navy. The SIORI-SEL Division is funded by the U.S. Armament Chemical Acquisition and Logistics Activity (ACALA) and the U.S. Industrial Operations Command through the Army Materials Command, on a yearly basis in performing this service.

**I. Type of testing.** The SIORI-SEL Division will perform analysis of solid wipe samples. The wipe samples are taken from devices containing radioactive sealed sources or from radioactive storage areas owned by the organizations mentioned above. In addition, wipes taken from shipping packages may be received and analyzed for gross alpha/beta. Isotopes which may be analyzed include Am241, Ni63, H3, Pm147, U238, (depleted uranium) Sr90, Kr 85, Cs137, and Ra226.

**II. Equipment used.** The following instruments will be used in performing radioisotope analysis. Liquid scintillation counters (LSC) ( 2 each) and low background flow proportional counters (FPC) ( 2 each).

**III. Calibration.** The flow proportional counters will be calibrated with NIST traceable standards at a minimum every quarter or when the P-10 gas is exchanged. A voltage plateau test(calibration) for alpha and/or beta will be performed prior to the generation of quarterly QA/QC charts for each instrument.

Liquid scintillation (LS) counters will be calibrated with liquid standards prepared by the manufacturer with NIST standards. Liquid scintillation counters are calibrated every day and prior to establishing specific quench curves as specified by manufacturer. This is an automatic calibration procedure unique to each instrument. NIST traceable standards are used to establish quench calibration curves. Quench calibration curves are established for the applicable isotope every quarter for each LS counter.

**IV. QA/QC checks.** Daily QA/QC checks will be performed on the FPCs for the specific isotope being analyzed and alpha and/or beta background. These values are plotted on quarterly QA/QC charts for the applicable instrument. QA/QC control charts (+/- 3 sigma) are generated on a minimum, every 90 days (excluding weekends). Background for alpha and/or beta will be determined weekly and plotted on QA/QC chart.

Daily QA/QC checks will be performed on the LS counters for the specific isotope being analyzed and daily background. Daily standards used in the QA/QC check will be NIST traceable unquenched standards. Values for each isotope being analyzed will be plotted daily on the quarterly QA/QC control chart for each applicable instrument. QA/QC control charts (+/- 3 sigma) are generated on a minimum every 90 days ( excluding weekends).

**V. Out-of-control QA/QC checks.** If at any time, the applicable standard or background count exceeds the control limits on the initial analysis, the standard or background will be run a second time. If the second analysis falls within control limits it will be annotated on the



applicable QA/QC chart. If the second analysis falls out of control limits, the instrument will be recalibrated. If after recalibration, the instrument is still out of control, a diagnostic check of the instrument will be performed per manufacturers guidance.

VI. External QA/QC program. The SIORI-SEL Division will participate in an external QA/QC program. The lab will participate in but not be limited to the following types of analyses, tritium in water and solid gross alpha/beta on disk.

VII. Sample receipt. Based on historical data, the vast majority of the samples that are received at RIA-RTL for analysis are free of removable contamination (>95%). The majority of the wipes are taken from instruments or storage areas that are not suspected of leakage. The shipping packages containing the samples can only be opened in room 407. All packages that have been identified as being from a potentially leaking sealed source, will be opened under the fume hood in room 407. Health physics wipe surveys are performed quarterly in the sample prep room (407) and analysis room(405).

VIII. Notification of test results. All test results whether positive or negative will be mailed to the customer submitting the wipe sample(s). Test reports that indicate positive test results that exceed acceptable contamination limits ( 9 nanocuries for alpha, 450 nanocuries for beta) will be forwarded to the ACALA Safety Office. Positive test results will either be phoned in, faxed or e-mailed to the ACALA Safety Office within 24 hours after the test report is complete.

IX. Maintenance of test reports. Test reports will be maintained in hard copy and in a database for a minimum of 2 years. The database is generated during the log-in procedure of the test samples. The database stored in a program called RADTEST, and is backed up onto a mainframe computer system daily. The database is capable of retrieving previous test results. The type of test data stored in the database includes but is not limited to the following; customer address; POC, ( if provided); serial number of device being tested ( if provided and applicable); wipe test date; wipe test results in disintegrations per minute (DPM). Hard copies of test reports will be stored in building 210, 4th floor, room 416.

X. Low level radiation waste(LLRW) disposal. Disposal of low level radioactive waste generated from sample analysis will be done in accordance with 10 CFR, Pt. 20.2003 and 20.006. Spent liquid scintillation sample vials (for all isotopes) having no activity and tritium samples less than 0.05 microcuries per gram (111,000 disintegrations per minute) will be disposed of as non radioactive waste. This non-radioactive waste will be disposed through the DRMO office at RIA to a contractor at a minimum of twice a year. All solid, nonsoluble samples having activity above the lower limit of detectability (LLD) will be stored in Bldg 210, room 407 and/or Bldg 335, Room 1, J-12 for future disposal. This LLRW will be disposed of through the U.S. Industrial Operation Command (IOC), Radiation Waste Division at RIA. The IOC Radiation Waste Division will manifest and oversee the waste disposal. Because of the extremely small volume of LLRW generated from this activity, disposal of this waste will be done, at a minimum, every two years.



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY

ROCK ISLAND ARSENAL  
ROCK ISLAND, ILLINOIS 61299-5000

March 18, 1997

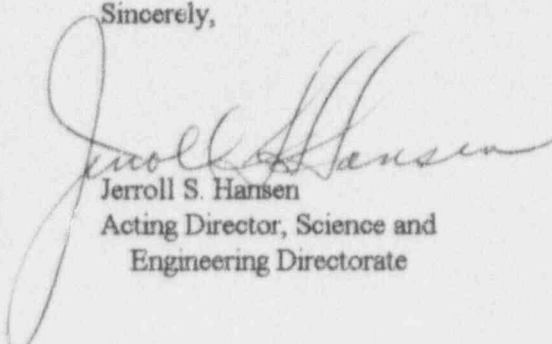
Materials Laboratory Division

U.S. Nuclear Regulatory Commission Region III  
801 Warrenville Road  
Attention: Ms. Sandra Fraiser  
Lisle, Illinois 60532-4351

Dear Ms. Fraiser:

This letter is in regards to amending Rock Island Arsenal's NRC License Number 12-00722-10. This license is currently under review by your office (control number 02296) for authorization to perform radioisotope analysis as a service. The amendment letter sent to your office dated February 6, 1997, contained a listing of isotopes that would be authorized for testing. The Rock Island Arsenal Materials Laboratory Division would like to add Th232 to the list of isotopes authorized for testing. If you have any questions regarding this request, please contact Mr. Thomas G. Gizicki, Rock Island Arsenal Radiation Protection Officer at (309) 782-7889.

Sincerely,



Jerroll S. Hansen  
Acting Director, Science and  
Engineering Directorate

RECEIVED  
MAR 24 1997  
REGION III

Pm: 3-20-97