

## ACCEPTANCE REVIEW MEMO (ARM)

**Licensee:** Engineering & Inspections - Hawaii      **License No.:** 53-27731-01  
**Docket No.:** 030-36017      **Mail Control No.:** 471113  
**Type of Action:** Amend      **Date of Requested Action:** 09-06-06  
**Reviewer Assigned:** ARM reviewer(s): Torres

Response	Deficiencies Noted During Acceptance Review
	<input type="checkbox"/> Open ended possession limits. Limit possession. Submit inventory. <input type="checkbox"/> Submit copies of most recent leak test results. <input type="checkbox"/> Add - delete IC license condition. Add IC paragraph in cover letter. <input type="checkbox"/> Split license from cover letter. Add SUNSI marking to license. <input type="checkbox"/> Ask the licensee if they have any type-amount of EPAct Material.

*RITC*

**Reviewer's Initials:** \_\_\_\_\_ **Date:** \_\_\_\_\_

<input type="checkbox"/> Yes <input type="checkbox"/> No	Unrestricted release Group 2 or >: Transfer memo to FCDB within 10 days.
<input type="checkbox"/> Yes <input type="checkbox"/> No	Decommissioning notification should be completed within 30 days.
<input type="checkbox"/> Yes <input type="checkbox"/> No	Termination request < 90 days from date of expiration
<input type="checkbox"/> Yes <input type="checkbox"/> No	Expedite (medical emergency, no RSO, location of use/storage not on license, RAM in possession not on license, other)
<input type="checkbox"/> Yes <input type="checkbox"/> No	TAR needed to complete action.

**Branch Chief's and/or Sr. HP's Initials:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**SUNSI Screening according to RIS 2005-31**

Yes  No      **Non-Publicly Available, Sensitive** if any item below is checked

General guidance:

- \_\_\_\_\_ RAM = or > than Category 3 (Table 1, RIS 2005-31), use Unity Rule
- \_\_\_\_\_ Exact location of RAM (whether = or > than Category 3 or not)
- \_\_\_\_\_ Design of structure and/or equipment (site specific)
- \_\_\_\_\_ Information on nearby facilities
- \_\_\_\_\_ Detailed design drawings and/or performance information
- \_\_\_\_\_ Emergency planning and/or fire protection systems

Specific guidance for medical, industrial and academic (above Category 3):

- \_\_\_\_\_ RAM quantities and inventory
- \_\_\_\_\_ Manufacturer's name and model number of sealed sources & devices
- \_\_\_\_\_ Site drawings with exact location of RAM, description of facility
- \_\_\_\_\_ RAM security program information (locks, alarms, etc.)
- \_\_\_\_\_ Emergency Plan specifics (routes to/from RAM, response to security events)
- \_\_\_\_\_ Vulnerability/security assessment/accident-safety analysis/risk assess
- \_\_\_\_\_ Mailing lists related to security response

**Branch Chief's and/or Sr. HP's Initials:** *RITC*      **Date:** 9-11-06

**Pre-Licensing Screening**

**Applicant Information:**

**Control No. 471113**

Name: Engineering & Inspections - Hawaii	Type of Request: Amend Program Code(s):
Location: HI	License No.: 53-27731-01      Docket No.: 030-36017

**STEP 1--Radioactive Materials and Quantities Requested:**

<b>Instructions for Step 1: Complete Step 1 for all applications.</b> If all your responses in Step 1 are "No" then do not complete Step 2 (Screening Criteria). Sign and date the completed step-sheet and add it as the sensitive and non-publicly available OAR in ADAMS. If a "yes" response is indicated for any item in Step 1, also complete Step 2. If the type of use is subject to a Security Order or the requirements for increased controls, complete Step 3 (Item A or Item B) without delay.		Yes or No
A.	The request is from a new applicant.	N
B.	NUREG-1556, Volume 20, Section 4.9 indicates a licensing site visit is needed for the requested type of use, e.g., (1) Type A broad scope license, (2) panoramic irradiator containing > 10000 curies, (3) manufacturers or distributors using unsealed radioactive material or significant quantities of sealed material, (4) radioactive waste brokers, (5) radioactive waste incinerators, (6) commercial nuclear laundries, and (7) any other application that in the judgement of the reviewer and cognizant supervisor involves complex technical issues, complex safety questions, or unprecedented issues that warrant a site visit.	N
C.	The applicant requested certain radionuclides and quantities that equal or exceed the Risk Significant Quantity (TBq) values in the table, below, that have been "highlighted" by the reviewer	N

**Table of Risk Significant Quantities**

(Category 2 Quantities, IAEA Safety Guide No. RS-G-1.9, Categorization of Radioactive Sources, August 2005)

Radionuclide	Risk Significant Quantity (TBq <sup>1</sup> )	Risk Significant Quantity (Ci <sup>1</sup> )	Radionuclide	Risk Significant Quantity (TBq <sup>1</sup> )	Risk Significant Quantity (Ci <sup>1</sup> )
Am-241	0.6	16	Pm-147	400	11,000
Am-241/Be	0.6	16	Pu-238	0.6	16
Cf-252	0.2	5.4	Pu-239/Be	0.6	16
Cm-244	0.5	14	Ra-226 <sup>2</sup>	0.4	11
Co-60	0.3	8.1	Se-75	2	54
Cs-137	1	27	Sr-90 (Y-90)	10	270
Gd-153	10	270	Tm-170	200	5,400
Ir-192	0.8	22	Yb-169	3	81

<sup>1</sup> The primary values are TBq. The curie (Ci) values are for informational purposes only.  
<sup>2</sup> The Atomic Energy Act, as amended by the Energy Policy Act of 2005, authorizes NRC to regulate Ra-226 and NRC is in the process of amending its regulations for discrete sources of Ra-226.

Calculations of the Total Activity or the Unity Rule are attached to document whether or not the screening criteria in Step 2 were also completed to evaluate the application. <b>NOTE--If an amendment of an existing license is being requested, the calculations will include the previously authorized quantities for the radionuclide(s).</b>	Yes , No, or Not Applicable (NA)
Total Activity--multiple activities are requested for a single radionuclide and the sum of the activities equals or exceeds the quantity of concern for the radionuclide	—
Unity Rule--multiple radionuclides are requested and the sum of the ratios equals or exceeds unity, e.g., [(total activity for radionuclide A) + (risk significant quantity for radionuclide A)] + [(total activity for radionuclide B) + (risk significant quantity for radionuclide B)] ≥ 1.0.	—

**Signature and Date for Step 1:**

*RITC 9-11-06*  
 License Reviewer and Date



ENGINEERING & INSPECTIONS  
HAWAII, INC.

*RMC*

September 6, 2006

**Attention: Colleen Murnahan**  
**Nuclear Materials Licensing Section**  
**U.S. Nuclear Regulatory Commission, Region IV**  
 611 Ryan Plaza Drive, Suite 400  
 Arlington, Texas 76011-8064

Subject: Request for Amendment to License Number 53-27731-01

Dear Colleen:

We respectfully request your consideration and consent of amending our license to include the following changes:

1. Change in Radiation Safety Officers from Scott Kinsella to Brian McKenna: We have attached his training documentation for your review.
2. Source Retrieval and Recovery will be conducted by QSA / Amersham as per there retrieval and recovery procedures and by calling there 24 hour hotline and stating radiological emergency at 1-800-815-1383

I hope the information offered addresses the items properly, however should you require any further information please feel free to contact myself at anytime.

Sincerely,

**Brian McKenna**  
 President / General Manager  
 Engineering & Inspections Hawaii, Inc.



Brian J. McKenna

IN RECOGNITION OF HAVING ATTENDED AN  
EDUCATIONAL COURSE ON THE SUBJECT OF

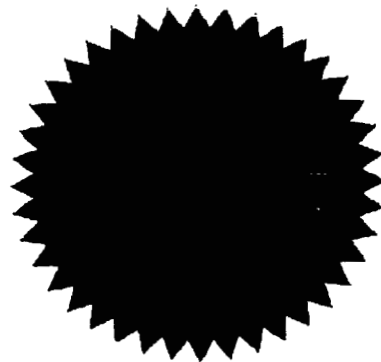
Radiation Safety Officer  
(24 Hours)

IN WITNESS THEREOF THESE SIGNATURES HAVE BEEN  
HERETO AFFIXED

May 31, 2002

  
GENERAL MANAGER

  
INSTRUCTOR



 **HELLIER**  
TECHNICAL TRAINING & CONSULTING

# CERTIFICATE OF RECOGNITION

awarded to

**Brian J McKenna**

for the completion of

**LANDAUER®**

**Radiation Safety**

**COMPUTER BASED TRAINING**

**November 15, 2005**

Date

*Stephen W. Schaaf*

**Stephen W. Schaaf, Landauer  
Authorized Representative**

# CERTIFICATE OF RECOGNITION

awarded to

**Brian McKenna**

for the completion of

**LANDAUER®**

**Radiation Safety**

**COMPUTER BASED TRAINING**

**December 07, 2004**

Date

*Stephen W. Schaaf*

**Stephen W. Schaaf, Landauer  
Authorized Representative**



**RADIATION SAFETY TRAINING**  
**COURSE COMPLETION CERTIFICATE**

*Brian J. McKenna*

**has successfully completed a 40-hour course on Radiation Safety and Protection Training**  
Presented by T.E.S.T. NDT, Inc. at Engineering & Inspections, Hawaii 96707

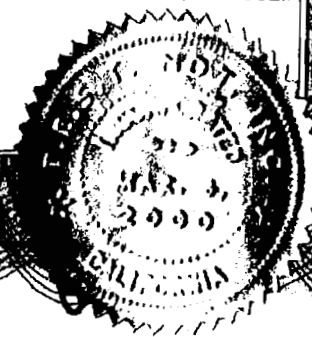
**The course meets or exceeds the requirements for training in Radiation Safety and Protection for Industrial Radiographers**  
as detailed in US NRC 10 CFR 19, 20 & 34.

**COURSE DATE: May 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup>, 2002**

**Certificate Number 00325**

A T.E.S.T. NDT, INC. Level III Certificate holder's signature is necessary on each individual document to validate it as approved. If there is any doubt regarding the validity please call (714) 255-1500 to confirm. This Certificate is not valid without an embossed T.E.S.T. NDT, Inc. Seal.

Richard A. Harrison  
President T.E.S.T. NDT, Inc.  
ASNT Certificate # K M 1485





Our Product is Quality

2300 E. Patrick Lane  
Suite 24  
Las Vegas, NV 89119  
Telephone: 702-795-0700  
Fax: 702-795-1717

Dave Nezzar  
MQS Inspection, Inc.  
9910 Jordan Circle  
Santa Fe Springs, CA. 90670

Ref: Affidavit; Prior Radiographer certification for Brian J. McKenna

I W.C. Wilson, served as Vice President of Cotton Houston Services, Inc. From May, 1991 through December, 1992 and hereby attest that Brian J. McKenna SS# was certified as Radiographer by CHSI certification program and functioned therein.

Respectfully submitted,

W. C. Wilson  
Contracts Manager  
MQS Inspection, Inc.

cc: mckenna, B.J.

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(Corporate Office) Chicago (800) 838-5227

471113



BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
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INFORMATION FROM LTS  
-----  
: Program Code: 03320  
: Status Code: 0  
: Fee Category: 30 2B  
: Exp. Date: 20121031  
: Fee Comments:  
: Decom Fin Assur Regd: N  
: .....

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED ENGINEERING & INSPECTIONS - HAWAII  
Applicant/Licensee: 20060906  
Received Date: 3036017  
Docket No: 471113  
Control No.: 53-27731-01  
License No.:  
Action Type: Amendment

2. FEE ATTACHED

Amount: \_\_\_\_\_  
Check No.: \_\_\_\_\_

3. COMMENTS

Signed Allen M. Mendenhall  
Date 9-9-06

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

1. Fee Category and Amount: \_\_\_\_\_

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

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

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