## **ACCEPTANCE REVIEW MEMO (ARM)**

Licensee:

Indo American Engineering, Inc. License No.: 49-27701-01

Docket No.:	030-35704	Mail Control No.: 471000
Type of Actio	on: Amend	Date of Requested Action: 06-07-06
Reviewer Assigned:	Torres	ARM reviewer(s): Cook
Response	Deficien	cies Noted During Acceptance Review
6/7/06		l possession limits. Limit possession. see that we are limiting possession limits via cover letter
	2.	
Reviewer's Ir	nitials: FTC	Date: 6/14/06
□Yes □No	'	cted use for Group 2 or higher category should be to FCDB within 10 days of receipt.
□Yes □No	Decommissioning ne	otification should be completed within 30 days.
□Yes □No	Termination request	< 90 days from date of expiration
Ø¥xes □No		mergency, no RSO docation of use/storage not on session not on license, other)
□Yes □No	TAR needed to com	plete action.
Branch Chie	ef's and/or Sr. HP's Init	als: <u>RiTC</u> Date: <u>6/14/06</u>
	SUNSI Scree	ning according to RIS 2005-31
Specific guid	Non-Publicly Available lance: _RAM = or > than Categ _Exact location of RAM ( _Design of structure and _Information on nearby f _Detailed design drawing _Emergency planning and lance for medical, industr _RAM quantities and invoManufacturer's name ar _Site drawings with exact _RAM security program i _Emergency Plan specific	able, Sensitive if any item below is checked  ory 3 (Table 1, RIS 2005-31), use Unity Rule whether = or > than Category 3 or not) /or equipment (site specific) acilities as and/or performance information of or fire protection systems  rial and academic (above Category 3): entory and model number of sealed sources & devices at location of RAM, description of facility information (locks, alarms, etc.) as (routes to/from RAM, response to security events)
	_Vulnerability/security as _Mailing lists related to s	sessment/accident-safety analysis/risk assess ecurity response  als: Date: 6/4/06

#### **Pre-Licensing Screening**

Applicant Information:

#### **Control No.** 471000

Name: Indo American	Type of Request: Amend				
Engineering, Inc.	Program Code(s): 03121				
Location: WY	License No.: 49-27701-01	Docket No.: 030-35704			

#### **STEP 1–Radioactive Materials and Quantities Requested:**

Instructions for Step 1: Complete Step 1 for all applications. 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.					
A.	The request is from a new applicant.	$\langle x \rangle$			
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.	Ø)			
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	X			

#### Table of Risk Significant Quantities

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

(Catego	ory 2 Quantities, IAEA Sa	fety Guide No. RS-G-1.	<ol><li>Categorization of Rad</li></ol>	ioactive Sources, Augus	st 2005)	
Radionuclide	Risk Significant Quantity (TBq¹)	Risk Significant Quantity (Ci <sup>1</sup> )	Radionuclide	Risk Significant Quantity (TBq¹)	Risk Significant Quantity (Ci¹)	
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-226²	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	
lr-192	0.8	22	Yb-169	3	81	

The primary values are TBq. The curie (Ci) values are for informational purposes only.

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.

NOTE-If an amendment of an existing license is being requested, the calculations will include the previously authorized quantities for the radionuclide(s).

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 B)] > 1.0.

Signature and Date for Step 1:

License Reviewer and Date

### SEC1

TION 2 - NOT	APPLICABLE	1
	***************************************	

STEP 2-Screening	Criteria:	<b>Control No.</b> 471000				
expected to use safety informat the review of each screening or not an additional evaluation ma the review below the table and	ion in the application as well as sources of in iteria below. For each criterion, provide a pre y be needed to reasonably assure that the re	"yes" response for any item in Step 1. The reviewer is formation that are outside of the application. Document liminary indication in the last column as to whether or quested materials will be used as intended. Summarize at as the sensitive and non-publicly available OAR in inplete Step 3 (Item C) without delay.	Preliminary Indication Additional Evaluation in Step 3			
Refer to Initial Implementation Guidance (ML061080231) for each criterion, below.	F	Review Notes	Needed? /yes or no)			
A. Request for Materials						
B. Former Licensee or Authorized User						
C. Ownership/Senior Management						
D. Radiation Safety Officer						
E. Authorized User						
F. Fee Payment						
G. Financial Assurance		**************************************				
H. Deficiency correspondence						
I. Contacts to the applicant						
J. Public Web Sites						
K. Pre-Licensing Visit						
L. Security						
needed to provide rear rationale to support th	asonable assurance that ma	whether or not an additional evaluati terials will be used as intended. Prov additional evaluation of a potential se	ride			
Signatures and Date	es for Step 2:					

License Reviewer and Date Supervisor and Date

## SECTION 3 - NOT APPLICABLE

#### STEP 3-Notify NRC Headquarters (NMSS/IMNS/MSIB-A): Control No. 471000

sheet with	attachments as the	ark the type of notification below and attach a copy of the additional information, as appropriate. Place the competed step- e sensitive and non-publicly available OAR in ADAMS. Designated staff in IMNS will process the incoming email or TAR acknowledge receipt and indicate the action(s) and a proposed schedule to complete the action(s).
A.	Security Orders	The cognizant supervisor sent an email to NMSS/IMNS/MSIB-A at Security_Orders@nrc.gov. The email requested MSIB-A to prepare Orders to accompany the specific license and provided the applicant's contact information. A copy of the email is attached.
<u></u> В.	Increased Controls	The cognizant supervisor sent an email to NMSS/MNS/MSIB-A at Security_Orders@nrc.gov. The email requested MSIB-A to prepare Orders to accompany the specific license or requested MSIB-A to update the National Source Interim Inventory and provided a recently issued licensing action, e.g., to add or remove increased controls from a license or terminate a license. A copy of the email is attached.
☐ c.	Request for additional evaluation of the applicant	As per NUREG-1556, Volume 20, Section 4.14, Technical Assistance Request–Materials Licensees, the cognizant supervisor sent a TAR package to NMSS/IMNS/MSIB-A after the screening criteria in Step 2 were evaluated. The license reviewer could not determine or has some doubt that radioactive material will be used as intended. The package included the TAR form and completed Step 2 worksheet. The package from an Agreement State supervisor was routed through the Regional State Agreements Officer as per Management Directive 5.7, "Technical Assistance for Agreement States," (revised November 19, 2004).
П	Action	Headquarters notified by e-mail Date:
	Action	TAR provided to HQ Date;
<u>Signat</u>	ures and Da	ates for Step 3:  License Reviewer and Date Supervisor and Date



## INDO AMERICAN ENGINEERING, INC.

#### **CONSULTING ENGINEERS & LAND SURVEYORS**

P.O. BOX 1813 • ROCK SPRINGS, WYOMING 82902-1813 • TELE: 307-362-2680 • FAX 307-362-2682 EMAIL ADDRESS: contact@indoamengg.com WEBSITE: http://www.indoamengg.com

**RECEIVED** 

June 7, 2006

Ms. Colleen Murnahan U.S. Nuclear Regulatory Commission Region IV 611 Ryan Plaza Drive, Suite 400 Arlington, TX 76011-4005

JUN 1 2 2006

**DNMS** 

Fax No. 817-860-8263 or 817-860-8188

License Number: 030-35704 Docket No.: 030-35704

Subject: Amendment to License

Dear Ms. Murnahan:

This is letter of request to amend our license for physical location, in according to Mr. Anthony D. Gaines site visit. Our license indicates our physical address as 2638 Commercial Way, Rock Springs, Wyoming that needs to be terminated. In support, we are hereby submitting Leak Test Reports on our Nuclear Gauges (1) Model 3440, Serial Number 21693; (2) Model 3440, Serial Number 22986 and (3) Model 3430, Serial Number 32250 that were performed by OSCS, 702 West 48<sup>th</sup> Ave., Unit H, Denver, CO 80216, Telephone: 303-292-2412.

At present our physical address is 649 North Front Street, Rock Springs, WY 82901

If you have any question, please do not hesitate to call us.

Thank you very much for your cooperation and consideration.

Sincerely:

Indo American Engineering, Inc

Dinesh P. Sheth, M.S., P.E.



"Your One Stop for Calibration & Service"

100 E. Highway 67 Keene, Texas 76059 (817) 648-0892 (817) 648-7560 Fax

Attention: Dinesh Sheth

702 West 48th Avenue Unit H Denver Colorado 80216 (303) 292-2412 (303) 292-2409 Fax

Indo American Engineering 649 N Front Street Rock Springs, WY 82902

Certificate Number: OSCSC544

#### Leak Test Certificate

Gauge Serial Number: 32250 Gauge Model: 3430 Sample Procedure by: OSCS Sample Date: 2/2/06

Sealed Source Isotope:

Activity:

Removable Contamination:

Cs-137 (gamma) Am-241 (alpha)

8 mCi 40 mCi < .005μCi < .005μCi

The analysis procedure was performed on 2/06/06 by Duane Hevly.

This portable nuclear gauge displays no removable contamination and may remain in active service.

The .001  $\mu$ Ci Cs-137 and Am-241 calibration check sources are NIST traceable. The survey meter used to perform the analysis was calibrated on 3 January 2006. Federal and Agreement State limits for removable contamination is 0.005  $\mu$ Ci (5.0 x 10<sup>-3</sup>  $\mu$ Ci). Duane A. Hevly is authorized to analyze portable and fixed gauge leak test samples containing Co-60, Cs-137 and Am-241; State of Washington License Number: WN-I0335-1.

Notice: The RSO or owner of the gauge that fails the leak test analysis will be alerted immediately by telephone, e-mail and or fax to remove the gauge from active service.

Certified by:

Sciane a Kerly
Duane A. Hevly



"Your One Stop for Calibration & Service"

100 E. Highway 67 Keene, Texas 76059 (817) 648-0892 (817) 648-7560 Fax

Attention: Dinesh Sheth

702 West 48th Avenue Unit H Denver Colorado 80216 (303) 292-2412 (303) 292-2409 Fax

Indo American Engineering 649 N Front Street Rock Springs, WY 82902

**Certificate Number:** OSCSC545

#### Leak Test Certificate

Gauge Serial Number: 22986 Gauge Model: 3440 Sample Procedure by: OSCS Sample Date: 2/2/06

The analysis procedure was performed on 2/06/06 by Duane Hevly.

This portable nuclear gauge displays no removable contamination and may remain in active service.

The .001  $\mu$ Ci Cs-137 and Am-241 calibration check sources are NIST traceable. The survey meter used to perform the analysis was calibrated on 3 January 2006. Federal and Agreement State limits for removable contamination is 0.005  $\mu$ Ci (5.0 x 10<sup>-3</sup>  $\mu$ Ci). Duane A. Hevly is authorized to analyze portable and fixed gauge leak test samples containing Co-60, Cs-137 and Am-241; State of Washington License Number: WN-10335-1.

Notice: The RSO or owner of the gauge that fails the leak test analysis will be alerted immediately by telephone, e-mail and or fax to remove the gauge from active service.

Certified by:

Sciane a Kerly
Duane A. Hevly



"Your One Stop for Calibration & Service"

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Attention: Dinesh Sheth

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Indo American Engineering 649 N Front Street Rock Springs, WY 82902

**Certificate Number: OSCSC546** 

#### Leak Test Certificate

Gauge Serial Number: 21693 Gauge Model: 3440 Sample Procedure by: OSCS Sample Date: 2/2/06

Sealed Source Isotope: Activity: Removable Contamination: Cs-137 (gamma) 8 mCi  $< .005 \mu Ci$   $< .005 \mu Ci$   $< .005 \mu Ci$ 

The analysis procedure was performed on 2/06/06 by Duane Hevly.

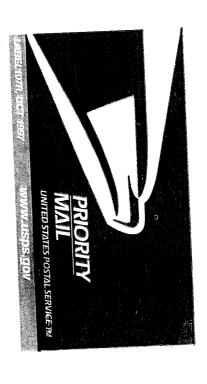
This portable nuclear gauge displays no removable contamination and may remain in active service.

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Certified by:

Sluane a Llevy Duane A. Hevly









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INDO AMERICAN ENGINEERING, INC.

ROCK SPRINGS, WY 82902-1813 P.O. BOX 1813 649 N. FRONT ST.

MS. COLLEEN MURNAHAN 

ARLINGTON, TX 76011-4005 611 RYAN PLAZA DRIVE, SUITE 400 U.S. NUCEAR REGULATORY COMMISSION REGION IV



## INDO AMERICAN ENGINEERING, INC. CONSULTING ENGINEERS & LAND SURVEYORS

P.O. BOX 1813 • ROCK SPRINGS, WYOMING 82902-1813 • TELE: 307-362-2680 • FAX 307-362-2682

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COMPANY:	Dinesh P. Sheth INDO AMERICAN ENGINEERING	: INC		
TELEPHONE NUMBER:		FAX NUMBER:	307-362-2682	
EMAIL ADDRESS:	contact@indoamengg.com			
WEBSITE:	http://www.indoamengg.com			
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TRANSMITTED BY:	Dinesh			
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IF YOU DID NOT RECEIVE ALL PAGES OR COPY IS UNCLEAR PLEASE PHONE 307-362-2680

649 NORTH FRONT STREET • ROCK SPRINGS, WYOMING 82901• U.S.A.
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217 BORA BAZAR • FORT BOMBAY 400001• INDIA • TELE. 2613229
48 ROSELEIGH RD.• SITTING BOURNE, KENT ME 101RS • U.K. • TELE. 5420663



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June 7, 2006

Ms. Colleen Murnahan U.S. Nuclear Regulatory Commission Region IV 611 Ryan Plaza Drive, Suite 400 Arlington, TX 76011-4005

Fax No. 817-860-8263 or 817-860-8188

License Number: 030-35704 Docket No.: 030-35704

Subject: Amendment to License

Dear Ms. Murnahan:

This is letter of request to amend our license for physical location, in according to Mr. Anthony D. Gaines site visit. Our license indicates our physical address as 2638 Commercial Way, Rock Springs, Wyoming that needs to be terminated. In support, we are hereby submitting Leak Test Reports on our Nuclear Gauges (1) Model 3440, Serial Number 21693; (2) Model 3440, Serial Number 22986 and (3) Model 3430, Serial Number 32250 that were performed by OSCS, 702 West 48<sup>th</sup> Ave., Unit H, Denver, CO 80216, Telephone: 303-292-2412.

At present our physical address is 649 North Front Street, Rock Springs, WY 82901

If you have any question, please do not hesitate to call us.

Thank you very much for your cooperation and consideration.

Sincerely:

Indo American Engineering, Inc

Dinesh P. Sheth, M.S., P.E.

649 N. FRONT STREET, ROCK SPRINGS, WYOMING 82901 U.S.A 314 E. FLAMING GORGE WAY, GREEN RIVER, WY 82935 U.S.A 217 BORA BAZAR • FORT BOMBAY 400001 • INDIA • TELE, 2613229 48 ROSELEIGH ROAD • SITTING BOURNE, KENT • ME101RS • U.K. • TELE: 5420663



100 E. Highway 67 Keene, Texas 76059 (817) 648-0892 (817) 648-7560 Fax

Attention: Dinesh Sheth

702 West 48th Avenue Unit H Denver Colorado 80216 (303) 292-2412 (303) 292-2409 Fax

Indo American Engineering 649 N Front Street Rock Springs, WY 82902

Certificate Number: OSCSC544

Gauge Model: 3430

#### Leak Test Certificate

Gauge Serial Number: 32250 Sample Procedure by: OSCS

Sample Date: 2/2/06

Sealed Source Isotope:

Activity:

Removable Contamination:

Cs-137 (gamma)

8 mCi

< .005uCi

Am-241 (alpha)

40 mCi

< .005uCi

The analysis procedure was performed on 2/06/06 by Duane Hevly.

This portable nuclear gauge displays no removable contamination and may remain in active service.

The .001 µCi Cs-137 and Am-241calibration check sources are NIST traceable. The survey meter used to perform the analysis was calibrated on 3 January 2006. Federal and Agreement State limits for removable contamination is  $0.005 \,\mu\text{Ci}$  ( $5.0 \times 10^{-3} \,\mu\text{Ci}$ ). Duane A. Hevly is authorized to analyze portable and fixed gauge leak test samples containing Co-80. Cs-137 and Am-241; State of Washington License Number: WN-10335-1.

Notice: The RSO or owner of the gauge that fails the leak test analysis will be alerted immediately by telephone, e-mail and or fax to remove the gauge from active service.

Certified by:

Duane A. Hevív

Swane A Llevly

171000



100 E. Highway 67 Keene, Texas 76059 (817) 648-0892 (817) 648-7560 Fax

Attention: Dinesh Sheth

702 West 48th Avenue Unit H Denver Colorado 80216 (303) 292-2412 (303) 292-2409 Fax

Indo American Engineering 649 N Front Street Rock Springs, WY 82902

Certificate Number: OSCSC545

#### Leak Test Certificate

Gauge Serial Number: 22986 Sample Procedure by: OSCS Gauge Model: 3440 Sample Date: 2/2/06

Sealed Source Isotope:

Activity:

Removable Contamination:

Cs-137 (gamma)

8 mCi

< .005µCi

Am-241 (alpha)

40 mCi

< .005μCi

The analysis procedure was performed on 2/06/06 by Duane Hevly.

This portable nuclear gauge displays no removable contamination and may remain in active service.

The .001  $\mu$ Ci Cs-137 and Am-241calibration check sources are NIST traceable. The survey meter used to perform the analysis was calibrated on 3 January 2006. Federal and Agreement State limits for removable contamination is 0.005  $\mu$ Ci (5.0 x 10<sup>-3</sup>  $\mu$ Ci). Duane A. Hevly is authorized to analyze portable and fixed gauge leak test samples containing Co-60, Cs-137 and Am-241; State of Washington License Number; WN-10335-1.

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Certified by:

Sciane a Levely

. 71000



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Indo American Engineering 649 N Front Street Rock Springs, WY 82902

Certificate Number: OSCSC546

#### Leak Test Certificate

Gauge Serial Number: 21693 Gauge Model: 3440 Sample Procedure by: OSCS Sample Date: 2/2/06

Sealed Source Isotope:Activity:Removable Contamination:Cs-137 (gamma)8 mCi< .005μCi</td>Am-241 (alpha)40 mCi< .005μCi</td>

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Certified by:

Duane A. Hevly

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TEL:

COMMENT:

Signed Date	3. OTHER	2. Correct Fee Paid. Application may be processed Amendment Renewal License	1. Fee Category and Amount:	B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03	3. COMMENTS Signed Date	1. APPLICATION ATTACHED Applicant/Licensee: INDO AMERICAN ENGINEERING, Received Date: 20060607 Docket No: 3035704 Control No.: 471000 License No.: 49-27701-01 Action Type: Amendment	A. REGION	LICENSE FEE TRANSMITTAL	BETWEEN: License Fee Management Branch, ARM and Regional Licensing Sections
		processed for:		hen milestone 03 is entered //)	de guellere pl. Coll	GINEERING, INC.			(FOR LFMS USE) INFORMATION FROM LTS