

**DBI, Inc. Quality Inspection and Consulting Services**

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**RECEIVED**

August 22, 2008

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Nuclear Materials Licensing Branch  
U.S. Nuclear Regulatory Commission, Region IV  
612 East Lamar Boulevard, Suite 400  
Arlington, TX 76011-4125

**DNMS**

Attention: Rachel Browder

Dear Ms. Browder,

DBI, Inc. is requesting a License amendment to NRC Radioactive Material License number 48-29301-01, Docket number 030-37817.

The item to amendment is for the Byproduct, source, and/or special nuclear material, Cesium-137, the maximum amount that DBI, Inc. may possess on the license from 165 millicuries to 200 millicuries per source

If you have any questions or need any further information please contact me at (402) 467-1818.

Sincerely,

Pennie Frye  
Radiation Safety Officer

**Lincoln, Nebraska**  
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Lincoln, NE 68507  
Telephone: (402) 467-1818  
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**Carter Lake, Iowa**  
520 Locust  
Carter Lake, IA  
Telephone: (712) 347-5296  
Fax: (712) 347-5297

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## ACCEPTANCE REVIEW MEMO (ARM)

**Licensee:** DBI, Inc. **License No.:** 49-29301-01  
**Docket No.:** 030-37817 **Mail Control No.:** 471916  
**Type of Action:** 4 - Amendment **Date of Requested Action:** 8/22/08  
**Reviewer Assigned:** T6 **ARM reviewer(s):** Rachel S. Browder

Response	Deficiencies Noted During Acceptance Review
<i>None</i>	<input type="checkbox"/> Open ended possession limits. Submit inventory. Limit possession. <input type="checkbox"/> Submit copies of latest leak test results. <input type="checkbox"/> Add IC L.C./Fingerprint LC, add SUNSI markings to license. <input type="checkbox"/> Confirm with licensee if they have NARM material.

**Reviewer's Initials:** Bob **Date:** 9/6/08

Yes  No Request for unrestricted release Group 2 or >. Consult with Bravo Branch.  
 Yes  No Termination request < 90 days from date of expiration  
 Yes  No Expedite (medical emergency, no RSO, location of use/storage not on license, RAM in possession not on license, other)  
 Yes  No TAR needed to complete action.

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

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

Yes  No **Sensitive and Non-Publicly Available** 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 [suite #, bldg. #, location different from mailing address] (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):

- less than* \_\_\_\_\_ RAM quantities and inventory
- cat 3* \_\_\_\_\_ Manufacturer's name and model number of sealed sources & devices
- cat 3* \_\_\_\_\_ 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 HP's Initials:** Bob **Date:** 9/6/08

## Checklist to Ensure That Radioactive Material Will Be Used as Intended

### Applicant Information:

Control No. 471916

Name: DBI, Inc.	Type of Request: 4 - Amendment Program Code(s): 3320	
Location: WY	License No.: 49-29301-01	Docket No.: 030-37817

### STEP 1, ITEM A - INITIAL SCREENING

<p><i>Instructions for Step 1: Complete Step 1 for all applications. If Step 1, Items A and B, are "YES" then do not complete Step 2. Sign and date the completed form and add it to ADAMS as Non-Sensitive and Non-Publicly Available. If a "NO" response is indicated for Item A or Item B, add the completed form to ADAMS as Sensitive and Non-Publicly Available, and complete Step 2 (Additional Screening). If the type of use is subject to a Security Order, complete Step 3, Item A, without delay. If the additional requirements for increased controls will be applied or voided, complete Step 3, Item B, without delay.</i></p>	YES or NO
A. The applicant is a known entity or a licensee transferring control to a known entity. This determination has been made using the screening criteria in Worksheet A below.	Yes

### Worksheet A

<p><i>Instructions for Worksheet A: Answer each of the 6 questions below by placing a "Yes", "No", or "NA" response in the column on the right. Best practices for a reviewer are provided after each of the questions. If the answer to any of the 6 questions is "Yes" then indicate "Yes" in Step 1, Item A, above. If the answers to all of the 6 questions is "No" then indicate "No" in Step 1, Item A, above. <b>NOTE</b> - If the reviewer has personal knowledge of the applicant's veracity, this can be taken into account in responding to any questions. For example, if the applicant's management and/or RSO have been associated with a current or previous NRC or Agreement State license, then the applicant may be considered as a known entity.</i></p>	YES, NO, or NA
1. <b>Does the applicant have a current Agreement State or NRC license?</b> The reviewer should 1) confirm that a valid license/registration/authorization exists for the applicant; and 2) compare the current license to the application to verify that the application represents a reasonable expansion of the licensee's operation (i.e., medical facility adding a gamma knife or an Agreement State licensee obtaining an NRC license in order to work in NRC jurisdiction without filing reciprocity).	Yes
2. <b>Does the applicant have a current Agreement State or NRC license at another location and the new application represents the addition of a new facility within the scope of the licensee's core business?</b> The reviewer should contact the appropriate licensing authority to confirm that a valid license/registration/authorization exists for the applicant and the corporate office of the licensee to verify that it has knowledge of and approves of the new application.	Yes
3. <b>Does the applicant have a current State or Federal government license, registration, authorization, etc., for other operations within the scope of its proposed license activities?</b> (e.g., a company authorized by a State for mining that is now requesting authorization to use fixed gauges). The reviewer should contact the appropriate government office to confirm that the license, registration, authorization, etc., is valid; and the applicant's corporate office to confirm that it has knowledge of and approves of the new application to possess radioactive materials.	Yes
4. <b>Is the applicant a local, State or Federal government agency?</b> The reviewer should contact the local, State or Federal government office to confirm that the applicant is a government entity.	No
5. <b>Does the application only involve the relocation of an existing licensee, or its mailing address, to another State?</b> This includes new licenses created from existing licenses listing locations in multiple States, in preparation for transfer of licenses to States that will shortly sign an Agreement with the NRC.	No
6. <b>Is the application only the result of a licensee failing to submit a renewal application in a timely manner?</b>	No

**STEP 1, ITEM B - INITIAL SCREENING CONTINUED**

<p>B. The applicant is requesting certain radionuclides and quantities that are less than the Risk Significant Quantity (TBq) values in Worksheet B, below, as "highlighted" by the reviewer, or is currently subject to a security order or additional requirements for increased controls. If "Yes", there is no need to proceed further.</p>	<p>Yes</p>
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**Worksheet B - 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.

<p>Calculations of the Total Activity or the Unity Rule were completed.  <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></p>	<p>Yes, No, or Not Applicable (NA)</p>
<p>Total Activity—multiple activities are requested for a single radionuclide and the sum of the activities is less than the Risk Significant Quantity (TBq) for the radionuclide.</p>	
<p>Unity Rule—multiple radionuclides are requested and the sum of the ratios is less than 1.0, e.g., [(total activity for radionuclide A) ÷ (risk significant quantity for radionuclide A)] + [(total activity for radionuclide B) ÷ (risk significant quantity for radionuclide B)] &lt; 1.0.</p>	

**Signature and Date for Step 1:**

  
 License Reviewer and Date

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: 03320  
Status Code: 0  
Fee Category:  
Exp. Date: 20180831  
Fee Comments:  
Decom Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL


A. REGION

1. APPLICATION ATTACHED  
Applicant/Licensee: DBI, INC.  
Received Date: 20080822  
Docket No: 3037817  
Control No.: 471916  
License No.: 49-29301-01  
Action Type: Amendment

2. FEE ATTACHED

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

3. COMMENTS

Signed   
Date 8-28-08

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 \_\_\_\_\_