

## ACCEPTANCE REVIEW MEMO (ARM)

**Licensee:** Centennial Engineering & Research  
**License No.:** 49-26861-01  
**Docket No.:** 03029654  
**Mail Control No.:** 471254  
**Type of Action:** Amend  
**Date of Requested Action:** 02-07-07  
**Reviewer Assigned:** Rachel  
**ARM reviewer(s):** Torres

Response	Deficiencies Noted During Acceptance Review
	<del>X</del> Open ended possession limits. Limit possession. <u>Submit inventory.</u> <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.
	<b>Submit Appendix F.</b>

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

- ☐ Yes ☐ No Unrestricted release Group 2 or >: Transfer memo to FCDB within 10 days.  
☐ Yes ☐ No Decommissioning notification should be completed within 30 days.  
☐ 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 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:** RTT **Date:** 2/16/07

## Pre-Licensing Screening

### Applicant Information:

Control No. 471254

Name: Centennial Engineering & Research	Type of Request: Amend Program Code(s):
Location: WY	License No.: 49-26861-01      Docket No.: 03029654

### 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.	No
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.	No
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	No

### Table of Risk Significant Quantities

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

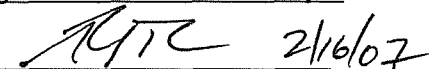
Radionuclide	Risk Significant Quantity (TBq <sup>1</sup> )	Risk Significant Quantity (Ci <sup>1</sup> )	Radionuclide	Risk Significant Quantity (TBq <sup>1</sup> )	Risk Significant Quantity (Ci <sup>1</sup> )
Am-241	0.6	16	Pm-147	400	11,000
Am-241/Be	0.6	16	Pu-238	0.6	16
Cf-252	0.2	5.4	Pu-239/Be	0.6	16
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:

 2/16/07  
 License Reviewer and Date



RECEIVED

FEB 13 2007

DNMS

February 7, 2007

Nuclear Regulatory Commission

RE: Amendments to License No. 49-26861-01  
Centennial Engineering & Research, Inc.

To Whom It May Concern,

Centennial Engineering & Research would like to request the following amendments to our license to operate Nuclear Density Testing Gauges.

1. Change the company name on the license from Centennial Engineering & Research, Inc. to Centennial Collaborative Inc. The engineering business recently changed hands; as such, the license should be updated to the new company name.
2. Change the Radiation Safety Officer (RSO) from Mr. Gerald Williams to Mrs. Cristi Johnson. A copy of Mrs. Johnson's Qal-Tek RSO Certification training is enclosed.

Please inform me if more information is required for this amendment request and the status of the request.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Cristi Johnson', is written over a horizontal line.

Cristi Johnson  
Radiation Safety Officer

# CERTIFICATE OF COMPLETION



PRESENTED BY  
**QAL-TEK ASSOCIATES, L.L.C.**  
TO

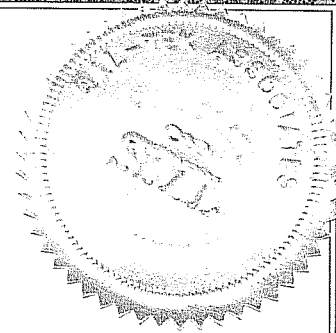
CRISTI JOHNSON

FOR HAVING SUCCESSFULLY COMPLETED THE RADIATION SAFETY AND NUCLEAR GAUGE  
USER SAFETY TRAINING IN ACCORDANCE WITH THE REQUIREMENTS OF NUREG 1556 VOL 1,  
10 CFR PARTS 19 & 20, AND DOT HAZMAT REQUIREMENTS IN 49 CFR PART 172.

PRESENTED THIS DAY  
2<sup>ND</sup> DAY OF FEBRUARY, 2007

Signature of Trainer Russ Rohl / Russ Rohl Location: ENGLEWOOD, CO.

# CERTIFICATE OF COMPLETION



PRESENTED BY  
**QAL-TEK ASSOCIATES, L.L.C.**  
TO

**CRISTI JOHNSON**

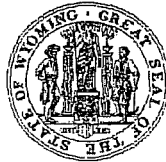
FOR HAVING SUCCESSFULLY COMPLETED THE RADIATION SAFETY OFFICER TRAINING IN  
ACCORDANCE WITH THE REQUIREMENTS OF NUREG 1556 VOL 1 APPENDIX D. 10 CFR PARTS  
19, 20 & 30. AND DOT HAZMAT IN 49 CFR PART 172

PRESENTED THIS  
3<sup>RD</sup> DAY OF FEBRUARY 2007

Signature of Trainer Russ Rohl / Russ Rohl Location: Englewood, CO

# State of Wyoming

## Office of the Secretary of State

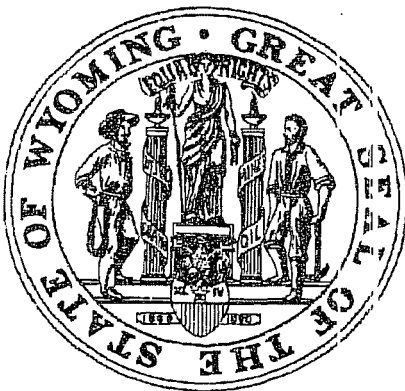


United States of America, }  
State of Wyoming } ss.

I, MAX MAXFIELD, Secretary of State of the State of Wyoming, do hereby certify that according to the records in the office of the Secretary of State of Wyoming **CENTENNIAL COLLABORATIVE, INC.** is a corporation organized and existing under the laws of the state of Wyoming, whose date of incorporation was 12/12/2006 and whose period of duration is perpetual.

I FURTHER CERTIFY that this corporation has filed all annual reports and paid all annual license taxes to date, or is not yet required to file such annual reports; and that Articles of Dissolution have not been filed, thus making the corporation in existence in the state of Wyoming.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the Great Seal of the State of Wyoming. Done at Cheyenne, the Capital, this 23<sup>rd</sup> day of January A.D., 2007.



*Max Maxfield*  
Secretary of State

By *Gelanda M. Pelen*

