

I. License Document

Completed

Not applicable

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Update leak-test condition |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Update decay-in-storage condition |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Eliminate exclusions from 35.200 in items 7 and 9, and authorized users |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Eliminate limited to cardiovascular procedures only from license |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Verify 35.400 and 35.500 model numbers are listed |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Specify possession limits for 35.400, 500, 600 and 1000 |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | For non-medical, specify total possession limits |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | SUNSI marking if applicable |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Verify security condition for portable gauges |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the licensee use Pet materials and if so, shielding information provided |

II. Miscellaneous Documents

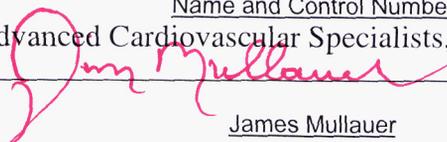
Completed

Not applicable

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Pre-licensing guidance form completed |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Include personal certification and CATX statement |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Criteria in the appropriate NUREG series used |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Update LTS and tab/highlight those items requiring change |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Assure that the appropriate SUNSI paragraph is used in cover letter |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Right wording for 35.300 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Decon check list used |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Checklist for Financial Assurance |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | SUNSI paragraph included in faxes to the licensee |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the license still exceed IC limits |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | If so, did you Mark the license and add the IC condition and paragraph in cover letter? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Did you email Branch Chief to cancel the IC Order? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Use streamlining strategy for renewal? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Confirm that the new RSO is aware of the duties and responsibilities of the position. |

Name and Control Number

Advanced Cardiovascular Specialists, CN 574147, 1/26/11

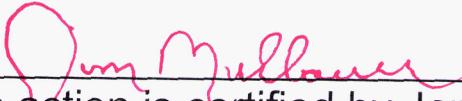


James Mullauer

Certification

LICENSING ACTION for Advanced Cardiovascular Specialists,
License No. 24-32712-01:

This is to certify that to the best of my knowledge, this licensing action in response to termination request dated December 1, 2010, was performed in accordance with NUREG 1557, current security criteria, and current SUNSI criteria. This application meets the CATX requirements of 10 CFR 51.22(c)(14). This action did not meet the security checklist criteria and the license was not marked since it does not meet the SUNSI criteria or security-fingerprinting criteria. This request was to terminate this license. This was a group 2 decommissioning request. The closeout survey appeared appropriate to terminate this license


This action is certified by James R. Mullauer, M.H.S.
DATE 1/26/11 Health Physicist

Materials Licensing Branch

Materials License Decommissioning/ Termination/ Retirement Form (Circle One)

Licensee: Advanced Cardiovascular Specialists License No(s): 24-32712-01
Address: 1530 N. Church Road Docket No(s): 030-37838
Liberty, MO 64068 Expiration Date: 10/31/18
Control Number: 574147
Contact: James P. McGraw, M.D. Title: RSO Telephone: 816-678-5787

Financial Assurance Required: **No**;

If yes, coordinate FA cancellation with FAIC before license is terminated

Determine if Group 1 Decommissioning

1. The licensee possessed and used **only** sealed sources and the most recent leak tests are current and demonstrate that the sealed sources did not leak while in the licensee's possession. yes no X
If yes, go to step 4. If no, go to step 2.

2. The licensee:
- possessed and used relatively short-lived radioactive material (i.e., $T_{1/2}$ less than or equal to 120 days) in an unsealed form, and,
- the maximum activity authorized under the license has decayed to less than the quantity specified in 10 CFR Part 20, Appendix C, and,
- the survey performed in accordance with 10 CFR Part 30.36 does not identify any residual levels of radiological contamination greater than decommissioning screening criteria; **and if**,
- the licensee possessed and used sealed sources and the most recent leak tests are current and demonstrate that the sealed sources did not leak while in the licensee's possession. yes XXX no ___ If yes, go to step 4. If no, go to step 3.

3. Forward the action to the Decommissioning Branch. This is a Group 2 through Group 7 Decommissioning which may require an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and a Safety Evaluation Report (SER).

Date action forwarded to Decommissioning Branch: _____

Go to step 5.

4. This is a Group 1 Decommissioning. Complete action per guidance in NUREG-1757, Vol. 1, Section 8, AGroup 1 Decommissioning. An EA is not required since this action is categorically excluded under 10 CFR Part 51.228)(20).

License Transferred & To: N/A, Terminated

Records Transferred To **NRC** or **New Licensee** (circle one) or N/A

(Refer to 30.51(d) or (e); 40.61(d) or (e); or 70.51(d) or (e); materials with $T_{1/2} > 120$ days)

Address: _____

Telephone: _____

Go to step 5.

5. This Action Is Certified By: Jim Mellauer 1/27/11
name date

*Checklist prepared in accordance with criteria in
NUREG-1757, Vol.1; Rev. 1 dated September 2003

Rev 1 dated 11/04

Official Use Only – Security-Related Information
Checklist to Address Requests for Risk-Significant Radioactive Material

APPLICANT INFORMATION:

| | |
|---|------------------------|
| Name: Advanced Cardiovascular Specialists | Program Code(s): 02201 |
| License No.: 24-32712-01 | Control No.: CN 574147 |

STEP 1—IDENTIFICATION OF RISK-SIGNIFICANT RADIOACTIVE MATERIAL

| | |
|---|--------------------------|
| Instructions for Step 1: Complete Step 1 for applicants: a) requesting to add or increase a possession limit of a radionuclide listed in the Risk-Significant Radioactive Material (RSRM) table below; or b) currently subject to Security Requirement or IC Requirements and requesting to either terminate its license or to reduce their possession limits of RSRM radionuclides to less than the quantities in the table below. If the answer to either question is “YES” then do not proceed to Step 2. Sign and date the completed form and add it to ADAMS as Non-Sensitive and Non-Publicly Available. If the answer to the first question is “NO,” add the completed form to ADAMS as Sensitive and Non-Publicly Available, and complete Step 2 without delay. | Indicate YES or NA |
| Is the applicant requesting certain RSRM radionuclide(s) determined by calculations of the Total Activity and the Unity Rule to be less than the listed activity (TBq) in the RSRM table below? | N/A |
| Is the applicant is currently subject to Security Requirements or IC Requirements and requesting to terminate its license or reduce its possession limits to less than the quantities in the RSRM table below? If “YES,” notify Security_Orders.Resource@nrc.gov to remove the licensee from the National Source Inventory database. See guidance section 03.01 (b) for further information on notification. | N/A |

Risk-Significant Radioactive Material (RSRM)

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

| Radionuclide | Quantity (TBq ¹) | Quantity (Ci ¹) | Radionuclide | Quantity (TBq ¹) | Quantity (Ci ¹) |
|--------------|------------------------------|-----------------------------|---------------------|------------------------------|-----------------------------|
| 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 ² | 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 |

¹The primary values are TBq. The curie (Ci) values are for informational purposes only.

²The Atomic Energy Act, as amended by the Energy Policy Act of 2005, authorizes NRC to regulate Ra-226 and NRC has amended its regulations for discrete sources of Ra-226.

| | |
|--|--------------------------|
| Calculations of the Total Activity or the Unity Rule (See Attachment 2) were completed. NOTE–If an amendment of an existing license is being requested, the calculations must include the previously authorized quantities for the radionuclide(s). | Indicate YES or NO |
| Total Activity–multiple activities are requested for a single radionuclide and the sum of the activities is less than the quantity (TBq) for the RSRM radionuclide. | N/A |
| Unity Rule–multiple radionuclides are requested and the sum of the ratios is less than “one,” e.g., [(total activity for radionuclide A) ÷ (RSRM quantity for radionuclide A)] + [(total activity for radionuclide B) ÷ (RSRM quantity for radionuclide B) + etc. ÷ etc.] < 1.0. | N/A |

Signature and Date for Step 1:

 Reviewer *Jim Mullauer* / RA / *1/27/11*
 Date