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Attn:  
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DOCKETED  
USNRC

November 30, 2004 (9:56am)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

To:  
Secretary, U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
ATTN: Rulemakings and Adjudications Staff

Subject: Comments on RIN 3150-AH44 Proposed Rule 10 CFR Part 110, Export and Import of Nuclear Equipment and Radioactive Materials / Security Policies.

Dear NRC Rulemakings and Adjudications Staff,

Baker Atlas, a subsidiary of Baker Hughes Oilfield Operations, Inc. has reviewed the proposed rule changes for 10 CFR Part 110, Export and Import of Radioactive Material. We would like to submit our comments and recommendations about these rule changes. Please consider our comments and recommendations when discussing and implementing the proposed new rule changes for Export and Imports.

Sincerely,

Phil Stoehr  
Baker Hughes  
Western Hemisphere  
Manager Radiation Safety

James Elrod  
Baker Hughes  
Houston Technology Center  
Radiation Safety Officer

Template = SECY-067

SECY-02

**Title 10, Part 110 Code of Federal Regulations Proposed Rule  
Comments Due by November 30, 2004**

**110.23 (a)(3) General License For The Export of Byproduct Material**

Current:

For Americium-241, exports must not exceed one curie (308 milligrams) per shipment or 100 Curies (30.8 grams) per year to any country listed in 110.29, and must be contained in industrial process control equipment or petroleum exploration equipment in quantities not to exceed 20 Curies (6.16 grams) per device or 200 Curies (61.6 grams) per year to any one country.

Proposed:

For americium-241, exports must not exceed one curie (308 milligrams) per shipment or 100 curies (308 grams) per year, and must be contained in industrial process control equipment or petroleum exploration equipment. Exports to countries other than those listed in 110.28 or 110.29 must be contained in industrial process control equipment or petroleum exploration equipment and individual shipments must be less than the amounts specified in Category 2 of Appendix P to this Part.

Comment:

The second sentence of the proposed change is overly restrictive in that a typical Am241Be well logging source will contain very close to the Appendix P, Category 2 limit for Am241Be. The operational needs for backup or spare tools and the associated sources for the support of this equipment will be jeopardized. A large part of our business is to be able to provide uninterrupted support for the contracted customer's needs. The manner in which the proposed change to this rule is currently stated, we would have to make multiple shipments of material to support single locations in countries not listed in 110.28 or 110.29. Creating multiple shipments of radioactive materials to comply with the proposed rule would have a substantial economic impact. It would also tremendously increase the burden of security, tracking, and the proposed notification process for radioactive material exports.

Recommendation:

Change the proposed rule to read, "For americium-241, exports must not exceed one curie (308 milligrams) per shipment or 100 curies (308 grams) per year, and must be contained in industrial process control equipment or petroleum exploration equipment. Exports of Am241Be to countries other than those listed in 110.28 or 110.29 must be contained in industrial process control equipment or petroleum exploration equipment and individual shipments must be less than 10 times the amounts specified in Category 2 of Appendix P to this Part."

Basis for Recommendation:

10 times the amount specified for Am<sup>241</sup>Be in Appendix P, Category 2 would be consistent with the current reporting and tracking requirements promulgated by the USNRC and the International Atomic Energy Agency.

110.23(a)(7)

Proposed:

Individual export shipments of byproduct material must be less than the amounts specified in Category 2 of Appendix P to this Part.

Comment:

This proposed change is overly restrictive in that a typical Am<sup>241</sup>Be well logging source will contain very close to the Appendix P, Category 2 limit for Am<sup>241</sup>Be and backup or spare tools and the associated sources will be shipped in order to provide uninterrupted support for the contracted customers needs. The manner in which the proposed change to this rule is currently stated we would have to divide the shipment of material to support work into 2 shipments. Multiple shipments of radioactive materials to comply with the proposed rule would have an impact not only on the economy of shipping but also an increased security burden on each shipment.

Recommendation:

Change the proposed rule to read, "Individual export shipments of byproduct material must be less than the amounts specified in Category 2 of Appendix P to this Part.

Exports of Am<sup>241</sup>Be to countries other than those listed in 110.28 or 110.29 must be contained in industrial process control equipment or petroleum exploration equipment and individual shipments must be less than 10 times the amounts specified in Category 2 of Appendix P to this Part."

Basis for Recommendation:

10 times the amount specified for Am<sup>241</sup>Be in Appendix P, Category 2 would be consistent with the current reporting and tracking requirements promulgated by the USNRC and the International Atomic Energy Agency.

## **110.27 General License For Imports**

### **Proposed:**

(f) Individual import shipments of radioactive material must be less than the amounts specified in Category 2 of Appendix P to this Part.

### **Comment:**

This proposed change is overly restrictive in that a typical Am241Be well logging source will contain very close to the Appendix P, Category 2 limit for Am241Be and backup or spare tools and the associated sources will be shipped in order to provide uninterrupted support for the contracted customers needs. The manner in which the proposed change to this rule is currently stated we would have to divide the shipment of material to support work into 2 shipments. Multiple shipments of radioactive materials to comply with the proposed rule would have an impact not only on the economy of shipping but also an increased security burden on each shipment.

### **Recommendation:**

Change the proposed rule to read, "Individual import shipments of byproduct material must be less than the amounts specified in Category 2 of Appendix P to this Part.

Imports of Am241Be to countries other than those listed in 110.28 or 110.29 must be contained in industrial process control equipment or petroleum exploration equipment and individual shipments must be less than 10 times the amounts specified in Category 2 of Appendix P to this Part."

### **Basis for Recommendation:**

10 times the amount specified for Am241Be in Appendix P, Category 2 would be consistent with the current reporting and tracking requirements promulgated by the USNRC and the International Atomic Energy Agency.

NRC has recognized in the past (Reference Federal Register FR21JY95-3, Page 37556-37565) the desirability of take-back features of certain shipments and has exempted certain classes of radioactive sources from specific licensing.

Quoting from the above reference Federal Register:

"These types of transfers help to ensure that the materials are handled Responsibly and not left in dispersed and perhaps unregulated locations around the world, and therefore they should not be subject to specific licensing if the radioactive material involved would not otherwise be subject to such licensing."

Therefore it is our opinion that sources which are no longer needed where they have been used (idle) outside the U.S., should be allowed to be returned to the U.S. unimpeded where they will be under the care, custody and control of their owner and the authority of the NRC and/or agreement states.”

### **110.32 Information Required In An Application For A Specific License/NRC Form7**

#### **Proposed:**

(g) For proposed exports of material listed in Appendix P to this Part, pertinent documentation that the recipient of the material has the necessary authorization under the laws and regulations of the importing country to import, receive, and possess the material.

No comments for this change, this is consistent with good business practices and existing license requirements.

### **110.42 Export Licensing Criteria**

#### **Proposed:**

(e) In making its findings under paragraphs (a)(8) and (c) of this section for proposed exports of radioactive material listed in Appendix P to this Part, the NRC shall consider whether:

- 1) The receiving country has the appropriate technical and administrative capability, resources and regulatory structure to manage the material in a secure manner; and
- 2) The foreign recipient is authorized to receive and possess the material; or
- 3) In exceptional circumstances, that an alternative arrangement has been made to manage the material in a safe and secure manner.

(f) For proposed exports of Category 1 amounts of radioactive material listed in Appendix P to this Part, the receiving country consents to the import of the material.

#### **Comment:**

Exports of materials to developing countries where the material remains in the custody and control of an affiliate of the exporting company which has in place the necessary structure and controls to ensure that the material is managed in a safe and secure manner should be considered a normal alternative arrangement for the management of these materials not an “exceptional circumstance”.

Recommendation:

Change (e) 3) to read, " An alternative arrangement has been made to manage the material in a safe and secure manner."

Basis for Recommendation:

This is consistent with good business practices and existing controls that are in place to ensure that the material is managed in a safe and secure manner in countries where no or little regulatory structure is in place.

**110.43 Import Licensing Criteria**

Proposed:

- (e) With respect to the import of radioactive material listed in Appendix P to this Part, the U.S. recipient is authorized to possess the material under a contract with the Department of Energy or a license issued by the Commission or a State with which the Commission has entered into an agreement under Section 274b. of the Atomic Energy Act.

Comment:

These kinds of shipments should continue to enter the United States under general license, as currently applicable under 10 CFR Part 110 to the nuclear material in question. This includes radioactive material in sealed sources, or devices containing sealed sources, being sent to any qualified recipient authorized to receive and possess them. This exclusion acknowledges that shipment of used sources to a qualified recipient should be handled as expeditiously as possible because these types of shipments help to ensure that idle sources are handled in a safe and responsible manner.

Recommendation:

- (e) With respect to the import of radioactive material listed in Appendix P to this Part, the U.S. recipient is authorized to possess the material under a contract with the Department of Energy or a license issued by the Commission or a State with which the Commission has entered into an agreement under Section 274b. of the Atomic Energy Act.

Notwithstanding any other requirement of this part, a general license is granted for a U.S. recipient re-importing radioactive sources originally exported under the provisions of 10 CFR 110.

Basis for Recommendation:

NRC has recognized in the past (Reference Federal Register FR21JY95-3, Page 37556-37565) the desirability of take-back features of certain shipments and has exempted certain classes of radioactive sources from specific licensing.

Quoting from the above reference Federal Register:

“These types of transfers help to ensure that the materials are handled Responsibly and not left in dispersed and perhaps unregulated locations around the world, and therefore they should not be subject to specific licensing if the radioactive material involved would not otherwise be subject to such licensing.”

Therefore it is our opinion that sources which are no longer needed where they have been used (idle) outside the U.S., should be allowed to be returned to the U.S. unimpeded where they will be under the care, custody and control of their owner and the authority of the NRC and/or agreement states.”

**110.45 Issuance or Denial of Licenses**

Proposed:

(b)(5) With respect to a proposed import of radioactive material listed in Appendix P to this Part, the U.S. recipient is authorized to possess the material under a contract with the Department of Energy or a license issued by the Commission or a State with which the Commission Has entered into an agreement under Section 274b. of the Atomic Energy Act.

No comments for this change, this is consistent with good business practices and existing license requirements.

**110.50 Terms**

Current:

(a)(3) Each license authorizes export or import only and does not authorize any person to receive title to, acquire, receive, possess, deliver, use or transfer nuclear equipment or material.

Proposed:

(a)(3) Each license authorizes export or import only and does not authorize any person to receive title to, acquire, receive, possess, deliver, use, transport or transfer nuclear equipment or material.

(b)(4) A licensee authorized to export or import material listed in Appendix P to this Part is responsible for notifying NRC and the importing country in advance of each shipment. A list of points of contacts in importing countries is available at NRC's Office of International Programs (See 110.4). The NRC office responsible for receiving advance notifications for all export and import shipments will be specified on each specific export and import license. Notifications must be made at least 24 hours in advance of each shipment, and to the extent practical, 10 days in advance of each shipment. Notifications may be electronic or in writing and should contain the following information:

- (i) A copy of the authorization applicable to export shipments as required by §110.42, paragraph (e)(2),
- (ii) Estimated dates of when the shipment is to begin and end,
- (iii) Exporting or importing facility,
- (iv) Recipient,
- (v) Radioactive material and specific activity,
- (vi) Aggregate activity level, and
- (vii) Number of radioactive sources and their unique identifiers (such as manufacturer, model number and serial number). If the unique identifiers are not available, a description of the radioactive source shall be provided.

No comments for this change, this is consistent with good business practices and existing license requirements.

Re-number (b)(4); (b)(5) to (b)(5); (b)(6)

Current:

(b)(4) A licensee authorized to export or import nuclear material is responsible for compliance with applicable requirements of parts 40, 70, and 73 of this chapter, unless a domestic licensee of the Commission has assumed that responsibility and the Commission has been so notified.

Proposed:

(b)(5) A licensee authorized to export or import nuclear material is responsible for compliance with applicable requirements of parts 40, 70, 71, and 73 of this chapter, unless a domestic licensee of the Commission has assumed that responsibility and the Commission has been so notified.

No comments for this change, this is consistent with good business practices and existing license requirements.



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**Subject:** Comments for RIN3150-AH44  
**Creation Date:** Mon, Nov 29, 2004 3:50 PM  
**From:** "Elrod, Jim" <[James.Elrod@bakerhughes.com](mailto:James.Elrod@bakerhughes.com)>

**Created By:** [James.Elrod@bakerhughes.com](mailto:James.Elrod@bakerhughes.com)

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MESSAGE	385	Monday, November 29, 2004 3:50 PM
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Mime.822	93750	

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