

POLICY ISSUE
(Notation Vote)

August 15, 2003

SECY-03-0139

FOR: The Commissioners

FROM: Janice Dunn Lee, Director
Office of International Programs /RA/

SUBJECT: PROPOSED LICENSE TO EXPORT BYPRODUCT AND SOURCE MATERIAL TO IRAQ FOR USE IN OIL WELL LOGGING (APPLICATION NO. XB001300)

PURPOSE:

To request Commission approval of a license to Halliburton Energy Services (HES) and affiliated companies of HES' parent company, Halliburton Company (Halliburton), authorizing the export of radioactive byproduct and source material to Iraq for use in oil well logging. The HES application is being referred to the Commission in accordance with 10 CFR 110.40(b)(7). The applicant has requested expedited review of the application.

SUMMARY:

On July 1, 2003, HES applied for a specific license to export to Iraq certain byproduct and source materials, including americium-241, cesium-137, cobalt-57, and thorium-232 incorporated in neutron generators, densitometers and calibration devices for use in down hole oil well logging services at various locations in Iraq as described in Attachment 1, Exhibit A. The radioactive sources used for this purpose are double-encapsulated and are designed in such a way that they can be inserted into the logging instruments and lowered into the well. The sources emit radiation into well bore formations. The emitted radiation is measured in correlation with the decay rate to obtain measurement data used to evaluate the wells for age or damage. HES also uses radioactive byproduct materials as "calibration sources" for calibrating its logging tools.

The NRC license is being sought by HES pursuant to a United States (U.S.) Army Corps of Engineers contract awarded to Kellogg Brown & Root (KBR), another subsidiary of Halliburton, for fire suppression and rehabilitation of hydrocarbon and petrochemical facilities in Iraq (including but not limited to oil wells). The equipment will be authorized for export under a Department of Treasury license.

CONTACT: S. Schuyler-Hayes, OIP
415-2333

In order to provide the contracted services in Iraq, HES proposes to export the byproduct and source material to their subsidiary and intermediate consignee in Kuwait, Halliburton Overseas Limited (HOL) which will be the staging location. These exports will be joined together with other material already exported to Saudi Arabia under NRC general license at 10 CFR 110.22 and 110.23, being brought to the staging area. The applicant notes that during staging in Kuwait and operations in Iraq, the NRC-controlled items will at all times be owned by Halliburton entities and under the possession, control and safekeeping of their employees.

DISCUSSION:

The review of this license application is governed by the sole export criterion at 10 CFR 110.42(c), that the proposed export is not inimical to the common defense and security. In response to NRC's request for views on the proposed export, the Executive Branch (EB), in a letter dated July 28, 2003 (Attachment 2), determined that the proposed export will not be inimical to the common defense and security of the United States, and is consistent with the provisions of the Atomic Energy Act of 1954, as amended, in light of Presidential Determination No. 2003-23 of May 7, 2003, suspending the Iraq Sanctions Act of 1990 (P.L. 101-513). The EB also recommended that a license be approved with two conditions proposed by the NRC staff: 1) the exported materials remain in the control of Haliburton with no transfer of ownership without NRC authorization; and 2) the term of the license should be limited to September 30, 2004, to correspond with the expiration date of the Presidential Determination.

Policy Considerations

The export assists the implementation of U.S. policy supporting post war reconstruction activities in Iraq. That country is under the control of U.S. and coalition forces, currently responsible for all government activities there. The subject case concerns the export of byproduct and source material by contractors working under the auspices of a U.S. Government contract. International Atomic Energy Agency (IAEA) safeguards verification activities on nuclear materials in Iraq remain in effect. The staff has no international safeguards or physical protection concerns with this export, which is for non-nuclear end use.

Reporting

Americium exports must be reported to the NRC on a calendar year basis. This information is needed by the U.S. Government for reporting to the IAEA all exports of alternative nuclear materials. Hence, the proposed license should contain a third condition requiring the licensee to report the actual shipments of americium exports to the NRC as specified for the general license in 10 CFR 110.23(b).

Other Information

The staff has reviewed available U.S. Government and other information sources related to the subject application, and from that standpoint, has no objection to issuing the license subject to the three conditions noted above. Given future unforeseen circumstances, the license could be revoked, suspended, or modified as necessary under 10 CFR 110.52.

CONCLUSION:

The staff concurs with the EB judgment that issuing a license to HES would not be inimical to the common defense and security of the United States and is consistent with the provisions of the Atomic Energy Act of 1954, as amended, subject to the three conditions noted above.

The Office of the Executive Director for Operations concurs. The Office of General Counsel has no legal objection.

RECOMMENDATION:

That the Commission authorize the issuance of the requested license to HES with the following conditions:

1. The exported material must remain in the control of Halliburton with no transfer of ownership without NRC authorization.
2. The license will expire on September 30, 2004, to correspond with the expiration date of the Presidential Determination 2003-23, issued May 7, 2003.
3. The licensee must submit calendar year reports of americium exports under this license to the NRC Office of International Programs. The reports must contain the information specified in 10 CFR 110.23(b).

Janice Dunn Lee, Director
Office of International Programs

Attachments: 1. 7/01/03 Halliburton Energy Services Export License Application
2. 7/28/03 DOS Letter R.J.K. Stratford to J.D. Lee

**APPLICATION FOR LICENSE TO EXPORT
NUCLEAR MATERIAL AND EQUIPMENT**

Estimated burden per response to comply with this mandatory collection request: 2.4 hours. This submital is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to infocollections@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NE08-10202, (3150-0027), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

(See Instructions on Reverse)

1. APPLICANT'S USE		2. NRC USE	
a. DATE OF APPLICATION July 1, 2003		b. APPLICANT'S REFERENCE	
3. APPLICANT'S NAME AND ADDRESS		4. SUPPLIER'S NAME AND ADDRESS (Complete if applicant is not supplier)	
a. NAME Halliburton Energy Services (and affiliated companies of Halliburton Company)		a. NAME	
b. STREET ADDRESS (Facility Site) 4100 Clinton Drive		b. STREET ADDRESS	
c. CITY Houston	d. STATE TX	e. ZIP CODE 77020	
f. TELEPHONE NUMBER (713) 676-3011	g. FAX N/A	h. E-MAIL	i. CITY
j. STATE	k. ZIP CODE		
5. FIRST SHIPMENT SCHEDULED 6/19/03	6. FINAL SHIPMENT SCHEDULED 3/15/09	7. APPLICANT'S CONTRACTUAL DELIVERY DATE 6/19/03	8. PROPOSED LICENSE EXPIRATION DATE 6/19/09
9. CONTRACT NO. U.S.A.C.E. Contract DACA 63-03-D-0005			
10. ULTIMATE FOREIGN CONSIGNEE		11. ULTIMATE END USE (Include plant or facility name)	
a. NAME Halliburton Worldwide Ltd.		Items are for use in oil well servicing operations at various oil well locations in Iraq. See letter of explanation.	
b. STREET ADDRESS (Facility Site) Various oil well locations		11a. DATE REQUIRED	
c. CITY	d. COUNTRY Iraq	12. INTERMEDIATE FOREIGN CONSIGNEE	
12. INTERMEDIATE FOREIGN CONSIGNEE		13. INTERMEDIATE END USE	
a. NAME Halliburton Overseas Ltd.		N/A	
b. STREET ADDRESS (Facility Site) Yard No. 34, P.O. Box 9022		13a. DATE REQUIRED	
c. CITY East Ahmadi 61001	d. COUNTRY Kuwait	14. INTERMEDIATE FOREIGN CONSIGNEE	
14. INTERMEDIATE FOREIGN CONSIGNEE		15. INTERMEDIATE END USE	
a. NAME N/A		N/A	
b. STREET ADDRESS (Facility Site)		15a. DATE REQUIRED	
c. CITY	d. COUNTRY	16. COM CODE	
17. DESCRIPTION (Include chemical and physical form of nuclear material; give dollar value of nuclear equipment and components)		18. MAX. ELEMENT WEIGHT	19. MAX. WT. %
Radioactive byproduct materials used in oil well servicing operations. See attached letter of explanation.		20. MAX. ISOTOPE WEIGHT	21. UNIT
		See attached letter of explanation.	
22. FOREIGN OBLIGATIONS BY COUNTRY AND PERCENTAGE (Use separate sheet if necessary)			
N/A			
23. ADDITIONAL INFORMATION ON CONSIGNEES, END USES, AND PRODUCT DESCRIPTION (Use separate sheet if necessary)			
Elite, 16303 Air Center Blvd., Houston, TX 77032 Contact: Larry Earley 281-443-0886			
24. The applicant certifies that this application is prepared in conformity with Title 10, Code of Federal Regulations; and that all information in this application is correct to the best of his/her knowledge.			
25. AUTHORIZED OFFICIAL		b. TITLE	
a. SIGNATURE <i>Terry K. Johnston</i>		Director - Export-Import License	

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ATTORNEYS AT LAW

815 CONNECTICUT AVENUE, N.W.
WASHINGTON, D.C. 20006-4078
TELEPHONE (202) 452-7000
FACSIMILE (202) 452-7074

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WASHINGTON, D.C.

July 1, 2003

Via Federal Express

Mr. Edward T. Baker
Deputy Director
Office of International Programs
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop O-4E21
Rockville, Maryland 20852

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**RE: U.S. Army Corps of Engineers Contract (Contract No. DACA63-03-D-0005)
License Application to Export and Reexport NRC-Controlled Items to Iraq**

Dear Mr. Baker:

On behalf of Halliburton Energy Services ("HES") and affiliated companies of HES' parent company, Halliburton Company, we are applying for a license to export and reexport to Iraq certain radioactive byproduct materials used in or to calibrate downhole oil well logging equipment, as described below. These items are subject to the export licensing jurisdiction of the Nuclear Regulatory Commission ("NRC-controlled items"). This license is being sought in support of reconstruction activities in Iraq pursuant to a U.S. Army Corps of Engineers contract awarded to Kellogg Brown & Root, Inc. ("KBR"), also a subsidiary of Halliburton Company. Attached to this letter is a completed NRC Form 7 and a check in the amount of \$9,900.00, to cover the license application fee.

I. Background

KBR was awarded a contract (the "Contract") with the U.S. Army Corps of Engineers (Contract No. DACA63-03-D-0005) for fire suppression and rehabilitation of hydrocarbon and petrochemical facilities (including but not limited to oil wells) in Iraq. KBR has since subcontracted certain of its obligations to Halliburton Worldwide Ltd. ("HWL"), a subsidiary of HES. HWL is organized under the laws of the Cayman Islands and has its principal place of business at 10200 Bellaire Boulevard, Houston, TX 77072. In order to perform the required

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Office of International Programs
Nuclear Regulatory Commission
July 1, 2003
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services in Iraq, HWL will require logging instruments that are used with certain radioactive byproduct materials that are NRC-controlled items. The logging instruments are subject to the Export Administration Regulations ("EAR") and are classified under the EAR as "EAR99" items.

The NRC-controlled items are currently in possession of either HES, in the United States, Saudi Halliburton Logging LLC ("SHL"), or Halliburton Overseas Ltd ("HOL") in Kuwait.¹ The NRC-controlled items that are currently abroad were authorized for export from the United States by an NRC general license, at 10 C.F.R. § 110.22 and 110.23. The NRC-controlled items in the United States and Saudi Arabia will be exported or reexported to HOL's facility in Kuwait, where they will be combined with those NRC-controlled items already in Kuwait. All NRC-controlled items at this staging location will be maintained and safeguarded by HOL. HOL's facility in Kuwait is located at Yard No. 34, P.O. Box 9022, East Ahmadi 61001, Kuwait. The NRC-controlled items will remain at HOL's facility in Kuwait until required for operations in Iraq, at which point they will be transferred by Halliburton employees from the facility in Kuwait to various oil well locations in Iraq. When the NRC-controlled items are no longer needed for oil well operations in Iraq, they will be returned by Halliburton employees to the HOL facility in Kuwait until needed again. Since the items will be in Iraq only when in use and will be stored in Kuwait when not in use, HWL anticipates that they will be transferred between Iraq and Kuwait multiple times. During operations in Iraq and staging in Kuwait, the NRC-controlled items will at all times be owned by Halliburton entities and under the possession, control and safekeeping of Halliburton employees.

II. Items to be Exported and/or Reexported

As noted above, the NRC-controlled items include radioactive byproduct materials, subject to the export licensing jurisdiction of the NRC. These materials are used with logging instruments or devices as emitters of radiation into well bore formations. The emitted radiation is measured in correlation with decay rate for the purpose of providing information with respect to certain well bore conditions or lithology. These measurements are then used to evaluate oil well bores, particularly the condition of aged or damaged wells, to determine the extent of repair that will be required. The radioactive sources used for this purpose are double-encapsulated and are designed in such a way that they can be inserted into the logging instruments and then lowered into a well. HES also uses radioactive byproduct materials as "calibration sources" for purposes of calibrating its logging tools. The NRC-controlled items are more particularly described in the attached Exhibit "A."

¹ Halliburton International, Inc. is a majority owner of Saudi Halliburton Logging LLC, owning a 75% ownership share of the company. The remaining 25% ownership share is owned jointly by Shoaibi Contracting Establishment and Trading and Development Company. Saudi Halliburton Logging LLC is located at Abu Hadriyah Highway, Saihet, Saudi Arabia.

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The review of license applications for the export of source or byproduct materials for non-nuclear end uses – which is the case here – are governed by the consideration of whether the proposed export would be inimical to the common defense and security of the United States. See 10 C.F.R. §110.42(c). HES respectfully submits that the proposed exports and reexports of the NRC-controlled items are not inimical to the common defense and security of the United States. As this project is under the auspices of a U.S. Government contract, we believe that the proposed exports are entirely consistent with U.S. Government policy and objectives.

III. Authorization Requested

Accordingly, HES and affiliates of HES' parent company, the Halliburton Company, request a specific license for the export or reexport to Iraq of the NRC-controlled items described in this application.

* * *

In the event any further information is needed, please do not hesitate to contact me at (202) 452-7004.

Very truly yours,


Edward E. Dyson

Encls.: Exhibit A
NRC Form 7

cc: Terry Soderstrom
Matt A. Scheffe
Halliburton Company

Janet K. Kim
Robert H. Bethea
Baker & McKenzie

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Exhibit A

Wireline Logging Sources

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>TOTAL VALUE</u>
8	13650	19 Curie AmBe 241 Logging Source used with Dual Spaced Neutron Tool	\$30,000.00
8	13668	.5 Curie AmBe 241 Calibration Source used with Dual Spaced Neutron Tool	\$3,500.00
8	101200032	1.5 Curie CS137 Source used with Spectral Litho Density Tool	\$10,000.00
6	100133084	2.5 Microcurie TH 232 Blanket used to calibrate Digital Interface Telemetry System Tool, Natural Gamma Ray Tool, Compensated Spectral Natural Gamma Ray Tool.	\$1,150.00
8	100090159	150 Millicurie Am 241 Gamma Source for fluid density used with Radioactive Fluid Density Tool	\$4,500.00
6	100137406	.005 Microcurie CS-157 Pulsar Source encapsulated in Spectral Litho Density Tool.	\$1,500.00
6	100137408	.016 Microcurie CS-137 Pulsar Source encapsulated in Spectral Litho Density Tool.	\$1,500.00
6	100132056	.001 Microcurie Pulsar Source encapsulated in Compensated Spectral Natural Gamma Ray Tool.	\$2,200.00
2	101251864	0.1 Millicurie AM241 Calibration Source for tool calibration.	\$4,000.00
2	101007612	10 Microcurie CS-137 Calibration Source for tool calibration.	\$2,500.00
2	101272936	125 Millicurie CS-137 Calibration Source for calibrating Reservoir Monitoring Tool.	\$5,000.00

Densometer Sources

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>TOTAL VALUE</u>
10	100061746	10 Millicurie CESIUM 137 Sealed Model GT-GHP encapsulated in Densometer.	\$1,500.00
10	100031739	20 Millicurie, CESIUM 137, Sealed Model GT-GHP encapsulated in Densometer.	\$1,500.00
10	100031117	55 Millicurie, CESIUM 137, Sealed Model GT-GHP encapsulated in Densometer.	\$1,500.00
10	100032324	100 Millicurie, CESIUM 137, Sealed Model GT_GHP encapsulated in Densometer.	\$1,500.00

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Logging While Drilling Sources

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>TOTAL VALUE</u>
4	120161222	2.0 Curie, CS-137 Source SLD assembly with shield used in Stabilized Lith Density (SLD) Tool.	\$5,500.00
4	87280	19 Curie, Am241Be, Source Assy W/PIG used in Compensated Thermal Neutron (CTN) Tool.	\$30,000.00
4	120169357	8 Curie, Am241Be, Source Assy W/PIG used in Compensated Neutron Porosity (CNPh) Tool.	\$21,000.00
4	120171109	100 Millicurie Am241Be Source encapsulated in Compensated Thermal Neutron (CTN) Verifier for Calibration of Neutron Tool	\$2,000.00
8	120141442	1.3 Microcurie, CS-137 Source used in calibration of Gamma Tool.	\$500.00
4	120141184	5.0 Microcurie, CS-137 Source used in Compensation Neutron Porosity Calibrator for Calibration of Neutron Tool.	\$500.00
4	120172699	30 Microcurie, CO-57 Source used in Calibration Fixture for Calibration of the Stabalized Litho Density (SLD) Tool.	\$1,000.00

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United States Department of State

Washington, D.C. 20520

www.state.gov

July 28, 2003

Ms. Janice Dunn Lee
Director
Office of International Programs
United States Nuclear Regulatory Commission
Rockville, Maryland

Dear Ms. Lee:

I refer to the letter from your office dated July 22, 2003, requesting the views of the Executive Branch as to whether issuance of an export license in accordance with the application hereinafter described meets the applicable criteria of the Atomic Energy Act of 1954, as amended.

NRC No. XB001300 – Halliburton Energy Services has applied for a license to authorize the export to Iraq of americium-241, cesium-137, cobalt-57 and thorium-232 incorporated in neutron generators, densitometers and calibration devices for oil well logging. Export of the equipment which is under Department of Commerce jurisdiction will be authorized under OFAC license.

It is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security of the United States, and is consistent with the provisions of the Atomic Energy Act of 1954, as amended, in light of Presidential Determination No. 2003-23 of May 7, 2003 suspending the Iraq Sanctions Act of 1990 (P.L. 101-513). The Executive Branch also concurs in the conditions proposed by the NRC: 1) to condition the license to require that the exported material remain in the control of Halliburton with no transfer of ownership without NRC authorization; and 2) that the validity of the license be limited to September 30, 2004, to correspond with the validity of the Presidential Determination.

Sincerely,

Richard J.K. Stratford
Director,
Nuclear Energy Affairs

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Presidential Documents

Presidential Determination No. 2003-23 of May 7, 2003

Suspending the Iraq Sanctions Act, Making Inapplicable Certain Statutory Provisions Related to Iraq, and Delegating Authorities, under the Emergency Wartime Supplemental Appropriations Act, 2003

Memorandum for the Secretary of State [and] the Secretary of Commerce

By virtue of the authority vested in me by the Constitution and the laws of the United States, including sections 1503 and 1504 of the Emergency Wartime Supplemental Act, 2003, Public Law 108-11 (the "Act"), and section 301 of title 3, United States Code, I hereby:

(1) suspend the application of all of the provisions, other than section 586E, of the Iraq Sanctions Act of 1990, Public Law 101-513, and

(2) make inapplicable with respect to Iraq section 620A of the Foreign Assistance Act of 1961, Public Law 87-195, as amended (the "FAA"), and any other provision of law that applies to countries that have supported terrorism.

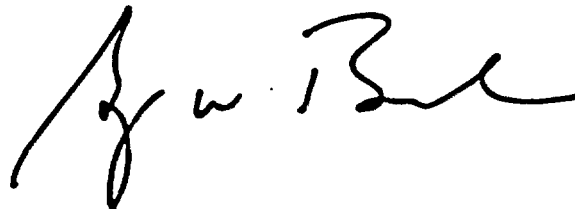
In addition, I delegate the functions and authorities conferred upon the President by:

(1) section 1503 of the Act to submit reports to the designated committees of the Congress to the Secretary of Commerce, or until such time as the principal licensing responsibility for the export to Iraq of items on the Commerce Control List has reverted to the Department of Commerce, to the Secretary of the Treasury; and,

(2) section 1504 of the Act to the Secretary of State.

The functions and authorities delegated herein may be further delegated and redelegated to the extent consistent with applicable law.

The Secretary of State is authorized and directed to publish this determination in the Federal Register.



THE WHITE HOUSE,
Washington, May 7, 2003.

SEC. 1503. The President may suspend the application of any provision of the Iraq Sanctions Act of 1990: *Provided*, That nothing in this section shall affect the applicability of the Iran-Iraq Arms Non-Proliferation Act of 1992 (Public Law 102-484), except that such Act shall not apply to humanitarian assistance and supplies: *Provided further*, That the President may make inapplicable with respect to Iraq section 620A of the Foreign Assistance Act of 1961 or any other provision of law that applies to countries that have supported terrorism: *Provided further*, That military equipment, as defined by title XVI, section 1608(1)(A) of Public Law 102-484, shall not be exported under the authority of this section: *Provided further*, That section 307 of the Foreign Assistance Act of 1961 shall not apply with respect to programs of international organizations for Iraq: *Provided further*, That provisions of law that direct the United States Government to vote against or oppose loans or other uses of funds, including for financial or technical assistance, in international financial institutions for Iraq shall not be construed as applying to Iraq: *Provided further*, That the President shall submit a notification 5 days prior to exercising any of the authorities described in this section to the Committee on Appropriations of each House of the Congress, the Committee on Foreign Relations of the Senate, and the Committee on International Relations of the House of Representatives: *Provided further*, That not more than 60 days after enactment of this Act and every 90 days thereafter the President shall submit a report to the Committee on Appropriations of each House of the Congress, the Committee on Foreign Relations of the Senate, and the Committee on International Relations of the House of Representatives containing a summary of all licenses approved for export to Iraq of any item on the Commerce Control List contained in the Export Administration Regulations, 15 CFR Part 774, Supplement 1, including identification of end users of such items: *Provided further*, That the authorities contained in this section shall expire on September 30, 2004, or on the date of enactment of a subsequent Act authorizing assistance for Iraq and that specifically amends, repeals or otherwise makes inapplicable the authorities of this section, whichever occurs first