



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 6, 2023

James Warden, Director
Office of Nuclear Energy,
Safety & Security Affairs, Room 3320 HST
Bureau of International Security
& Nonproliferation
U.S. Department of State
2201 C Street, NW
Washington, D.C. 20520

Dear Dir. Warden:

Enclosed is an application (PXB216.03) dated January 18, 2023, received by the U.S. Nuclear Regulatory Commission, from Halliburton Energy Services, for a specific license to export Category 5 quantities of Am-241, Cs-137, Co-60 and Cf-252, as well as Category 2 quantities of Am-241/Be to multiple countries. See the list of countries below.

The Category 5 Am-241 sources and the Category 2 Am-241/Be sources will be used in downhole well logging operations for data acquisition of geology make-up. The Category 5 Cs-137 and Cf-252 sources will be used in downhole oil well logging operations for data acquisition of geology make-up, as well as for energy compensation for logging tool detector stabilization. The Category 5 Co-60 sources will be used for markers in pipe casing to determine well location for perforating.

Before acting on this request, we would appreciate your views on this application, in accordance with title 10 to the *Code of Federal Regulations* section 110.41(a)(10), from the overall perspective of the Executive Branch, as to whether the requested export meets the applicable criteria in the Atomic Energy Act of 1954, as amended.

Sincerely,

X Peter J. Habighorst

Peter Habighorst

Signed by: Peter J. Habighorst

Peter Habighorst, Branch Chief
Export Controls and Nonproliferation Branch
Office of International Programs

Countries Listed on Halliburton's License Application needing EB Views are:

Tier 3

Congo, Republic of (Brazzaville); Long-term exports to subsid's are permitted
Congo, Democratic Republic of (Kinshasa); Eligible for 1-year licenses
Liberia; Eligible for 1-year licenses

Tier 4

Antigua and Barbuda; Consult the EB before issuing license
Barbados; Consult the EB for issuing license
Barbuda; Consult the EB before issuing license
Belize; Consult the EB before issuing license
Benin; Consult the EB before issuing license
Bhutan; Consult the EB before issuing license
Botswana; Consult the EB before issuing license
Bosnia and Herzegovina; Consult the EB for issuing license
Burkina Faso; Consult the EB before issuing license
Burundi; Consult the EB before issuing license
Cambodia; Consult the EB before issuing license
Cape Verde; Consult the EB before issuing license
Central African Republic; Consult the EB before issuing license
Chad; Consult the EB before issuing license
Dominica; Consult the EB before issuing license
Eritrea; Consult the EB before issuing license
Eswatini (Formerly Swaziland); Consult the EB before issuing license
Fiji; Consult the EB before issuing license
Gambia; Consult the EB before issuing license
Grenada; Consult the EB before issuing license
Guinea; Consult the EB before issuing license
Guinea-Bissau Consult the EB before issuing license
Kiribati; Consult the EB before issuing license
Kosovo; Consult the EB before issuing license
Laos; Consult the EB before issuing license
Lebanon; Consult the EB before issuing license
Lesotho; Consult the EB before issuing license
Macedonia; Consult the EB before issuing license
Malawi; Consult the EB before issuing license
Maldives; Consult the EB before issuing license
Mali; Consult the EB before issuing license
Marshall Islands; Consult the EB before issuing license
Micronesia; Consult the EB before issuing license
Monaco; Consult the EB before issuing license
Nauru; Consult the EB before issuing license
Nepal; Consult the EB before issuing license
Nicaragua; Consult the EB before issuing license
Palau; Consult the EB before issuing license
Rwanda; Consult the EB before issuing license
Saint Kitts and Nevis; Consult the EB before issuing license

Saint Vincent and the Grenadines; Consult the EB before issuing license
Samoa; Consult the EB before issuing license
San Marino; Consult the EB before issuing license
Sao Tome and Principe; Consult the EB before issuing license
Serbia; Consult the EB before issuing license
Seychelles; Consult the EB before issuing license
Sierra Leone; Consult the EB before issuing license
Solomon Islands; Consult the EB before issuing license
Somalia; Consult the EB before issuing license
Tanzania; Consult the EB before issuing license
Timor-Leste; Consult the EB before issuing license
Togo; Consult the EB before issuing license
Tonga; Consult the EB before issuing license
Tuvalu; Consult the EB before issuing license
Vanuatu; Consult the EB before issuing license
Zimbabwe; Consult the EB before issuing license

Enclosure:
Export License Application

J. Warden, DOS
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S. Clagett, DOC
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S. Davidson-Hood, CIV/DTSA

J. Semones, DHS/CBP
R. Bennett, DHS/CBP
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R. Justice, DOS

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