

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee

- 1. Halliburton Company
-Halliburton Services
-Otis Engineering
- 2. -Vann Systems
1015 Bois D'Arc
P. O. Drawer 1431
Duncan, Oklahoma 73536

In accordance with letter dated dated May 16, 1986

3. License number 35-00502-02 is amended in its entirety to read as follows:

4. Expiration date March 31, 1991

5. Docket or Reference No. 030-05900

6. Byproduct, source, and/or special nuclear material

7. Chemical and/or physical form

8. Maximum amount that licensee may possess at any one time under this license

- A. Iodine-131
- B. Scandium-46
- C. Iridium-192
- D. Cobalt-60
- E. Zinc-65
- F. Silver-110m
- G. Iron-59
- H. Lanthanum-140
- I. Gold-198

- A. Any
- B. Any
- C. Any
- D. Any
- E. Any
- F. Any
- G. Any
- H. Any
- I. Any

- A. 1.5 curies
- B. 1.5 curies
- C. 3 curies
- D. 50 millicuries
- E. 100 millicuries
- F. 750 millicuries
- G. 500 millicuries
- H. 1 curie
- I. 1 curie

9. Authorized use:

A. through I. To be used for tracer studies in oil and gas wells.

CONDITIONS

Handwritten initials: AB

Handwritten date: 4/1/88

MATERIALS LICENSE
SUPPLEMENTARY SHEETLicense number
35-00502-02Docket or Reference number
030-05900

Amendment No. 24

10. A. Licensed material may be used and stored at the branch offices located in the non-Agreement States listed in the licensee's application dated April 11, 1984, and GEO Vann, Inc. letter dated November 27, 1984. The licensee shall notify USNRC, Region IV, Nuclear Materials Safety Section, 611 Ryan Plaza Drive, Suite 1000, Arlington, Texas 76011, of the opening of additional branch offices or the closing of existing branch offices (in non-Agreement States) within 7 days thereafter.
- B. Licensed material shall be used only at temporary job sites of the licensee anywhere in the United States where the Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. Licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have completed the GEO Vann training course in the use of, the devices and have been designated by John Tangas, GEO Vann Radiation Safety Officer or individuals who have been trained as specified in licensee's application dated April 11, 1984, and letters dated May 13, 1985, and June 6, 1985. The licensee shall maintain records of individuals designated as users.
12. This license does not authorize commercial distribution of licensed material.
13. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated April 11, 1984
B. Letter dated November 19, 1984
C. Letter dated November 27, 1984, from GEO Vann, Inc.
D. Letter dated March 7, 1985
E. Letter dated May 13, 1985
F. Letter dated June 6, 1985
G. Letter dated May 16, 1986

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date JUN 11 1986By Nuclear Materials Safety Section
Region IV
Arlington, Texas 76011

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