NRC Form 314
(11-82)
10 CFR 30.36(d)(1)(iv)
10 CFR 40.42(d)(1)(iv)
10 CFR 70.38(d)(1)(iv)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB
3150-0028
EXPIRES 11-30-85

CERTIFICATE OF DISPOSITION OF MATERIALS

(All items MUST be completed, please print)

LICENSEE NAME AND ADDRESS	LICENSE NUMBER
Memorial Medical Center 800 North Rutledge Street Springfield, Illinois 62781	12-00089-02
	LICENSE EXPIRATION DATE November 30, 1988

THE LICENSEE OR ANY INDIVIDUAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE LICENSEE CERTIFIES THAT: *(Check and/or complete the appropriate item(s) below.)*

A. MATERIALS DATA *(Check one and complete, as necessary)*

☐ 1. NO MATERIALS HAVE EVER BEEN POSSESSED OR PROCURED BY THE LICENSEE UNDER THIS LICENSE.

OR

☐ 2. ALL MATERIALS PROCURED AND/OR POSSESSED BY THE LICENSEE UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN TRANSFERRED ON

DATE	TO	WHICH HAS NRC LICENSE NUMBER

OR

☐ 3. ALL MATERIALS PROCURED AND/OR POSSESSED BY THE LICENSEE UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN TRANSFERRED ON

DATE	TO	WHICH HAS LICENSE NUMBER	ISSUED BY THE STATE OF

AN AGREEMENT STATE PURSUANT TO SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED, AND THE ENERGY REORGANIZATION ACT OF 1974.

OR

☒ 4. MATERIALS HAVE BEEN DISPOSED OF IN THE FOLLOWING MANNER. *(Describe specific disposal procedures—if additional space is needed, use the reverse of this form, or provide attachments)*

Nickel-63 foil source (2.5 mCi)

Transferred to Pedneault Associates, Oakdale, New York on 7/26/84.
License # 2232-30-10 (See attached Memorandum of Record)

B. OTHER DATA

☐ 1. OUR LICENSE HAS NOT YET EXPIRED; PLEASE TERMINATE IT.

2. WAS A RADIATION SURVEY CONDUCTED TO CONFIRM THE ABSENCE OF LICENSED RADIOACTIVE MATERIALS AND TO DETERMINE WHETHER ANY CONTAMINATION REMAINS ON THE PREMISES COVERED BY THE LICENSE? *(Check one)*

☐ NO

☒ YES, THE RESULTS *(Check one)*

This is a sealed source. The source was leak tested on 5/18/84. Results are attached.

☒ ARE ATTACHED, OR

☐ WERE FORWARDED TO NRC ON *(Date)*

3. THE PERSON TO BE CONTACTED REGARDING THE INFORMATION PROVIDED ON THIS FORM

NAME	TELEPHONE NUMBER
Randy Maxey, M.S., RSO	217-788-3267

4. MAIL ALL FUTURE CORRESPONDENCE REGARDING THIS LICENSE TO

James Rigby, Senior Vice President and Chief Operating Officer

RETURN TO:

DIRECTOR, DIVISION OF FUEL CYCLE AND MATERIAL SAFETY
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555

CERTIFYING OFFICIAL

SIGNATURE	DATE
Randy Maxey	7/16/85

PRINTED NAME AND TITLE
Randy Maxey, M.S.
Radiation Safety Officer

NRC Form

CONTROL NO. 7 9 4 4

Revised 11/83

Sealed Source Test Data Sheet

Source & Identification Number: ^{63}Ni

Location of Source: Warehouse Date: 5/18/84

Counting Instrument: PACKARD 2S COUNTER Inspector: STAFF - RIA

Counting Efficiency: _____

Settings: _____

Wipe or Leak Test Materials: _____

Procedure: All samples should be counted for a length of time sufficient to collect 10,000 counts. When this is not feasible a 10 minute count time can be used for low activity samples.

Data: Total Counts: attached Count Time: _____

CPM: _____

What type of vial was used to contain the sample? _____

Background: Total Counts _____ Count Time _____

CPM: _____

Calculations:

$$MDA = \frac{3\sqrt{2N}}{t}\ (cpm) \times \frac{100}{E} \times \frac{1\ (\mu Ci)}{2.2 \times 10^{6}\ (dpm)} = 3\sqrt{2.22} \times \frac{100}{14} \times \frac{1}{2.22 \times 10^{6}} = 9.5 \times 10^{-6}\ \mu Ci$$

MDA = minimum detectible activity
N = number of background counts
t = time
E = % efficiency

Removable Activity:

$$A(\mu Ci) = \frac{N_t}{t} - \frac{N_B}{t} \cdot \frac{100}{E} \cdot \frac{1}{2.2 \times 10^{6}}$$

$$38 \times \frac{100}{.94} \times \frac{1}{2.2 \times 10^{6}} = 1.84 \times 10^{-5}\ \mu Ci = .0000184\ \mu Ci$$

Evaluation: OK

Comments:

J. Stolz 1150

John C 14

C 14 = 93.8% Eff.

PROGRAM #: 7
REGION A: LL-UL= 0- 19 LCR= 0 BKG= 0 % 2 SIGMA= .2
REGION B: LL-UL= 2- 19 LCR= 0 BKG= 0 % 2 SIGMA= .2
REGION C: LL-UL= 0- 0 LCR= 0 BKG= 0 % 2 SIGMA= .2
TIME= 1.00 QIP= SIS SCR= B/A K= 1.000

P#	S#	TIME	CPMA/K	%DEV	CPMB/K	%DEV	CPMC/K	%DEV	QIP	FLAGS	SCR	MIN
7	1	1.00	22.00	42.6	11.00	60.3	.00	.00	13.2		.500	1
7	2	1.00	38.00	32.4	22.00	42.6	.00	.00	11.8		.579	3
7	3	1.00	25.00	40.0	16.00	50.0	.00	.00	11.2		.640	4
7	RA 4	1.00	22.00	42.6	11.00	60.3	.00	.00	12.8		.500	5

MEMORANDUM OF RECORD

The Hewlett Packard 7610A High Efficiency Gas Chromatograph (model 86195, serial number A2026) was transferred to Pedneault Associates in Oakdale, New York on 6/26/84. Dr. Bradley at the New York Radiological Health Office confirmed that Pedneault was licensed to receive the gas chromatograph under license number 2232-30-10. The gas chromatograph contained a sealed Ni-63 radioactive source (2.5 mCi).

Name of Carrier: Wheeler Trucking

P.U. 7.26.84

Signature: Tim Wheeler

John T. Stalp, M.S.
Radiation Safety Officer
Memorial Medical Center

CONTROL NO. 7 9444