

MORGAN, LEWIS & BOCKIUS

3252

123 SOUTH BROAD STREET  
PHILADELPHIA, PENNSYLVANIA 19109  
TELEPHONE: (215) 491-9200

717 FIFTH AVENUE  
NEW YORK, NEW YORK 10022  
TELEPHONE: (212) 486-7320

800 NORTH THIRD STREET  
HARRISBURG, PENNSYLVANIA 17102  
TELEPHONE: (717) 238-1787

COUNSELORS AT LAW  
1800 M STREET, N.W.  
WASHINGTON, D.C. 20036

TELEPHONE: (202) 872-5000  
CABLE ADDRESS: MORLEBOCK  
TELEX: 89-627

800 WEST SIXTH STREET  
LOS ANGELES, CALIFORNIA 90017  
TELEPHONE: (213) 687-9900

ASSOCIATED OFFICE:  
130, RUE DU FAUBOURG ST. HONORE  
PARIS 8, FRANCE  
TELEPHONE: 359-29-57

August 28, 1978

Joseph M. Brown, Jr.  
U.S. Nuclear Regulatory Commission  
Office of Nuclear Material Safety  
and Safeguards  
Radioisotopes Licensing Branch  
Division of Fuel Cycle and Material  
Safety  
7915 Eastern Avenue  
Silver Spring, MD 20555

Dear Mr. Brown:

Enclosed is the additional information that you requested with respect to the Well Logging, Inc. Byproduct Material License Application. (NRC Mail Control No. 95733).

The information is set forth in accordance with the format utilized in the original application.

Thank you again for your assistance in expediting the processing of the application. If you need any more information please give Bill Horin or myself a call as soon as possible.

Sincerely,

*William A. Horin for*  
Kevin P. Gallen

/tjs

Enclosure

8508300197 850618  
REG4 LIC30  
35-18229-01 PDR

Well Logging, Inc. (Applicant)  
Byproduct Material License Application  
Additional Information

Item 6(b)

The 3Ci AmBe 241 Neutron Source is  
manufactured by

Gulf Nuclear, Inc.  
202 Medical Center Building  
Webster, Texas 77598

The source is Gulf Nuclear's model  
No. GN-71-1

Item 13

The well logging truck and source will  
be stored at the facility described  
below. The source storage assembly  
will remain secured and locked in the  
truck when the truck is parked in the  
garage. The building will be leased  
by Well Logging, Inc. from The McIntosh  
Co., Inc., and is located at  
1402 South 69th East Avenue, Tulsa,  
Oklahoma 74112. A simple annotated  
sketch of the property and the building  
is attached.

The building is a large (approximately  
32' x 42') garage set back 100 feet from  
69th East Avenue. The walls of the  
building are red brick, with a sheet  
metal side on the north wall. There are  
two doors to the building, both of which  
may be securely locked so that access  
can be gained only by authorized persons.  
One door is an entrance door on the  
north side of the building. The other  
door is a large overhead door on the  
east side of the building which is used  
for access with the truck. The floor  
of the building is cement. There are  
two locked windows on the building, on  
the north and south walls. A telephone  
is to be installed in the building.  
There is water service and electricity.

The surrounding area includes the McIntosh facility (a cement block structure) on the north side, approximately 10 feet from the building, and a large, fenced area to the south and west of the building. The fence prevents access to the building exterior from the sides and rear. This entire area is to be illuminated for night security. The fenced area will be used as a storage area by The McIntosh Co. McIntosh is a heating and plumbing company. The driveway to the facility runs to the building from the street on the east.

Item 14

Leak testing, as described in Part H of the Operating Manual, will be performed using the Leak Wipe Test Kit manufactured by

Atomic Energy Industrial Laboratories  
of the Southwest, Inc.  
6421 S. Main  
Houston, Texas 77030  
(713/790-9719)

NRC License No. 8-1067

The Applicant will make the wipings and send the wipes to Atomic Energy Industrial Labs for measurement in accordance with the methodology established by them for their Leak Wipe Test Kit.

The Well Logging, Inc. Operating Manual is amended to include provisions for permanently sealing the source in place and permanently marking the well in the event the source cannot be recovered from the well. Pages 8 and 9 of the Manual, as revised are attached.

- e. It is necessary to minimize possible exposures by controlling the time and distance factors during the fishing operation. Where practical, everyone, except the well operator and enough personnel to provide necessary assistance during the operation, should be kept from the area. All handling of the drilling rig equipment should be handled by the well operator and actual handling of the source should be done by the Radiation Safety Officer or a qualified designee.
  - f. In the event the source cannot be recovered from the well, the Radiation Safety Officer should so inform the appropriate persons listed above, and the well owner or his representative. The Radiation Safety Officer will make sure that arrangements for permanently sealing the hole are made, and the hole is then sealed. He will be responsible for ensuring that any specific instructions from NRC or the appropriate State agency are followed. He will see to it that the hole is marked with permanent signs which indicate the source is sealed in the well hole.
3. Fires
- a. Notify all personnel in the area immediately.
  - b. Attempt to put out the fire if a radiation hazard is not immediately present.
  - c. Notify the fire department.
  - d. Notify the Radiation Protection Officer.
  - e. The Radiation Protection Officer will set up restrictions governing the fire fighting and other emergency activities.
  - f. Following the emergency, monitor the area and ascertain the emergency devices necessary for safe contamination.
  - g. Notify the authorities listed above.

(Revised)

- h. Decontaminate the area.
- i. The Radiation Protection Officer will have to approve the area before work can resume.
- j. Monitor all persons involved in combating the emergency.
- k. Prepare a complete report of the accident for transmittal to the authorities listed above.
- 4. Leaking Source
  - a. If the logging tool indicates that a source is leaking, shut the operation down.
  - b. Notify the well owner.
  - c. The Radiation Protection Officer will set up control procedures for keeping personnel out of the immediate area until recovery is commenced.

#### J. REVIEW OF RADIATION SAFETY PROGRAM

The Radiation Protection Officer will conduct quarterly reviews of the radiation safety program. These reviews will include:

- 1. Determining that these established procedures are being followed to ensure the protection of the health and safety of well logging personnel and the general public.
- 2. Check to see that all required records are being maintained, including those records described in Part G above.
- 3. Determining that all equipment associated with the well logging operation is in safe working order.

(Revised)

JOB LOG SHEET

Well Logging Incorporated

Date:

Customer Name:

Well Location:

Survey Readings

Measurements should be entered in units of mr/hr.  
The exposure rates given in parenthesis are the maximum  
acceptable readings. Measurements in excess of those  
quantities indicate a problem which needs to be corrected  
before beginning well logging.

Prior to travel to well location:

Source storage assembly

at surface \_\_\_\_\_ (200 mr/hr)

at three feet distance \_\_\_\_\_ (10 mr/hr)

Truck

at 18 inches from surfaces \_\_\_\_\_ (2 mr/hr)

in passenger cab \_\_\_\_\_ (2 mr/hr)

Well Site:

Prior to logging

general area \_\_\_\_\_

well bore \_\_\_\_\_

Following logging

general area \_\_\_\_\_

well bore \_\_\_\_\_

logging tool \_\_\_\_\_

Comments:

14th

The McIntosh Co.

S. 69th E. Av.

Well Logging Inc.

Driveway

Vacant Lot

fence

Enclosed Storage Area

Approx. 100'

~42'

~32'

~10'

