

FEB 18 1979

FCLM:JMB
(96668)

Shelwell Services, Inc.
ATTN: Mr. Clyde D. Shelton
President
Route 1, Harbor Hills
Hebron, OH 43025

Gentlemen:

This refers to your application dated September 26, 1978, for the renewal of your material License No. 34-10445-01. Your application needs to be supported with the additional information listed below.

1. More specific information is needed on the formal training provided to Brent Lane, Thomas Reed, James Haines and William Bettger. Please present an outline of your "Classroom" or "Seminar Type" training provided to these individuals. In earlier letters you indicated that Assistant Engineers work primarily under Mr. Shelton or Mr. Miller's supervision. Please indicate if this is still the case, and also state your requirements for authorizing your Assistant Engineers to operate independently under the license.
2. You are requested to list the manufacturer and the manufacturer's model numbers of the cesium-137 sources listed in Item 6.E. and Item 6.F. of your application. The number of sources and activity in millicuries listed in the application (2 curies each and 125 millicuries each) appears to cover the sources listed in Items 6.E., 7.E. and 8.E. of your present license. The present Item 7.E. of the license lists the sealed sources you may possess as General Nuclear, Inc. Model GNL-CS-1000 or GNL-CS-2000. If you no longer have these approved sources and want to replace them with sources of another manufacturer, you will need to be specific as to both the manufacturer and the model number for the particular cesium sources you intend to possess under the renewed license. Also, for your information, we cannot identify from our records that Hastings Radiochemical Works sources were ever approved for use in well logging. Perhaps if you have Hastings Radiochemical Works sources, they were supplied to you by another manufacturer and under some other specific model number. Please clarify how and from whom Hastings Radiochemical Works sources were obtained if you actually possess these sources.

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3. In Item 11 of your application you state that calibration of your radiation survey meters will be done "in house". Therefore, you need to provide a detailed description of your survey meter calibration procedures. Your description of calibration procedures needs to include, as a minimum:
 - a. The manufacturer and model number of each radiation standard source to be used;
 - b. The radioactive material and quantity of material (in millicuries, etc.) contained in each source;
 - c. The accuracy of your calibration sources, that is, the traceability of the sources to a primary standard;
 - d. The step-by-step procedures used for a typical instrument calibration, including associated safety procedures, and
 - e. The name and pertinent experience of each person who will perform the calibrations.

You are reminded that daily or other frequent checks of survey instruments using instrument check sources are not considered calibrations. Survey instruments should be calibrated every 6 months with a two-point calibration on each scale of each instrument with the two-points separated by at least 50% of the scale. A survey instrument may be considered properly calibrated when the instrument readings are within $\pm 20\%$ of the calculated or known values for each point checked.

4. You need to provide specific information on your handling procedures for the uncontained radioactive tracer materials (iodine-131, scandium-46, and iridium-192). Include your requirements for use of general safety equipment, such as rubber gloves, coveralls, specified injection equipment, handling tools, etc., that will be available and used at the well site. Include, also, the surveys for contamination that are made during and following tracer use.
5. A description of your transport containers for your americium-241 and cesium-137 sources needs to be provided. If these are not standard transport containers, give the name of the manufacturer and model number can be provided; simple sketches of the containers showing construction materials (lead, paraffin, etc.) and wall thickness would be helpful. Please indicate how your storage and transport containers are labeled to indicate content.
6. You should provide a description of your handling tools for use with the americium-241 and cesium-137 sources.

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7. From Item 14-4 of your application, it would appear that you intend to use a leak test kit for performing the required 6 month leak testing of the cesium-137 and americium-241 sources. Please list the manufacturer and model number of the leak test kit(s) you intend to use, if this is the case. Otherwise, it will be necessary for you to provide a complete description of your leak test procedures including the names of personnel designated to perform these functions. Also, you will need to describe your means of assaying the leak test sample.

You are reminded that a renewal application needs to be complete in all respects and reflect your program at the time of the renewal. Thus, the need for the information requested above. You may find the enclosed Guides helpful. If you have questions or I can supply additional information, feel free to contact me at Area Code (301) 427-4228. Please reference your assigned Mail Control No. 96668 in your reply.

Sincerely,

Joseph M. Brown, Jr.
License Management Branch
Division of Fuel Cycle and
Material Safety

Enclosures:

1. Guides dtd 1975
2. 10 CFR Parts 19, 20, 30
and 71

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PLNAME	J. M. Brown:bjp					
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