

March 15, 1985

Ms. B. J. Holt
U. S. Nuclear Regulatory Commission
Materials Licensing Section
Region III
700 Roosevelt Road
Glen Ellyn, IL 60137

Dear Ms. Holt:

SYTEC, Inc., would like to add one new customer site to our current NRC License Amendment Control #76623.

The new customer site is: Appleton Waste Water Treatment Plant
City of Appleton
59 Weimer Court
Appleton, WI 54911

The site will be serviced by Greg Horton, who received NRC approval through the original License dated February 24, 1984.

The source device that will be serviced at Appleton Waste Water Treatment Plant, manufactured by Kay-Ray, is a Cs-137 source with an activity of 500 mCi:

<u>Source Type</u>	<u>Source Serial Number</u>	<u>Device Model Number</u>
Cs-137	5032	7050B

RECEIVED
MAY 14 1985
REGION III

8509120422 850524
REG3 LIC30
48-21261-01 PDR

Ms. B. J. Holt
Page 2

Enclosed are the necessary additions to the SYTEC Radiation Safety Manual. I have been in contact with Kay-Ray and they agree that SYTEC'S source wipe procedures, safety procedures and general maintenance procedures are in accordance with their specifications.

If you need further information, feel free to call me.

Sincerely,

Allison Blackmer
Radiological Officer

6.7 Columbia Scientific Model 740 Compact Materials Analyzer

Safety

The radioactive source in the Model 740 Analyzer is mounted directly behind the shutter as shown in Figures 6.8 and 6.9, for all three probe options. All surfaces of the probes except the bottom of the Surface Probe are safe to handle. The shutters of the Laboratory Sample Probe and Light Element Probe cannot be opened unless the covers are closed thereby protecting the operator at all times. The shutter of the Surface Probe can be opened by pressing the pin on the bottom of the probe. DO NOT PLACE THE HAND OR FINGERS OVER THE EXPOSED APERTURE OF THE SURFACE PROBE while the shutter is open. Operating personnel may work continuously in the vicinity of the device without fear of radiation exposure if the above precautions are followed.

Leak Testing

Leak testing of all sources supplied with the Model 740 is required at 6-month intervals. The Leak Test Certificates supplied with your instrument carry the last leak test date. You must have a leak test performed 6 months from this date. Store all Leak Test Certificates in a well kept file. You may be asked to produce these certificates by the licensing and regulatory authorities in your state.

To Perform the Leak Test

1. Open cover to expose sample holder cavity and source shutter.
2. Gently wipe around the shutter and the top surface of the shutter itself with the leak test swab. (See position E, in Figure 4b).
3. Close cover and place swab in bottle provided. Label bottle with source type and serial number.
4. If the source is found to be leaking, follow the Emergency Procedures as outlined in this manual.

LABORATORY (SAMPLE) PROBE

Dimensions in millimeters

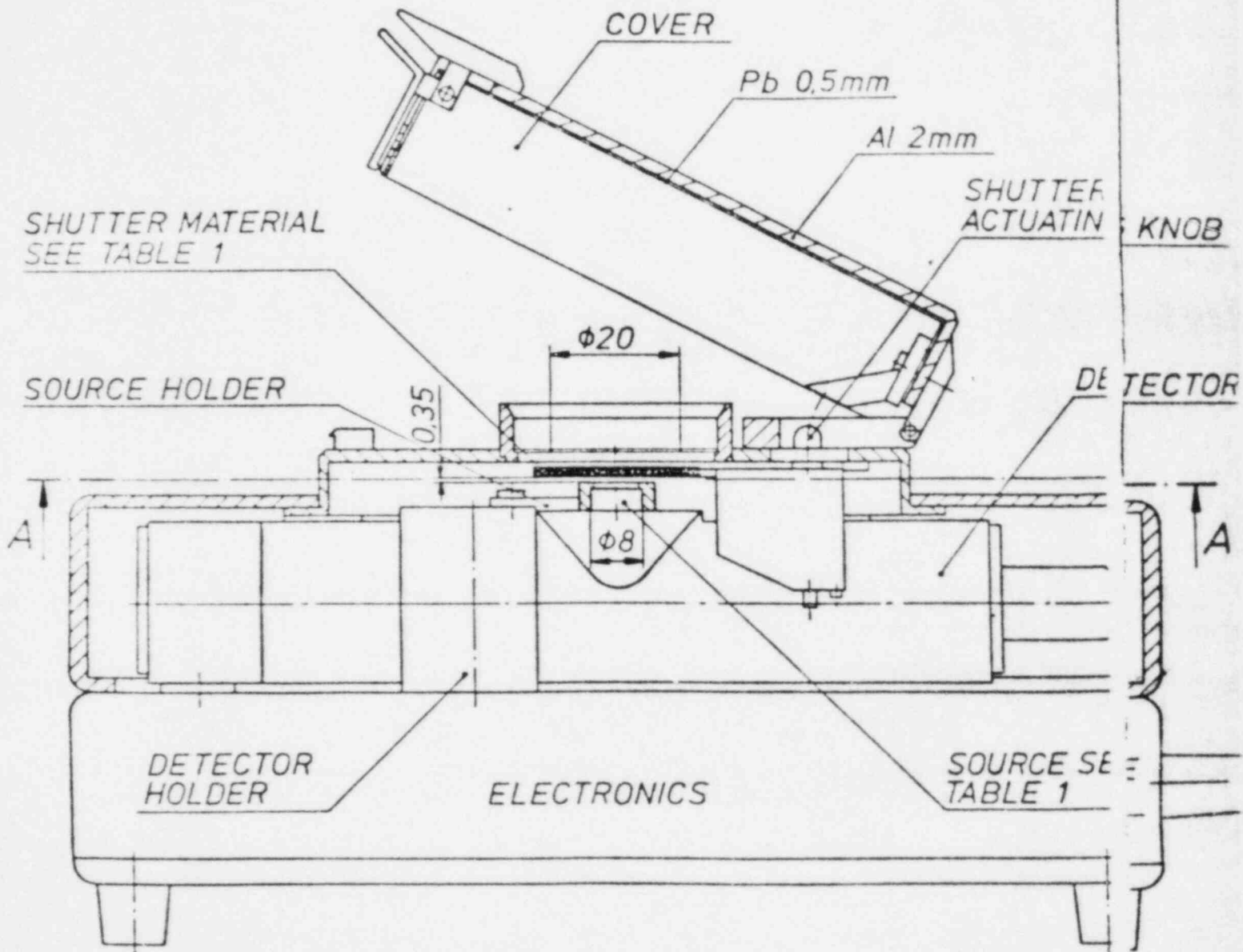
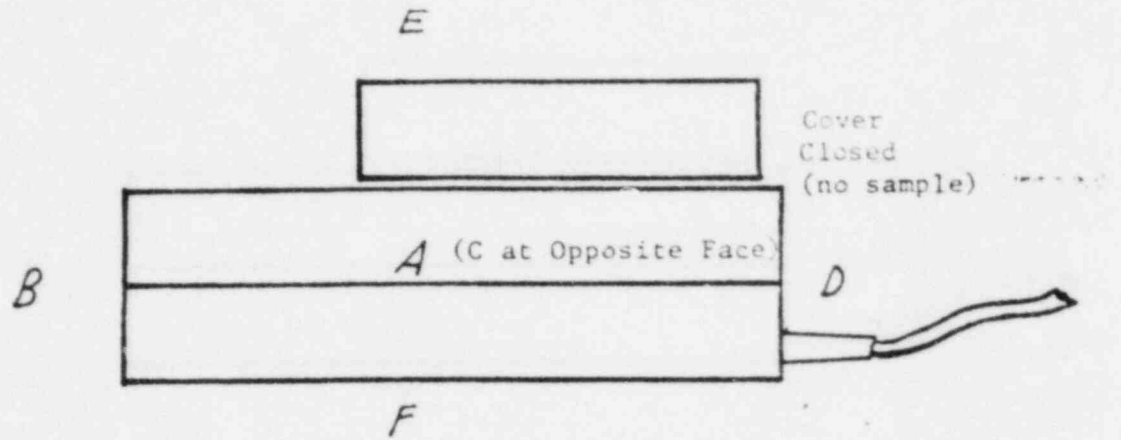
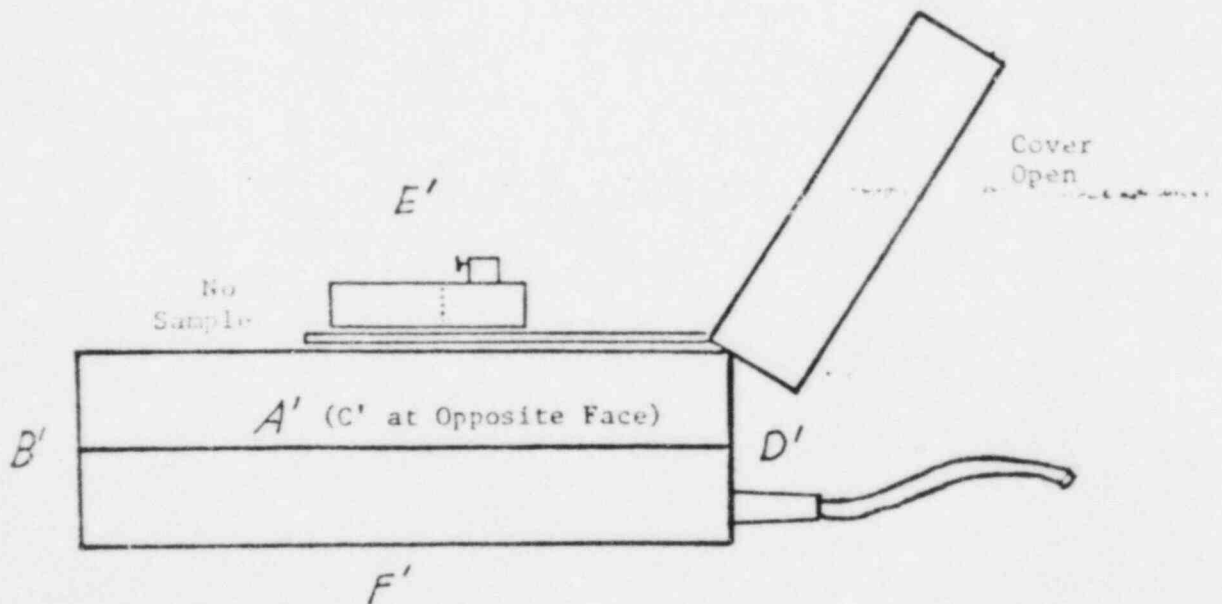


Figure 6.8

MEASUREMENT LOCATIONS FOR
LABORATORY SAMPLE PROBE
AND LIGHT ELEMENT PROBE



a) "Measure" Configuration



b) "Open" Configuration (ready for a sample)

Figure 6.9

LFE
Corporation

March 27, 1985

Sytek, Inc.
2525 South Oneida Street
Appleton, WI 54915

Attn: Allison Blackmer
Vice President

Dear Allison,

This letter certifies that the following subjects were included in the Radiation Training Course presented at your facility on January 8 and 9, 1985

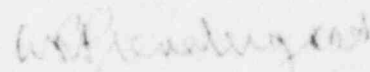
1. Source Replacement

Using a typical LFE radiation device and a dummy source, I demonstrated the correct procedure for removing and installing a source. Then, hands-on training was provided to each student. Under my supervision each student removed and installed the dummy source.

2. Leak Testing

The requirements for leak testing were reviewed followed by a demonstration of leak testing using a suitable radiation detector. Calibration of the detector was demonstrated. Then, each student performed a simulated leak test. The procedure for analyzing leak test results was explained and the students performed a simulated analysis. Methods of recording data were reviewed.

Very truly yours,
LFE CORPORATION



William R. Prendergast
Radiation Safety Officer

WRP:erd