



VETERANS ADMINISTRATION
HOSPITAL

150 MUIR ROAD

MARTINEZ, CALIFORNIA 94553

January 10, 1979

IN REPLY
REFER TO: 612/114B

Nuclear Regulatory Commission
License Management Branch
Division of Fuel Cycle and Material Safety
Washington, D. C. 20553

Attn: Francis A. St. Mary

Gentlemen:

We understand from your letter of November 29, that our previous application has been voided, and this communication is intended to serve as an application for amendment of License No. 04-02956-02. In response to your letter regarding authorization to possess and use a 100 millicurie Cs-137 sealed source (letter no. 96984), additional information is enclosed which hopefully will satisfy your requirement for licensing approval. In checking with the manufacturer, J. L. Shepherd and Associates, we were informed that the Series 10 Portable Beam Calibrator uses an NRC approved Cesium-137 source capsule designated U. S. Nuclear Source Type 375.

A data sheet on the calibrator is enclosed. Although the source is removable from the calibrator for applications involving free source exposure, the application involves use of the source for port beam exposures of radiation survey instruments for calibration. The radiation safety hazard involving a beam port will be significantly less than that involved with a panoramic type exposure.

Procedures for use and storage of the calibrator will be as follows:

1. The source and container will be stored in Room D-57 in a locked cabinet with keys restricted to personnel in Radiotherapy Service only. The source, during periods of storage, will be locked in the shielded storage container and access by key limited to the radiation physicist, who will use the calibrator. The external radiation level as specified by the manufacturer is 5 mR/hr or less at one foot from the surface.
2. The beam calibrator will be labeled with appropriate warning signs and source identification including nuclide activity and date of calibration. Security for the premises is provided by hospital police.
3. Use of the source will be limited to the radiation physicist and the location of use will be Room D-57. This room has shielding designed for use of a Cobalt-60 teletherapy unit, and modified

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FEE EXEMPT

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"To care for him who shall have borne the battle, and for his widow, and his orphan." - ABRAHAM LINCOLN

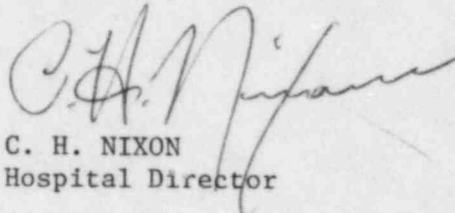
for a 6 MeV linear accelerator, and is more than adequate to limit the exposure of employee personnel outside of Room D-57 to much less than the maximum allowable. Access to the area outside of the room during use is limited to radiation workers and medical center employees.

4. Occupancy of room will be limited to the radiation physicist at all times during use of the calibrator. The radiation physicist will always wear a film badge and a pocket chamber or digital dosimeter during use. Care will be taken to restrict as much as possible individual exposure to areas outside of the beam defined by the beam port of the device.

5. At no time will the calibrator be left unattended with the source exposed without any shielding.

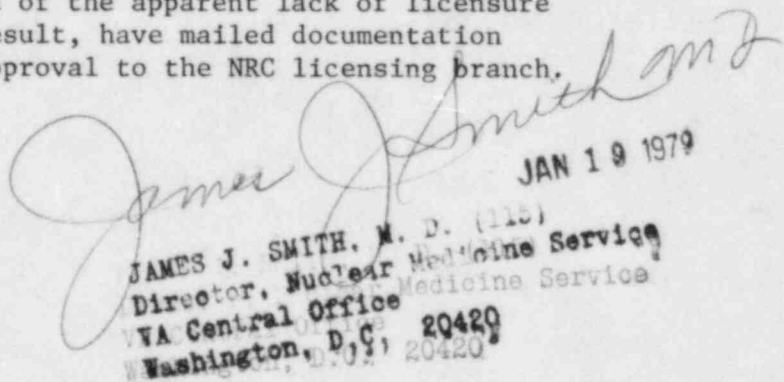
6. Wipe tests will be performed at six month intervals.

Sincerely yours,

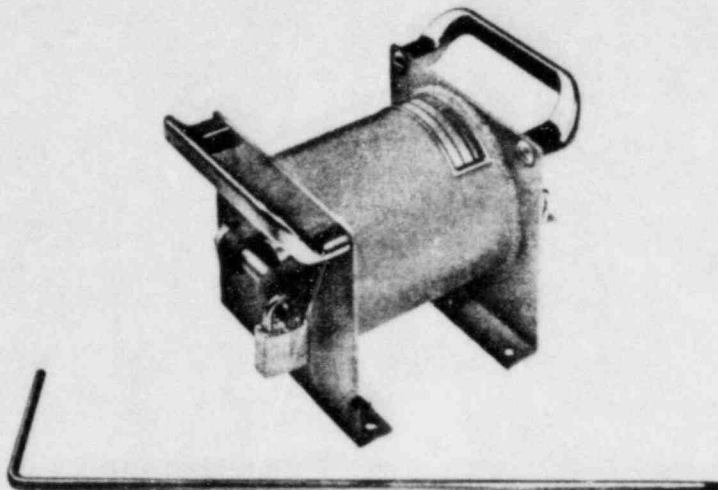

C. H. NIXON
Hospital Director

Encl

P.S. We just learned from T. L. Shepherd that the calibrator device has been approved by the State of California Bureau of Radiological Health for several years. They have been informed of the apparent lack of licensure by NRC and as a result, have mailed documentation regarding state approval to the NRC licensing branch.


JAN 19 1979
JAMES J. SMITH, M. D. (118)
Director, Nuclear Medicine Service
VA Central Office
Washington, D.C. 20420

SERIES 10 PORTABLE BEAM CALIBRATORS WITH REMOVABLE SOURCES



Model 10 are lightweight, portable Calibration Facilities designed for the calibration of low or intermediate range survey meters, as well as remote area monitor probes or other applications in which it is desirable to use a small gamma source with attached handler for panoramic or free air exposures.

These units include a 100 mCi ^{137}Cs gamma source mounted on the end of a shielded plug, which fits into an NRC/DOT approved shipping and storage container. A handler, which threads into the shielded end of this plug, is supplied so that the source may be removed from the shield for panoramic exposures. A second removable plug is provided in line with the source, which may be removed to provide a 20° beam port for the calibration of survey instruments.

These shields are equipped with handles so that they may be easily transported.

An 18 inch handler is provided for manipulation of the source in free air exposures.

All sources are calibrated free air with an accuracy of $\pm 5\%$ with Bureau of Standards traceable Roentgen Meters.

SPECIFICATIONS

External radiation level is 5 mR/hr or less at one foot from the surface.

All beam port plugs as well as source rods are equipped with padlocks for storage.

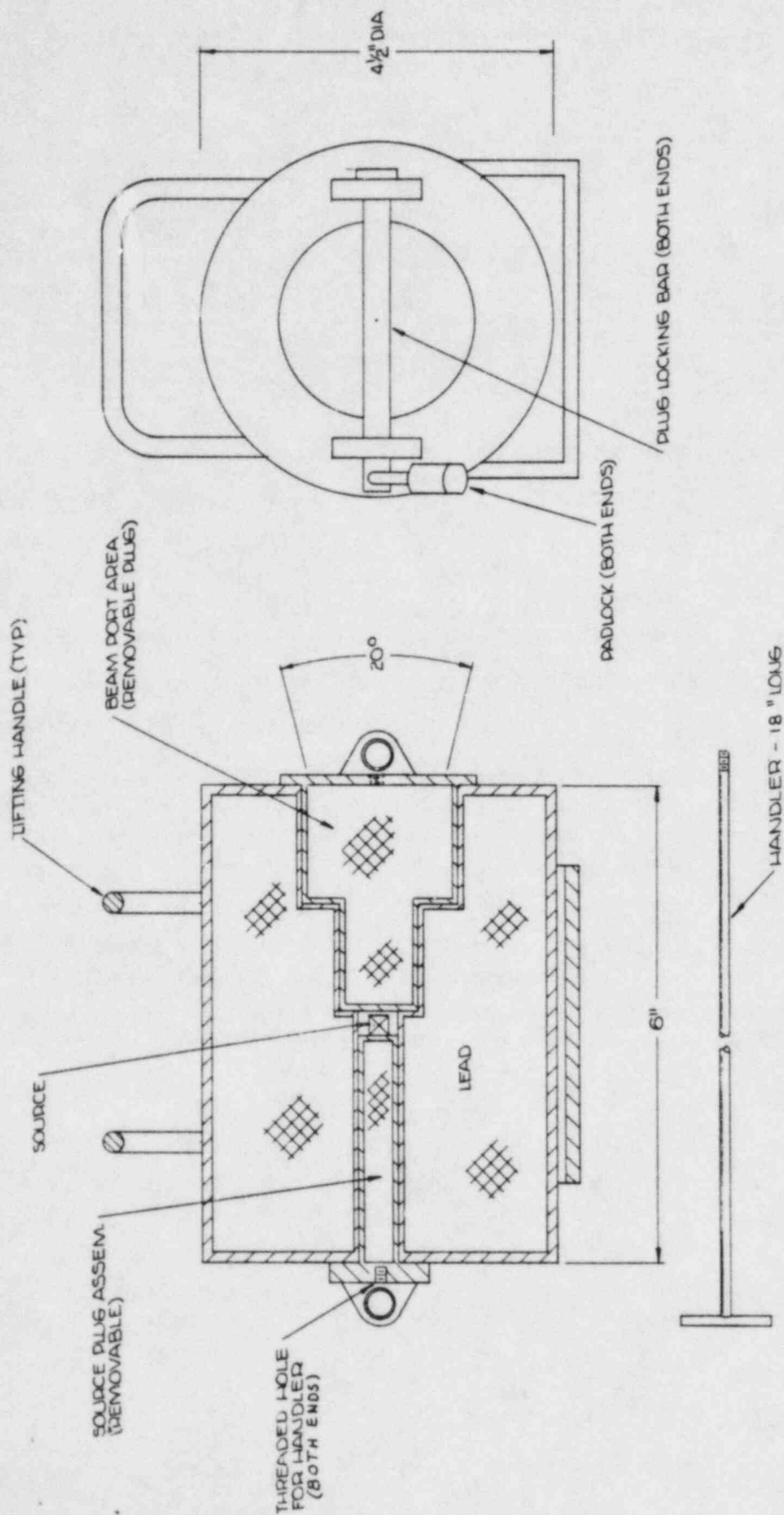
	Source	Weight	Output		Price
			12 inch	40 inch	
Model 10	100 mCi ^{137}Cs	40 pounds	350 mR/hr	32 mR/hr	\$695.00
Model 10A	20 mCi ^{137}Cs	20 pounds	54 mR/hr	5 mR/hr	\$650.00

Delivery from stock.

F.O.B.: Glendale, California.

JLS **SHEPHERD** *and Associates*
740 SALEM ST.
GLENDALE, CA 91203
(213) 245-0187

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NOTE

1. ALL WELDED STEEL CONSTR.
2. SURFACES INSIDE/OUTSIDE FINISH PER JLS SPEC
3. WEIGHT - 40 LBS.

J.L. SHEPHERD and Associates			
SCALE	FULL	APPROVED BY:	DESIGNED BY: RMLH
DATE	6-1-75	REVISED	
BEAM CALIBRATOR WITH REMOVABLE SOURCE			
PROPOSAL			DESIGN NUMBER A 0306

**SERIES 10 PORTABLE BEAM
CALIBRATORS WITH REMOVABLE SOURCES**

Model 10 are lightweight, portable Calibration Facilities designed for the calibration of low or intermediate range survey meters, as well as remote area monitor probes or other applications in which it is desirable to use a small gamma source with attached handler for panoramic or free air exposures.

These units include a 100mCi ^{137}Cs gamma source mounted on the end of a shielded plug, which fits into an NRC/DOT approved shipping and storage container. A handler, which threads into the shielded end of this plug, is supplied so that the source may be removed from the shield for panoramic exposures. A second removable plug is provided in line with the source, which may be removed to provide a 20° beam port for the calibration of survey instruments.

These shields are equipped with handles so that they may be easily transported. Weight is only 40 pounds.

An 18 inch handler is provided for manipulation of the source in free air exposures.

All sources are calibrated free air with an accuracy of $\pm 5\%$ with Bureau of Standards traceable Roentgen Meters.

SPECIFICATIONS

External radiation level is 5 mR/hr or less at one foot from the surface.

All beam port plugs as well as source rods are equipped with padlocks for storage.

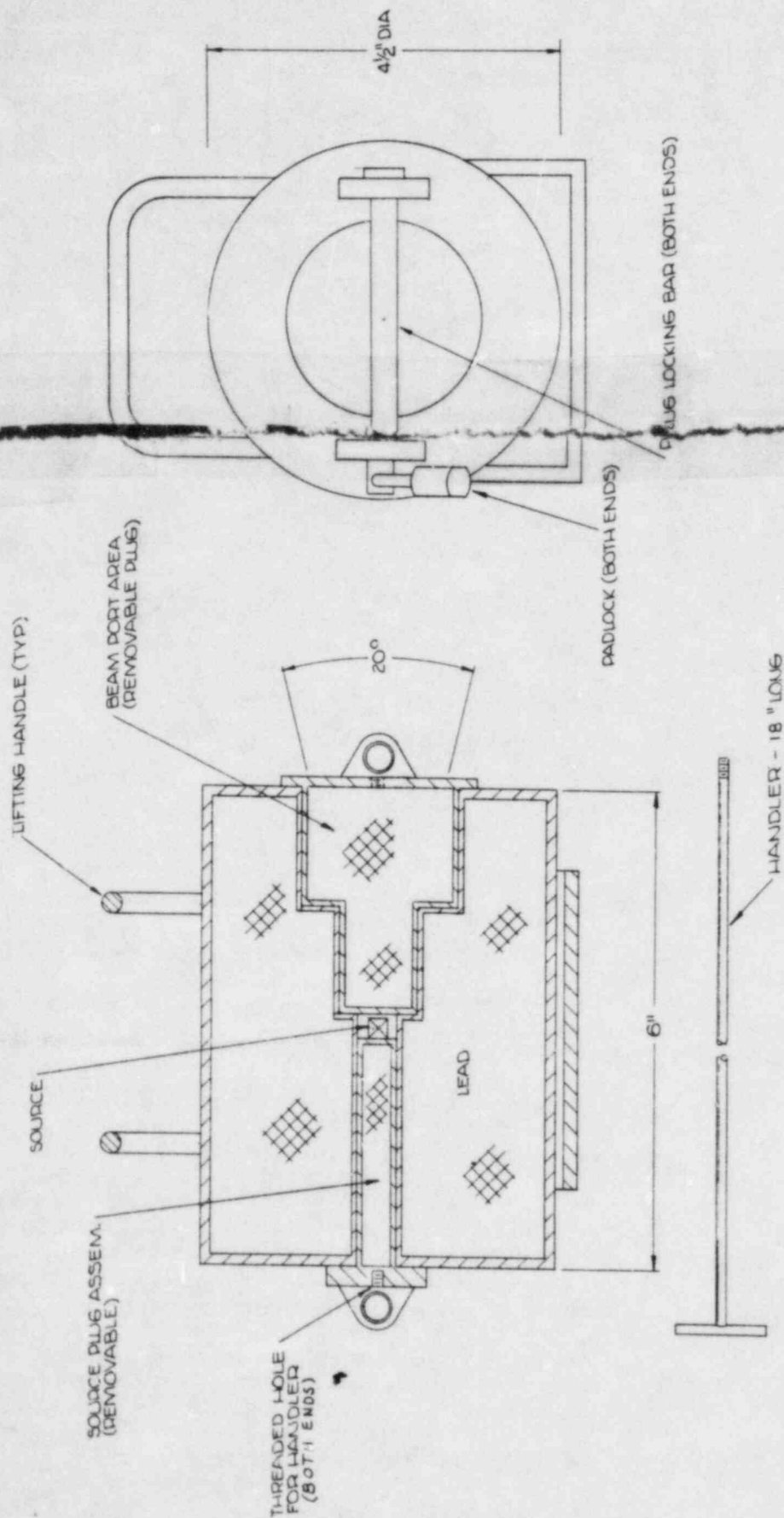
Carrying handle and storage tube for handler are built in.

Source	100 mCi ¹³⁷ Cs "Special Form"			
Output	6"	12"	20"	40"
	1400 mR/hr	350 mR/hr	128 mR/hr	32 mR/hr
Handler	18" long			
Weight	40 pounds			
Dimensions	Shield	4½" dia. x 6" long		
	Overall	4½" side x 10" long x 10" high		
Price	\$645.00 645.00			

Model 10-A with 50 mCi, ^{137}Cs source. Weight 32 lbs. Otherwise identical to Model 10. Price ^{650.00} \$595.00.

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Glendale, California 91203
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J. L. SHEPHERD and Associate

SCALE	FULL	DESIGNED BY	QMLH
DATE	6-1-75	APPROVED BY	ED-180

BEAM CALIBRATOR WITH REMOVABLE SOURCE

PROPOSAL

A-0306