

**REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE
(AMENDS IN ITS ENTIRETY)**

NO. : NC-585-D-801-G

DATE: January 11, 2005

PAGE: 1 of 4

DEVICE TYPE: Self Lighting Sign

MODEL No.: Safety 10 Exit Sign

MANUFACTURER/DISTRIBUTOR: SRB Technologies, Inc.
2580 Landmark Drive
P.O. Box 25267
Winston Salem NC 27114-5267

<u>SEALED SOURCE MODEL DESIGNATION:</u>	<u>ISOTOPE:</u>	<u>MAXIMUM ACTIVITY:</u>
<u>SRB Technologies</u>	Hydrogen 3 (Tritium)	21 Curies (777 GBq)

LEAK TEST FREQUENCY: None Required for Tritium

PRINCIPAL USE: (W) Self Luminous Light Source

CUSTOM DEVICE: _____ YES X NO

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DESCRIPTION:

H-3 gas contained within high borosilicate glass vials, the interiors of which are coated with phosphor. The device is fully tested during and following manufacture to ensure no leakage exists. The vials are mounted on shock mounts inside the sign and the whole permanently sealed shut. The resultant sign is very robust.

LABELING:

Labeling is in accordance with the requirements of Rule **15A NCAC 11.0328** of the North Carolina Regulations, and complies with Title 10 CFR Part 32.51. The labels contain the radiation symbol, isotope, activity, model number, serial number, name of distributor, and the words "CAUTION-RADIOACTIVE MATERIAL."

DIAGRAM:

See Attachment 1.

CONDITIONS OF NORMAL USE:

The Safety-10 Sign is intended for use inside buildings, fixed in normal **exit** sign positions (over doors, fixed from pendulum mounts from ceilings, etc.)

PROTOTYPE TESTING:

Saunders-Roe Developments has provided full information on prototype testing of the Safety-10 sign to the State of North Carolina, Radiation Protection Section. The prototype testing was done by EMI Electronics, Limited, Test House, Feltham, England. Tests were made in accordance with American National Std. N540 – Classification of Radioactive Self-Luminous Light Sources. Date of Test Approval: November 19, 1980.

EXTERNAL RADIATION LEVELS:

There should be no radiation exposure under normal installation and use.

QUALITY ASSURANCE AND CONTROL:

The manufacturer maintains a full quality control program throughout all stages of production. The program provides for testing throughout the assembly process. The final test is for contamination and proper illumination.

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LIMITATIONS AND/OR OTHER CONSIDERATIONS OF USE:

This device is no longer being manufactured or distributed by SRB Technologies, Inc.

Reviewer Note: The manufacturer/distributor will accept these signs for disposal; no other services are provided.

Reviewer Note: This registration sheet and the information contained within the references shall not be changed without the written consent of the North Carolina Division of Radiation Protection, Radioactive Materials Section.

SAFETY ANALYSIS SUMMARY:

The Safety-10 Sign is a well-constructed exit sign with no external radiation, which has the ability to withstand very rough treatment. It is inherently a very safe sign. The supplier provides a Radiation Safety Manual that describes the beta lights and some precautions on how to handle, store, and use the lights. It also tells what to do if one is broken. Also contains a list of do's and don'ts.

REFERENCES:

The following supporting documents are hereby incorporated by reference into this SS&D registry document:

1. Sealed Source & Device Registry Certificate No. NC-585-S-101-U originally issued November 20, 1981;
2. **Completed questionnaire dated March 30, 2004, signed by Jim Roberts, President and RSO.**

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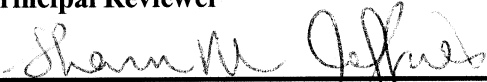
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ISSUING AGENCY:

State of North Carolina
Department of Environment and Natural Resources
Radiation Protection Section
1645 Mail Service Center
Raleigh NC 27699-1645


Principal Reviewer



Sharn M. Jeffries, Health Physicist

Date: January 11, 2005

Concurrence Reviewer:



George Accattato, Health Physicist

Date: January 11, 2005

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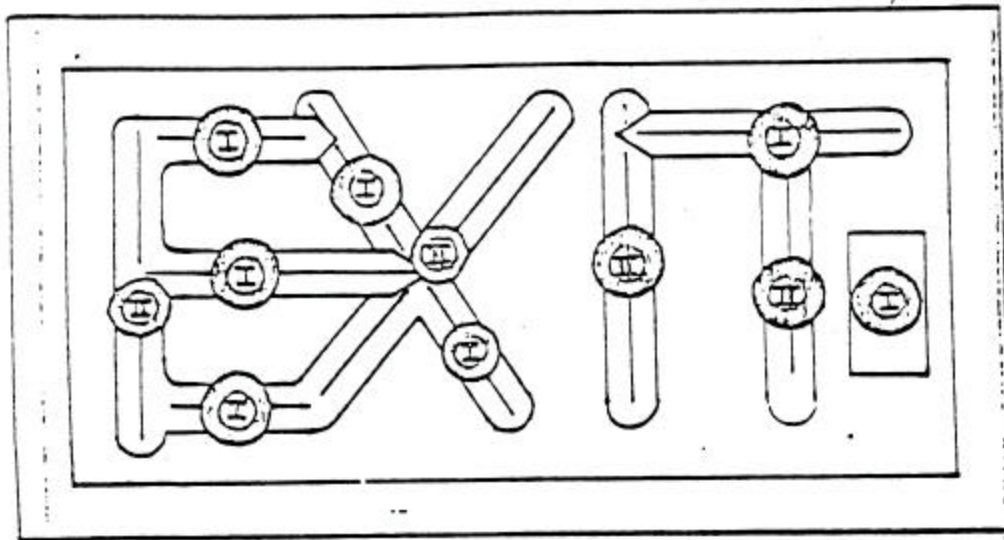
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ATTACHMENT 1 of 1

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Front and Side View of the Safety 10 Exit Sign



— FIGURE 1

FIGURE 2

