

CE 10 76087
Harry H. Dooley
7120 North Skyway Drive
Tucson, Arizona 85718

July 26, 1982

U. S. Nuclear Regulatory Commission
Division of Fuel Cycle & Materials
Safety
Materials License Branch
Washington, D. C. 20555

Attention: Mr. Earl Wright

Gentlemen:

Re: Ruoff & Sons License Application Control Number 11559

Please find enclosed two copies each of sealed source descriptions for tritium gas excited luminous sources T4279-1 and T4280-1, manufactured by MB-Microtec. These sources are a part of the referenced application and are related to the following U. S. Army drawings.

<u>U.S. Army P/N</u>	<u>MB-Microtec P/N</u>
11730922-2	T4279-1
11729510-2	T4280-1

As a Technical Consultant to MB-Microtec, I will be glad to supply any additional information that may be needed in connection with source review. I may be reached at the following telephone numbers:

(602) 882-9603 Office

(602) 297-2718 Home.

Sincerely,

Harry H. Dooley

Harry H. Dooley

HHD:djw

xc: Ruoff & Sons

Encl 1

9602260293 960223
PDR RC *
SSD PDR

SEALED LUMINOUS SOURCE P/N T4280-1

A. Usage

The purpose of this gaseous tritium light source (GTLS) is to provide a power independent light as required by governmental documents, referenced below.

B. Radioisotope

MB-Microtec (MB-M) P/N T4280-1 has a maximum tritium content of 75 millicuries (mCi) at the time of manufacture. The tritium gas, obtained from Oak Ridge National Laboratory (ORNL), used by MB-M in the manufacture of the referenced GTLS, has a minimum elemental tritium content of ninety four (94) percent and a maximum tritium oxide content of one (1) percent, as certified by ORNL.

C. Construction

MB-M GTLS T4280-1 is comprised of borosilicate glass, inorganic phosphor and tritium, with construction per U. S. Army dwg C11729510, P/N 11729510-2, maximum internal pressure is 2/3 atmosphere (see ref. dwg).

D. Prototype Tests

Tests have been conducted in accordance with American National Standard N540, Classification of Radioactive, Self-Luminous Light Sources, National Bureau of Standards Handbook 116. The prototype tests showed that MB-M GTLS P/N T4280-1 complies with Classification 2 and can be classified as Type T2GC1333133.

E. Production Tests

All GTLS P/N T4280-1 will be leak tested for conformance with Sec. 8.3.2, ANSI N540. Other tests will be conducted as required by U. S. Army drawing C11730922 and related U. S. Army Supplementary Quality Assurance Provisions (SQAP).

F. Shipment

MB-M GTLS P/N T4280-1 will be packaged, labelled and shipped in accordance with applicable regulatory and other documents to authorized licensees.

July 16, 1982

SEALED LUMINOUS SOURCE P/N T4279-1

A. Usage

The purpose of this gaseous tritium light source (GTLS) is to provide a power independent light as required by governmental documents referenced below.

B. Radioisotope

MB-Microtec (MB-M) P/N T4279-1 has a maximum tritium content of 450 millicuries (mCi) at the time of manufacture. The tritium gas obtained from Oak Ridge National Laboratory (ORNL) used by MB-M in the manufacture of the GTLS, has a minimum elemental tritium content of ninety four (94) percent and a tritium oxide content not exceeding one (1) percent, as certified by ORNL.

C. Construction

GTLS T4279-1 is comprised of borosilicate glass, inorganic phosphor and tritium with construction per U. S. Army dwg C11730922, Rev. C4. The maximum internal pressure is 2.5 atm (see ref. dwg).

D. Prototype Tests

Tests have been conducted in accordance with American National Standard N 540, Classification of Radioactive Self-Luminous Light Sources, National Bureau of Standards Handbook 116. The prototype tests showed that GTLS P/N T4279-1 complies with Classification 2 and can be classified as Type T2GC1333133.

E. Production Tests

All GTLS P/N T4279-1 will be leak tested for conformance with Sec. 8.3.2, ANSI N540. Other tests are conducted as required by U. S. Army Supplementary Quality Assurance Provisions (SQAP).

F. Shipment

MB-M GTLS P/N T4279-1 will be packaged, labelled and shipped in accordance with applicable regulations and other documents to authorized licensees.

DAT/RAB

14th July, 1982

Mr. A. Ruoff,
Ruoff & Sons Inc.,
1030 Rose Avenue,
Runnemeade,
New Jersey, 08079,
U.S.A.

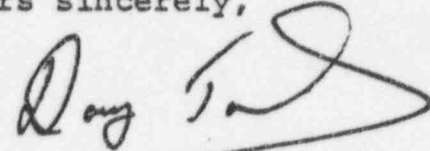
Dear Al,

I enclose a synopsis of the manufacturing and quality control procedures employed in the production of microlights. This should be appended to your Application for Licence and the Brandhurst light sources will be included on that licence.

I am quite sure this will resolve the problem. We will be only too pleased to offer further assistance either directly or via Ron Harper.

With best personal regards.

Yours sincerely,



D. A. Tonks

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