

71-5862



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

25 August 2000

MEMORANDUM FOR US NRC REGION IV
ATTN: MR. TONY GAINES

SEP 5 2000

FROM: AFMOA/SGOR
110 Luke Avenue, Room 405
Bolling AFB, DC 20332-7050

SUBJECT: Renewal of Certificate of Compliance No. 5862 for Sentinel-100F Radioisotope
Thermoelectric Generator

Attached is the request for the renewal of Certificate of Compliance No. 5862 for
Sentinel-100F Radioisotope Thermoelectric Generator, which is associated with USAF Permit
FL-00409-00/01AFP, Docket No. 030-00409. Please note that no changes are required.

Should you have any further questions, please contact me at (202) 767-4306.

A handwritten signature in black ink, appearing to read "Julie L. Coleman".

JULIE L. COLEMAN
Chief, Materials Licensing
Radioisotope Committee Secretariat
Air Force Medical Operations Agency
Office of the Surgeon General

Attachment:
AFTAC/SE Request

cc:
343 MDG/SGPB
HQ AFSPC/SGB
HQ AFIA/SGO (Maj Nichelson)
AFTAC/SE (w/o Atch)

NMSSOIPublic



DEPARTMENT OF THE AIR FORCE
AIR FORCE TECHNICAL APPLICATIONS CENTER (AFTAC)

9 Aug 2000

MEMORANDUM FOR AFMOA/SGOR

FROM: AFTAC/SE
1030 South Highway A1A
Patrick AFB FL 32925-3002

SUBJECT: Renewal of Certificate of Compliance No. 5862 for Sentinel-100F Radioisotope Thermoelectric Generator, USAF Permit FL-00409-00/01AFP, Docket No. 030-00409

1. The Certificate of Compliance (CoC) for the subject Radioisotope Thermoelectric Generator (RTG) is due to expire on 30 Sep 00. Please use the attached documents to renew the CoC with the Nuclear Regulatory Commission. No changes are required.
2. Please contact me at DSN 854-3870 or (321) 494-3870 if you desire additional information. Thanks for your assistance.


CRAIG L. ADAMS
Permit Radiation Safety Officer

Attached
NRC CoC (4 pgs)





UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

OCT 03 1995

Expires: 30 Sep. 00

Capt. Noel D. Montgomery
Department of the Air Force
Headquarters Air Force Medical Operations Agency
Brooks Air Force Base, Texas 78235-5217

Dear Capt. Montgomery:

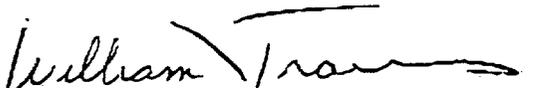
As requested by your application dated August 15, 1995, enclosed is Certificate of Compliance No. 5862, Revision No. 7, for the Model No. Sentinel-100F package. This certificate supersedes, in its entirety, Certificate of Compliance No. 5862, Revision No. 6, dated December 16, 1993.

Changes made to the enclosed certificate are indicated by vertical lines in the margin.

The Department of the Air Force has been registered as a user of the package under the general license provisions of 10 CFR §71.12 or 49 CFR §173.471.

The approval constitutes authority to use the package for shipment of radioactive material and for the package to be shipped in accordance with the provisions of 49 CFR §173.471.

Sincerely,


William D. Travers, Director
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Docket No.: 71-5862

Enclosures: 1. Certificate of Compliance
No. 5862, Rev. No. 7
2. Approval Record

cc w/encl: J. K. O'Steen, Department of Transportation
W. J. Richards, Department of the Air Force



**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIALS PACKAGES**

1. a. CERTIFICATE NUMBER 5862	b. REVISION NUMBER 7	c. PACKAGE IDENTIFICATION NUMBER USA/5862/B()	d. PAGE NUMBER 1	e. TOTAL NUMBER PAGES 2
---	--------------------------------	--	----------------------------	-----------------------------------

2. PREAMBLE

- a. This certificate is issued to certify that the packaging and contents described in Item 5 below, meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

a. ISSUED TO (Name and Address) Department of the Air Force HQ ATAC/SEG 1030 S. Highway A1A Patrick AFB, FL 32925-3002	b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION: Teledyne Energy Systems application dated June 26, 1985, as supplemented.
c. DOCKET NUMBER 71-5862	

4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

(a) Packaging

- (1) Model No.: Sentinel-100F
- (2) Description

The package, a thermoelectric generator, is 45.5 inches in height with a base diameter of 24.5 inches (excluding mounting pads), and weighs approximately 2,600 pounds. The components include a Tungsten biological shield (10.705" X 13.837" OD) which is within the aluminum (6061) outer protective housing. Four 6061-T6 mounting pads at the base of the aluminum housing provide the shipping pallet attachment points.

(3) Drawings

The packaging is constructed in accordance with the following Isotopes, Inc. Drawing Nos.:

- 010F10000 Sheets 1-3 (Rev. C), Generator Assembly Sentinel 100F
- 010-20000 Sheets 1-2 (Rev. B), Fuel Capsule Assembly
- 010-70003 (Rev. A) Shield Body
- 010-70004 Shield Plug
- 001-90064 Sheets 1-2 (Rev. A), Shipping Crate Sentinel RTG
- 001-90039 Sheets 1-2 (Rev. J), Sheet 3 (Rev. H), and Sheet 4, Pallet Assembly

5. (b) Contents

(1) Type and form of material

Strontium-90 titanate doubly encapsulated in a stainless steel liner and Hastelloy or Uniloy HC capsule which meets the requirements of special form radioactive material.

(2) Maximum quantity of material per package

370,000 curies.

6. Fabrication of additional packages is not authorized.

7. In addition to the requirements of Subpart G of 10 CFR Part 71:

(a) The package shall be prepared for shipment and operated in accordance with the Operating Procedures in the supplement dated August 30, 1985.

(b) The package must be maintained in accordance with the Maintenance Program in the supplement dated August 30, 1985.

8. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.12.

9. Expiration date, September 30, 2000.

REFERENCES

Teledyne Energy Systems application dated June 26, 1985.

Teledyne supplements dated August 30, 1985, and July 26, 1990.

Department of the Air Force Supplements dated: November 12, 1993; and August 15, 1995.

★ ★ ★ FOR THE ★ ★ ★ U.S. NUCLEAR REGULATORY COMMISSION

William D. Travers
 William D. Travers, Director
 Spent Fuel Project Office
 Office of Nuclear Material Safety
 and Safeguards

Date: OCT 03 1995



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

APPROVAL RECORD
Model No. Sentinel-100F Package
Certificate of Compliance No. 5862
Revision No. 7

By application dated August 15, 1995, the Department of the Air Force requested renewal of Certificate of Compliance No. 5862, for the Model No. Sentinel-100F package. No changes in package design or contents were requested.

The operating procedures and maintenance program included in the supplement dated August 30, 1985, were reviewed and found to be adequate. Fabrication of new packagings is not authorized.

The Certificate of Compliance was revised to show a change of address of the certificate holder, as requested by the applicant. The Certificate of Compliance has been renewed for a five year period which expires September 30, 2000.

A handwritten signature in black ink, appearing to read "William D. Travers".

William D. Travers, Director
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

OCT 03 1995
Date _____