

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 03007636/82-01(DETP); 03011314/82-01(DETP)

Docket Nos. 03007636; 03011314

License No. 22-13585-02G

Category E

Priority IV

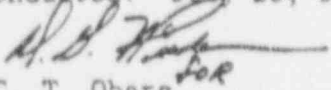
License No. 22-13585-03

Category E

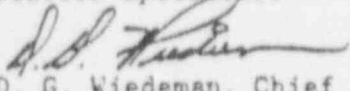
Priority IV

Licensee: Nite-Site, Incorporated
P. O. Box 0
Rosemount, MN 55068

Inspection Conducted: July 28, 1982

Inspector: 
C. T. Oberg
Radiation Specialist

8-24-82

Approved By: 
D. G. Wiedeman, Chief
Materials Radiation Protection
Section 1

8-24-82

Inspection Summary

Inspection on July 28, 1982 (Reports No. 03007636/82-01(DETP);
03011314/82-01(DETP))

Areas Inspected: Special, unannounced inspection of the licensed programs; materials; facilities; receipt and transfer of material; confirmatory measurements; and independent inspection efforts. The inspection involved a total of five inspector-hours onsite by one NRC inspector.

Results: Within the six areas inspected, three apparent items of noncompliance were identified against License No. 22-13585-02G. Labels required by License Conditions No. 3.A. and B. have not always been permanently attached to guns by Nite-Site, Inc. in accordance with License Condition No. 3.D.; the three year leak tests were not performed as required by License Condition No. 3.A.(i); and Appendix L of 10 CFR 20 was not supplied as required by License Condition No. 5.

DETAILS

Persons Contacted

The inspection and exit interview on July 28, 1982, were conducted with the Director of Licensing, Mr. Elliel F. Knutsen.

Purpose of Special Inspection

This inspection was performed in response to a memorandum from the Chief of the Materials Licensing Branch (MLB), Division of Fuel Cycle and Material Safety (Div. FC&MS), NRC Headquarters, dated July 15, 1982, requesting that Region III inspect the licensee to obtain answers to specific inquiries addressed within the text of this memo. The letter states that some manufacturers and distributors of luminous sights for handguns, rifles, and shotguns have maintained that unrestricted distribution to exempt persons should be authorized. NMSS maintains that distribution should be restricted.

The memo requested the region to review the licensee's customer list to determine whether gun sights distributed under 10 CFR Section 31.5 are in fact being used only for business purposes and to provide information to the Commission for control of the use of these units. The MLB has asked for assistance in determining whether Nite-Site, Inc. customers are in compliance with 10 CFR 31.5.

Region III MRPS personnel are addressing specific questions to some of the general licensee's customers who are customers of Nite-Site, Inc. The specific questions being asked are:

1. What is the nature of the business requiring use of the gun sight?
2. Is the customer aware he is subject to NRC requirements? Was he informed of this by Nite-Site Inc.? Is he aware he cannot sell or abandon the gun sight?
3. Is the gun sight or weapon labelled as required?
4. If the customer no longer possesses the gun sight, how did he dispose of it? Was it transferred to a specific licensee as required?
5. Has a leak test sample been submitted to Nite-Site as required? Does the general licensee have a record of leak test results?

During the inspection of Nite-Site, Inc. the NRC inspector attempted to determine: (1) what documentation they obtain from their customers to assure that gun sights will be used only on weapons employed in the conduct of business; (2) are Nite-Site, Inc. customers submitting leak test samples upon receipt of gun sights and every three years thereafter? Does Nite-Site, Inc. remind customers to send in samples; (3) how many gun sights have been

found to be leaking after distribution; and (4) is Nite-Site, Inc. in compliance with the label attachment requirement?

These and other items and questions are covered in this report.

Licensee Action on Previous Inspection Findings

During the previous inspection of December 1980, a total of three items of noncompliance were identified for these two licenses. Appropriate and effective corrective action has been taken for two of these items. The third item is a repeat item of noncompliance. The licensee has been allowing their customers to permanently affix the warning label to their weapons, sign an affidavit certifying that they have attached the label to the weapon with the specifically identified sight, and forwarding the affidavit to Nite-Site, Inc. for their records. The use of this affidavit was acceptable to Licensing at the time that the licensee submitted their response (March 1981) to the Region III enforcement letter. Based upon this, Region III accepted the licensee's corrective action to be appropriate and effective. This is now considered unacceptable by Licensing.

1. Summary of the Licensed Programs

License No. 22-13585-02G authorizes the distribution of promethium-147 contained in self-luminous gun sights to persons generally licensed.

License No. 22-13585-03 authorizes possession of promethium-147 in sealed luminous gun sight sources for nondestructive testing, demonstration, and installation on, and removal from guns.

The licensee has designed gun sight fixtures for handguns, rifles, and shotguns which are fabricated from a polycarbonate or steel material. The licensee delivers these sight fixtures to Minnesota Mining and Manufacturing Company (3M Co.) where Pm-147 sealed sources (3M Co. Model 1E2X luminous elements) are "potted" into the sight fixture with an epoxy and become an integral part of the gun sight. These gun sights are returned to Nite-Site, Inc., who only packages, stores, and distributes these finished gun sights. The licensee distributes the gun sights for use by persons as specified in 10 CFR 31.5. The licensee distributes only to persons who identify themselves as regular, private, special law officers, security guards, or military personnel. This can be inferred from Exhibit A-1, requested on order forms of Exhibit A-2 and stated on Exhibit A-3.

No items of noncompliance were identified.

2. Materials

Since the previous inspection the licensee has attempted to maintain a minimum inventory of gun sights containing the licensed material. They keep a minimal inventory available to supply the units for which they have the greatest demand. Other gun sights are obtained from 3M Co. in accordance with customer orders. During this inspection

the licensee had less than two dozen envelopes containing less than one millicurie each of Pm-147 mounted in gun sights. This would be in the order of 20 millicuries total, significantly less than their authorized 75 millicurie possession limit.

Material possessed under these licenses is adequately protected against unauthorized removal from the licensee's facility as discussed in the previous inspection report dated February 19, 1981.

No items of noncompliance were identified.

3. Facilities and Instrumentation

The licensee's facilities were inspected and found to be the same as were observed during the previous inspection.

The licensee maintains a Nuclear-Chicago Corp. Model No. 2652 portable survey instrument for use under these licenses. This instrument incorporates an end window, GM type detector stated to be capable of detecting beta radiation energies down to 40 keV. This is quite adequate for surveying the sealed Pm-147 source in the gun sights.

Based upon the efficiency quoted by the licensee for this detector and Model 2652 instrument (28%), the unit is also capable of measuring the activity on leak test samples taken from the gun sight to determine the level of contamination by Pm-147, if any, on the sights. The instrument background activity level is between 2000 and 3000 cpm which calculates to be equivalent to 0.0032 and 0.0048 microcuries. The licensee stated that this instrument was calibrated during April or May of this year; however, documentation of this calibration was not available for verification by the inspector. The records were with J. A. Santiago, the Director of Marketing, and he was not available from the date of this inspection through July 30, 1982, because of commitments within the Sheriff's office.

No items of noncompliance were identified.

4. Receipt and Transfer of Material

With respect to License No. 22-13585 3. the licensee has no specified procedure for picking up and receiving material because the packages are picked up directly from the manufacturer by the licensee. The material is hand carried in packaged lots containing no more than 75 sights, less than 75 millicuries of Pm-147, to the licensee's facility. The sights are repackaged by the licensee, stored, and subsequently distributed to general licensees. The licensee maintains appropriate receipt records, some of which are shown in the attached Exhibit B.

Because the Certification Forms from 3M Company specify that the Pm-147 sources produce a radioactive level of less than 0.3 mr/hr at 1 cm (Exhibit B), the licensee does not perform surveys of the material when it arrives at his facility.

The luminous gun sights containing Pm-147 are ultimately distributed to general licensees as authorized under 10 CFR 31.5. The licensee verifies customer orders via letterheads submitted with orders and by the order form itself (Exhibit A-2) to ascertain the general licensee's need and use of the product. After the licensee has assured themselves that their customer is authorized to receive the sights the order is filled. The sights are contained in a polyethylene packet (Exhibit C-2 attached) with the required label and a couple of filter paper disks for the required leak testing.

The envelope and each part of the report card have the sight serial number on it. Additionally, the envelope contains three colored cards (Exhibit C-3 attached); a "Special Notice" card (pink), a "Maintenance" card (peach) and a "NRC Label Requirement" and affidavit card (light green). Finally, the envelope also contains a sheet with parts of Title 10, Code of Federal Regulations (Exhibit C-4) warning label and business cards (Exhibit C-2). The return address envelopes containing these items is sent to the general licensee under one cover.

License Condition No. 3 of License No. 22-13858-02G requires each gun to bear two durable and clearly visible (caution) labels as outlined under conditions 3A and 3B. The Corrected Copy of Amendment No. 2 dated February 2, 1981, references a letter dated March 26, 1980, in which Section (3) refers to revision of the label as specified. Since all of the information required by License Conditions 3.A and 3.B is included on this one label and there is no statement to the contrary, no citation was made for not having two labels.

License Condition No. 3D states each label shall be permanently attached to each gun by Nite-Site Inc. Contrary to this requirement, the label is not always permanently attached by the licensee but by the licensee's customer, a general licensee who signs an affidavit to this effect and then mails it to the licensee.

This is a repeat item of noncompliance with the conditions of the license.

License Condition No. 5 specifies the sections of the parts of 10 CFR which are to be provided to the general licensee. This includes Appendix D of Part 20, 10 CFR 20. Contrary to this requirement, the information supplied to the general licensee does not include Appendix D of 10 CFR 20 (see Exhibit C-4). This is an item of noncompliance with the conditions of the license.

In accordance with License Condition No. 2, each gun sight transferred to a general licensee is to be tested for leakage and contamination immediately following installation of sight(s) on a weapon. The leak test wipe samples taken by the general licensee are sent back to the licensee for measurement and evaluation. The results of the evaluation are returned to the general licensee on one of the three part report cards. According to the licensee and based upon the records available, the leak testing has been accomplished and reported as required in most

cases. The exception to this was a lot of about 60 sights transferred to the U.S. Army during 1981. The U.S. Army did not return the leak test wipes for evaluation.

License Condition No. 3.A.(1) requires that the sights be tested for leakage every three years. To accomplish this, three years after the initial leak test, Nite-Site, Inc. sends the second report card (Exhibit C-1) to the general licensee and/or a memorandum as shown in Exhibit A-1. According to the licensee, the three year leak testing samples have been returned from only about 50 percent of the general licensees. Records of these were not available for review by the inspector. The required three year leak testing for contamination of the gun sights containing sealed Pm-147 sources was not being performed on each sight possessed by a general licensee. This is an item of noncompliance with the license conditions.

With the exception of the occurrence at the Argonne National Laboratories in August 1980, the licensee has never found, nor been informed of any contamination of gun sights containing leaking sources of Pm-147.

The filter papers used to take the wipes for leak testing are measured either by the licensee, using the portable survey instrument described in Section 3 of this report, or by 3M Company for the licensee.

As mentioned above in this Section and in preceeding Section 3, several types of the licensee's records were not available for inspection. Some of the records such as purchase orders, customer qualifications as a general licensee, survey instrument calibration, etc. were with the Director of Marketing, Mr. J. A. Santiago, who was not available because of his duties as Sheriff. Distribution records including names of general licensees, their addresses, gun sight identification, dates, etc. were not available for another reason. Copies of these records were requested by Ms. Penny Pennington of International Energy Associates (IEA) who was working under a contract with the NRC. The licensee did not have copies of these tabulations and had no facilities for making copies of them. IEA asked to have the originals sent to them and they would make the copies and return the originals. The records were removed from the record book (ring binder), packaged, and mailed to IEA about January 4, 1982, as shown in Exhibit D-1 attached. Ms. Penny Pennington never received the records, only the cover letter (Exhibit D-1) which was attached to the package. She informed the licensee of this and they presumed that the package, which had no addresses on it and apparently was not well attached to the cover letter, became separated from the cover letter and got lost in the mail. On January 13, 1982, the licensee initiated a trace of the package through the Post Office by PS Form 1510 (Exhibit D-2 attached). A search was conducted by the Post Office during March 1982 and the package and/or records were not located. As of the day of this inspection, no further information on the loss has been received by the licensee. This information was verified by the inspector through

a telephone discussion with Ms. Pennington in Washington, D.C. She stated the request to obtain and review copies of the Nite-Site Inc. records had been approved by Materials Certification and Procedures Division of Fuel Cycle and Material Safety of the NRC. This was also verified by a telephone call to NRC Headquarters. From this the inspector learned that they were compiling a list of general licensees for byproduct material status and accountability purposes.

Records of the available "NRC Label Requirement" and/or affidavit return cards were reviewed by the inspector. Almost all of these were affidavits signed by the general licensee to verify that he/she had applied the NRC caution label as required. Other available records of transfer were the three year leak test reminder cards filed according to month and year when they should be mailed to the general licensee.

Gun sights containing decayed Pm-147 which have been returned by the general licensees for final disposition and disposal have not accounted for all of those which presumably are of no further use as luminous products. A period of between five and seven years decay will reduce the level of light intensity from the source to 70 microlumens or less. This has been established as the critical level of brightness for effective use of these luminous gun sights in the dark. The units which have been returned have been disposed of by subsequent transfer to 3M Company for final disposal as waste. Records of these transfers have been maintained by the licensee. These records also contain results of the final leak testing performed by 3M Company for the licensee (see attached Exhibit E).

None of the sources returned to date have been found to be contaminated with Pm-147 which would be indicative of leakage of the sealed source.

Three items of noncompliance were identified.

5. Confirmatory Measurements

On July 28, 1982, the inspector measured the level of radiation from several gun sights using an E-520 survey instrument, NRC No. 9575, with an end window type M detector, calibrated on July 15, 1982. Measurement of these sights indicated that the radiation levels from them were not in excess of 0.3 mR/hr at 1 cm. Readings obtained varied between 0.1 and 0.2 mR/hr and were confirmed by use of the licensee's survey instrument (see Section 3 of this report).

No items of noncompliance were identified.

6. Independent Inspection Effort

The inspector discussed the operation of the program with the licensee, the circumstances surrounding the loss of their records in the mail and attempted to contact J. A. Santiago, Director of Marketing, to arrange a meeting for review of records in his possession. In addition the inspector subsequently (August 5 and 6, 1982) contacted the IEA, Ms. P. Pennington, and NRC, Div. FC&MS, Mr. B. Singer, to verify the necessity of the licensee mailing his records to IEA.

Exit Interview

The inspector reviewed the findings of this inspection and discussed the items of noncompliance identified in this report. He also informed the licensee that he would attempt to determine the reason that the IEA needed to review his records. This was accomplished on August 5, 1982, and the licensee was informed.

The inspector also requested the licensee to forward to RIII, copies of some of the records held by J. A. Santiago, Director of Marketing. This was agreed to by the licensee.

Attachments: Exhibits A-1 through E

Exhibit A-1

NITE-SITE, INC.

P. O. BOX 0
ROSEMOUNT, MINNESOTA 55068

↑
filter papers stapled
to original/cs

MEMO TO: ALL OWNERS OF "NITE-SITE" SELF ILLUMINATING GUN SIGHTS

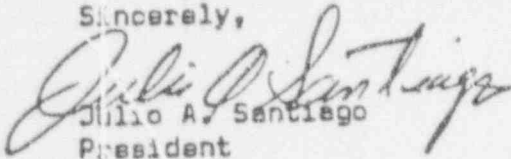
The U.S. Atomic Energy Commission requires that each set of self illuminating gun sights installed by NITE-SITE INC, be wipe tested every three years.

Enclosed please find two round filter papers. Simply wipe each sight housing with one of the filter papers and return the paper (s) to NITE-SITE INC, P.O.BOX 0, ROSEMOUNT, MINNESOTA 55068.

Since your weapon was among the first to carry night sights on duty, we would appreciate it if you would check the following, plus, adding your comments along with any incidences you came up with, both good and bad, during the course of duty:

- (A) Weapon with night sights still used on duty? Yes _____ No _____
(B) Self illuminating sources retaining the brightness you expect after three years? Yes _____ No _____
(C) Sight housing holding tight to the weapon? Both _____ Front _____ Rear _____
(D) COMMENTS: _____

Thank you very much for your assistance in this matter.
Sincerely,


Julio A. Santiago
President

Nite-Site # _____

Date installed _____

Daylight or Dark . . . Hit Your Mark

7/28/82

Exhibit A-2
NITE-SITE ORDER FORMS
(for additional forms xerox copy this page)

NITE-SITE, INC. • P.O. BOX 0 • ROSEMOUNT, MN 55068

Order Form: To order the following information must be supplied along with a certified check or money order.

Buyer's Name _____

Organization _____

Address _____

City _____

State _____ Zip _____

Nite-Site will be attached to the following weapon:

Make _____

Model _____

Nite-Site Model No. ordered: _____

NOTE: Please print legibly, see catalog for
Nite-Site model numbers and prices.

DO NOT WRITE IN THIS SPACE

Nite-Site SN _____

Date Shipped _____

State Sales Tax _____

Total Price _____

Amount Received by Nite-Site _____

Total _____ Date _____

SHIP TO: Please fill out.

NITE-SITE, INC. • P.O. BOX 0 • ROSEMOUNT, MN 55068

Order Form: To order the following information must be supplied along with a certified check or money order.

Buyer's Name _____

Organization _____

Address _____

City _____

State _____ Zip _____

Nite-Site will be attached to the following weapon:

Make _____

Model _____

Nite-Site Model No. ordered: _____

NOTE: Please print legibly, see catalog for
Nite-Site model numbers and prices.

DO NOT WRITE IN THIS SPACE

Nite-Site SN _____

Date Shipped _____

State Sales Tax _____

Total Price _____

Amount Received by Nite-Site _____

Total _____ Date _____

SHIP TO: Please fill out.

NITE-SITE, INC. • P.O. BOX 0 • ROSEMOUNT, MN 55068

Order Form: To order the following information must be supplied along with a certified check or money order.

Buyer's Name _____

Organization _____

Address _____

City _____

State _____ Zip _____

Nite-Site will be attached to the following weapon:

Make _____

Model _____

Nite-Site Model No. ordered: _____

NOTE: Please print legibly, see catalog for
Nite-Site model numbers and prices.

DO NOT WRITE IN THIS SPACE

Nite-Site SN _____

Date Shipped _____

State Sales Tax _____

Total Price _____

Amount Received by Nite-Site _____

Total _____ Date _____

SHIP TO: Please fill out.

Exhibit A-?

PLEASE POST ON SQUAD ROOM BULLETIN BOARD

U.S. Patent Issued

NITE-SITE®

Gold Medal Winner In World
Competition

Day/Night Combat Sighting Systems
For Handguns - Shotguns - Rifles

Pioneer in Low Level Light Weaponry
Used By Elite U.S. and Canadian Forces

Reported in Numerous National Police
& Gun Journals Including:

Nov. 81 American Rifleman

May 82 Gun World

June 82 Combat Handguns



Self-Luminous Gunsights

No Batteries • No Wires • No Bulbs

Turn Your Gun into a
24-Hour Weapon

For Catalog Send \$1 to:

NITE-SITE, INC.

Box O, Rosemount, MN 55068

LAW ENFORCEMENT OFFICERS ONLY

**FOR FREE CATALOG SEND DEPARTMENT 4" x 9"
SELF-ADDRESSED STAMPED ENVELOPE.**

See 7/28/82

Exhibit D

Static Control Systems/3M
TCAAP 1/90
New Brighton, Minnesota 55112

3M

Form 9499 F PWO

NITE-SITE, INC.
Rosemount, MN 55068

3M 414296
PO 011178, Rel. 42

Certification 3M Model 1E2X

The following radioactive sources are certified by Minnesota Mining and Manufacturing Company to have been subjected to the tests described below and to have given the results listed.

Model:	70H-1 Front	70H-2 Rear	70H-5 Rear
Quantity:	250 Each	30 Each	6 Each
Activity:	0.7 mCi	0.55 mCi	0.55 mCi

Radiation Level:

≤ 0.3 mr/hr at 1 cm

Wipe Test:

≤ 0.0005 uCi Removable Activity

No other certification is to be implied.

Quality Supervisor

Melvin R. Peters
Melvin R. Peters

Date

2 Apr 1962

Static Control Systems 3M
TCAAP 590
New Brighton, Minnesota 55112



Form 8489, PWO

NITE-SITE, INC.
Rosemount, MN 55068

3M 414296
PO 011178, Rel. 40

Certification

3M Model 1E2X

The following radioactive sources are certified by Minnesota Mining and Manufacturing Company to have been subjected to the tests described below and to have given the results listed.

Model:	70H-1 Front	70H-2 Rear	70H-5 Rear
Quantity:	461 each	85 each	75 each
Activity:	0.7 mCi	0.55 mCi	0.55 mCi
Model:	70H-7 Rear	70S-11 Front	70H-13 Front
Quantity:	38 each	24 each	10 each
Activity:	0.55 mCi	0.7 mCi	0.7 mCi

Radiation Level: <0.3 mr/hr at 1 cm
Wipe Test: <0.0005 uCi Removable Activity

No other certification is to be implied.

Quality Supervisor

Melvin R. Peters
Melvin R. Peters

Date 29 Jan 1982

Static Control Systems/3M
TCAAP 590
New Brighton, Minnesota 55112

3M

Form 9499 E PWD

NITE-SITE, INC.
Rosemount, MN 55068

3M 314797
PO 011178, Re1. 39

Certification

3M Model 1L2X

The following radioactive sources are certified by Minnesota Mining and Manufacturing Company to have been subjected to the tests described below and to have given the results listed.

Model: 70-S-16 Front
Quantity: 25 each
Activity: 0.7 mCi

Nominal Brightness: ≥ 350 u1
Radiation Level: ≤ 0.3 mr/hr at 1*cm
Wipe Test: ≤ 0.0005 uCi Removable Activity

No other certification is to be implied.

Quality Supervisor Melvin R. Peters
Melvin R. Peters

Date 8 Dec 1981

Static Control Systems/3M
TCAAP 590
New Brighton, Minnesota 55112

3M

Form 8499-E PWO

NITE-SITE, INC.
Rosemount, MN 55068

3M 414292
PO 01117R, Rel. 3R

Certification

3M Model 1E2X

The following radioactive sources are certified by Minnesota Mining and Manufacturing Company to have been subjected to the tests described below and to have given the results listed.

Model:	70H-1 Front	70H-2 Rear	70H-5 Rear
Quantity:	130 each	80 each	15 each
Activity:	0.7 mCi	0.55 mCi	0.55 mCi
Model:	70H-7 Rear	70S-11 Front	70S-14 Front
Quantity:	5 each	35 each	25 each
Activity:	.55 mCi	0.7 mCi	0.7 mCi

Nominal Brightness:	300 μ l Front, 200 μ l Rear
Radiation Level:	0.3 mr/hr at 1 cm
Wipe Test:	\leq 0.0005 μ Ci Removable Activity

No other certification is to be implied.

Quality Supervisor Melvin R. Peters
Melvin R. Peters

Date 8 Dec 1981

Static Control Systems 3M
10000 1000
New Brighton, Minnesota 55111



Form 9498-1 PWD

NITE-SITE, INC.
Rosemount, MN 55068

3M 414.92
PO 011179, Rel.

Certification
3M Model 1L2X

The following radioactive sources are certified by Minnesota Mining and Manufacturing Company to have been subjected to the tests described below and to have given the results listed.

Model:	70H-1 Front	70H-2 Rear	70H-5 Rear
Quantity:	110 each	35 each	20 each
Activity:	0.7 mCi	0.55 mCi	0.55 mCi

Nominal Brightness:

300 μ l Front, 200 μ l Rear

Radiation Level:

≤ 0.3 mr/hr at 1 cm

Wipe Test:

≤ 0.0005 μ Ci Removable Activity

No other certification is to be implied.

Quality Supervisor

Melvin R. Peters
Melvin R. Peters

Date 19 Sep 1981



Form 9499 E-PWD

NITE-SITE, INC.
Rosemount, MN 55068

3M 414292
PO 011178, Rel. 3f

Certification

1154/11/81

3M Model 1F2X

The following radioactive sources are certified by Minnesota Mining and Manufacturing Company to have been subjected to the tests described below and to have given the results listed.

Model:	70H-1 Front
Quantity:	60 each
Activity:	0.7 mCi

Nominal Brightness:	30 μ l Front, 200 μ l Rear
Radiation Level:	≤ 0.3 mr/hr at 1 cm
Wipe Test:	≤ 0.0005 μ Ci Removable Activity

No other certification is to be implied.

Quality Supervisor

Melvin R. Peters
Melvin R. Peters

Date 30 Jul 1981

Form 9497-1 PWD

NITE-SITE, INC.
Rosemount, MN 55068

3M 414292
PO 011178, Rel. #31

Certification

3M Model 1E2X

The following radioactive sources are certified by Minnesota Mining and Manufacturing Company to have been subjected to the tests described below and to have given the results listed.

Model:	70H-1 Front	70H-2 Rear	70H-5 Rear
Quantity:	190 each	30 each	30 each
Activity:	0.7 mCi	0.55 mCi	0.55 mCi

Model:	70H-7 Rear	70S-11 Front
Quantity:	10 each	14 each
Activity:	0.55 mCi	0.7 mCi

Nominal Brightness:

300 μ l Front, 200 μ l Rear

Radiation Level:

≤ 0.3 mr/hr at 1 cm

Wipe Test:

≤ 0.00005 μ Ci Removable Activity

No other certification is to be implied.

Quality Supervisor

EM. Schuster
for Melvin R. Peters

Date 16 Jul 1981

Static Control Systems/3M
1CAAP 590
New Brighton, Minnesota 55112

3M

Form 8499 E-PWO

NITE-SITE, INC.
Rosemount, MN 55068

3M 414292
PO 011178, Rel. 34

Certification

3M Model 1E2X

The following radioactive sources are certified by Minnesota Mining and Manufacturing Company to have been subjected to the tests described below and to have given the results listed.

Model:	70H-1 Front	70H-2 Rear	70H-11 Front
Quantity:	35 each	35 each	10 each
Activity:	0.7 mCi	0.55 mCi	0.7 mCi

Model:	70S-13 Front	70S-15 Front
Quantity:	5 each	5 each
Activity:	0.7 mCi	0.7 mCi

Nominal Brightness:	300 μ l Front, 200 μ l Rear
Radiation Level:	≤ 0.3 mr/hr at 1 cm
Wipe Test:	≤ 0.0005 μ Ci Removable Activity

No other certification is to be implied.

Quality Supervisor

E.M. Salaschi
for Melvin R. Peters

Date 23 Apr 1981

5826

Place
Stamp
Here

70S-18

Mr. E. F. Knutsen
Director of Licensing
Nite-Site, Inc.
P.O. Box O,
Rosemount, MN 55068

IMPORTANT
DO NOT DESTROY THIS ENVELOPE
SEE SPECIAL NOTICE INSIDE

Envelope in which to return
tripartite card, wipes, and affidavit if used.

Exhibit C

WIPER TEST REPORT CARD

Please fill in the following

Make Model Serial number

This card will be returned immediately

Wipe test results not to exceed 0.005 uCi

3-YEAR REPORT CARD

Please fill in the following

Make Model Serial number

This card will be returned in three years

Agreement State Agency

REPORT CARD

Licensed under the United States Nuclear Regulatory Commission, #22-13585-02G, the following gunsight(s) were transferred to the person (or) department listed on other side.

 MODEL 70-H Activity-less than 1.5 mCi PM-147 per set.

 MODEL 70-S Activity-less than 0.8 mCi PM-147 per unit.

Wipe test results not to exceed 0.005 uCi

Tripartite
Yellow Card

Front

5820

NITE-SITE, INC.
P.O. Box O
Rosemount, MN 55068

Name (Print or Type)

Address

City State Zip

5820

NITE-SITE, INC.
P.O. Box O
Rosemount, MN 55068

Name (Print or Type)

Address

City State Zip

5820

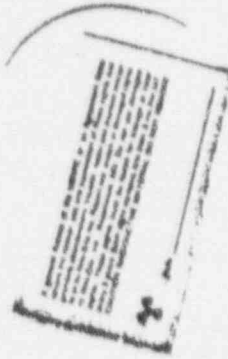
NITE-SITE, INC.
P.O. Box O
Rosemount, MN 55068

Name (Print or Type)

Address

City State Zip

Back



NITE-SITE, INC.

P. O. BOX 0

ROSEMOUNT, MINNESOTA 55068

DAY  NIGHT®
COMBAT SIGHTING SYSTEMS

SEE OTHER SIDE

UNITED STATES ATOMIC ENERGY COMMISSION

RULES and REGULATIONS • TITLE 10 - ATOMIC ENERGY

PART
20

STANDARDS FOR PROTECTION AGAINST RADIATION

§ 20.402 Reports of theft or loss of licensed material.

(a) Each licensee shall report by telephone and telegraph to the Director of the appropriate Atomic Energy Commission Regional Compliance Office listed in Appendix D immediately after its occurrence becomes known to the licensee, any loss or theft of licensed material in such quantities and under such circumstances that it appears to the licensee that a substantial hazard may result to persons in unrestricted areas.

(b) Each licensee who is required to make a telephonic and telegraphic report pursuant to paragraph (a) of this section shall, within 30 days after he learns of the loss or theft, make a report in writing to the Director, Division of Compliance, U.S. Atomic Energy Commission, Washington, D.C. 20545, with a copy to the Director of the appropriate Atomic Energy Commission Regional Compliance Office listed in Appendix D, setting forth the following information:

(1) A description of the licensed material involved, including kind, quantity, chemical, and physical form;

(2) A description of the circumstances under which the loss or theft occurred;

(3) A statement of disposition or probable disposition of the licensed material involved;

(4) Radiation exposures to individuals, circumstances under which the exposures occurred and the extent of possible hazard to persons in unrestricted areas;

(5) Actions which have been taken, or will be taken, to recover the material; and

(6) Procedures or measures which have been or will be adopted to prevent a recurrence of the loss or theft of licensed material.

(c) Subsequent to filing the written report the licensee shall also report any substantive additional information on the loss or theft which becomes available to the licensee, within 30 days after he learns of such information.

(d) Any report filed with the Commission pursuant to this section shall be so prepared that names of individuals who may have received exposure to radiation are stated in a separate part of the report.

§ 20.403 Notifications of incidents.

(a) Immediate notification. Each licensee shall immediately notify the Director of the appropriate Atomic Energy Commission Regional Compliance Office shown in Appendix D by telephone and telegraph of any incident involving byproduct, source or special nuclear material possessed by him and which may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 25 rms or more of radiation; exposure of the skin of the whole body of any individual of 150 rms or more of radiation; or exposure of the feet, ankles, hands or forearms of any individual to 375 rms or more of radiation; or

(2) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the limits specified for such materials in Appendix B, Table II; or

(3) A loss of one working week or more of the operation of any facilities affected; or

(4) Damage to property in excess of \$100,000.

(b) Twenty-four hour notification. Each licensee shall within 24 hours notify the Director of the appropriate Atomic Energy Commission Regional Compliance Office listed in Appendix D by telephone and telegraph of any incident involving licensed material possessed by him and which may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 5 rms or more of radiation; exposure of the skin of the whole body of any individual to 30 rms or more of radiation; or exposure of the feet, ankles, hands, or forearms to 75 rms or more of radiation; or

(2) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 500 times the limits specified for such materials in Appendix B, Table II; or

(3) A loss of one day or more of the operation of any facilities affected; or

(4) Damage to property in excess of \$1,000.

(c) Any report filed with the Commission pursuant to this section shall be prepared so that names of individuals who have received exposure to radiation will be stated in a separate part of the report.

§ 20.54 Terms and conditions of license.

(a) Each license issued pursuant to the regulations in this part and the regulations in Parts 31-36 shall be subject to all the provisions of the Act, now or hereafter in effect, and to all valid rules, regulations and orders of the Commission.

(b) No license issued or granted pursuant to the regulations in this part and Parts 31-36, nor any right under a license shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person, unless the Commission shall, after securing full information, find that the transfer is in accordance with the provisions of the Act and shall give its consent in writing.

(c) Each person licensed by the Commission pursuant to the regulations in

this part and Parts 31-36 shall confine his possession and use of the byproduct material to the locations and purposes authorized in the license.

Except as otherwise provided in the license, a licensee issued pursuant to the regulations in this part and Parts 31-36 of this chapter shall carry with it the right to receive, acquire, own, possess, and import byproduct material and to transfer such material to the Commission, to a specific or general licensee of the Commission or of an Agreement State whose license authorizes him to receive such material, or to any person exempt from the regulations in this part to the extent permitted under such exemption.

(d) Each license issued pursuant to the regulations in this part and Parts 31-36 shall be deemed to contain the provisions set forth in section 182b-d., inclusive, of the Act, whether or not these provisions are expressly set forth in the license.

(e) The Commission may incorporate, in any license issued pursuant to the regulations in this part and Parts 31-36, at the time of issuance, or thereafter by appropriate rule, regulation or order, such additional requirements and conditions with respect to the licensee's receipt, possession, use and transfer of byproduct material as it deems appropriate or necessary in order to:

(1) Promote the common defense and security;

(2) Protect health or to minimize danger to life or property;

(3) Protect restricted data;

(4) Require such reports and the keeping of such records, and to provide for such inspections of activities under the license as may be necessary or appropriate to effectuate the purposes of the Act and regulations thereunder.

RECORDS, INSPECTIONS AND TESTS

§ 20.51 Records.

Each person who receives byproduct material pursuant to a license issued pursuant to the regulations in this part and Parts 31-36 shall keep records showing the receipt, transfer, export and disposal of such byproduct material.

§ 20.52 Inspections.

(a) Each licensee shall afford to the Commission at all reasonable times opportunity to inspect byproduct material and the premises and facilities wherein byproduct material is used or stored.

(b) Each licensee shall make available to the Commission for inspection, upon reasonable notice, records kept by him pursuant to the regulations in this chapter.

Each licensee shall perform, or permit the Commission to perform, such tests as the Commission deems appropriate or necessary for the administration of the provisions in this part and Part 20 of the Act, including tests of:

- (a) Byproduct material;
- (b) Facilities wherein byproduct material is utilized or stored;
- (c) Radiation detection and monitoring instruments; and
- (d) Other equipment and devices used in connection with the utilization or storage of byproduct material.

ENFORCEMENT

§ 30.61 Modification and revocation of licenses.

(a) The terms and conditions of each license issued pursuant to the regulations in this part and Parts 21-32 shall be subject to amendment, revision or modification by reason of amendments to the Act, or by reason of rules, regulations and orders issued in accordance with the terms of the Act.

(b) Any license may be revoked, suspended or modified, in whole or in part, for any material false statement in the application or any statement of fact required under section 182 of the Act, or because of conditions revealed by such application or statement of fact or any report, record or inspection or other means which would warrant the Commission to refuse to grant a license on an original application, or for violation of, or failure to observe any of the terms and provisions of the Act or of any rule, regulation or order of the Commission.

(c) Except in cases of willfulness or those in which the public health, interest or safety requires otherwise, no license shall be modified, suspended or revoked unless, prior to the institution of proceedings therefor, facts or conduct which may warrant such action shall have been called to the attention of the licensee in writing and the licensee shall have been accorded an opportunity to demonstrate or achieve compliance with all lawful requirements.

§ 30.62 Right to withhold or recall byproduct material.

The Commission may withhold, recall or order the withholding or recall of byproduct material from any licensee who is not equipped to observe or fails to observe such safety standards to protect health as may be established by the Commission, or who uses such materials in violation of law or regulation of the Commission, or in a manner other than as disclosed in the application therefor or approved by the Commission.

§ 30.63 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law.

§ 31.3 Certain measuring, gauging or controlling devices.

(a) Subject to the provisions of this section, a general license is hereby issued to own, receive, acquire, possess and use of the person receiving the device;

byproduct material when contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing light or ionized atmosphere.

(b) The general license contained in this section applies only to devices which have been:

(1) Manufactured in accordance with the specifications contained in a specific license issued by the Commission to the manufacturer of the device pursuant to § 32.51 of this chapter, or in accordance with the specifications contained in a specific license issued to the manufacturer by an agreement State which authorizes the manufacture of the device for distribution to persons generally licensed by the agreement State; and

(2) Installed on the premises of the general licensee by a person authorized to install such devices under a specific license issued to the installer by the Commission pursuant to Parts 30 and 32 of this chapter or by an agreement State, if a label affixed to the device at the time of receipt states that installation by a specific licensee is required. The requirement of this subparagraph (2) does not apply while devices are held in storage in the original shipping container pending installation by a specific licensee.

(c) The general license contained in this section applies only to devices which (1) are labeled in accordance with the provisions of the specific license which authorizes the distribution of the device to general licensees, and (2) bear a label containing the following or a substantially similar statement which contains the information called for in the following statement:

The receipt, possession, use, and transfer of this device, Model #....., Serial No. #..... are subject to a general license or the equivalent and the regulations of the U.S. AEC or of a State with which the AEC has entered into an agreement for the exercise of regulatory authority. Removal of this label is prohibited.

CAUTION-RADIOACTIVE MATERIAL

(Name of supplier)*

*The model, serial number, and name of supplier may be omitted from this label provided they are elsewhere specified in labeling affixed to the device.

(d) Persons who own, receive, acquire, possess or use a device pursuant to the general license contained in this section:

(1) Shall not transfer, abandon or dispose of the device except by transfer to a person authorized by a specific license from the Commission or an agreement State to receive such device and shall furnish to the Director of the appropriate Atomic Energy Commission Regional Compliance Office listed in Appendix "D" of Part 30 of this chapter, "Standards for Protection Against Radiation", within 30 days after any transfer.

*Devices previously licensed under this section acquired prior to July 1, 1960, may bear labels authorized by the regulations in effect on Jan. 1, 1960.

(2) Shall not transfer, abandon or dispose of the device except by transfer to a person authorized by a specific license from the Commission or an agreement State to receive such device and shall furnish to the Director of the appropriate Atomic Energy Commission Regional Compliance Office listed in Appendix "D" of Part 30 of this chapter, "Standards for Protection Against Radiation", within 30 days after any transfer.

(2) Shall assure that all labels affixed to the device at the time of receipt and bearing a statement that removal of the label is prohibited are maintained thereon and shall comply with all instructions contained in such labels.

(3) Shall have the device tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at the time of installation of the device or replacement of the byproduct material on the premises of the general licensee and thereafter at no longer than six-month intervals or at such longer intervals not to exceed three years as are specified in the label required by § 31.5(c); provided that devices containing only krypton need not be tested for leakage, and devices containing only tritium need not be tested for any purpose;

(4) Shall have the tests required by subparagraph (3) of this paragraph and all other services involving the radioactive material, its shielding and containment, performed by the supplier or other person holding a specific license from the Commission or an agreement State to manufacture, install or service such devices.

(5) Shall, within 30 days after the occurrence of a failure of or damage to the shielding of the radioactive material or the on-off mechanism or indicator or upon the detection of 0.003 microcurie or more of removable radioactive material, furnish to the Director of the appropriate Atomic Energy Commission Regional Compliance Office listed in Appendix "D" of Part 30 of this chapter, "Standards for Protection Against Radiation", a report containing the name of the manufacturer of the device, the type of device, the manufacturer's serial number of the device and a brief description of the event and the remedial action taken; and shall maintain records of all tests performed on the devices as required under this section, including the dates and results of the tests and the names of the persons conducting the tests.

(6) Upon the occurrence of a failure of or damage to, or any indication of a possible failure of or damage to, the shielding or containment of the radioactive material or the on-off mechanism or indicator, shall immediately suspend operation of the device until it has been repaired by the supplier or other person holding a specific license from the Commission or an agreement State to manufacture, install or service such devices, or disposed of by transfer to a person authorized to receive the byproduct material contained in the device; and

(7) Shall be exempt from the requirements of Part 20 of this chapter, except that such persons shall comply with the provisions of §§ 20.402 and 20.403 of this chapter.

(8) Persons who possess byproduct material pursuant to this general license shall not export such byproduct material without a specific license from the Commission authorizing such export.

Exhibit D-1

January 4, 1982

Ms. Penney Pennington
International Energy Associates
600 New Hampshire Ave. N.W.
Washington, D.C. 20037

Dear Ms. Pennington,

The attached package contains the records of the General
licensee names, addresses, serial numbers, etc., that
received gunrights dating from 1977 through 1980.

Sincerely,

Elliel F. Knutsen

Exhibit D-2

PART IV

SUPERINTENDENT DEAD LETTER OR PARCEL BRANCH

Conduct search for article described in Part II B below

BRANCH SERVING MAILING OFFICE

A. CONDUCTED SEARCH ON /Date/ ☒ SEARCH CONDUCTED BY /Name/ ☒ ARTICLE WAS ☒ LOCATED ☒ NOT LOCATED

BRANCH SERVING ADDRESSEE OFFICE

B. CONDUCTED SEARCH ON /Date/ ☒ SEARCH CONDUCTED BY /Name/ ☒ ARTICLE WAS ☒ LOCATED ☒ NOT LOCATED

3. IF ARTICLE WAS LOCATED IT WAS FORWARDED TO ☐ SENDER ☐ ADDRESSEE

PS Form 1510, Feb. 1970

PART II B

U.S. POSTAL SERVICE

MAIL LOSS/RIFLING REPORT

1. COMPLAINT DATE 1-13-82 2. OFFICE ACCEPTING COMPLAINT Rosemount, Mn. 55068 3. COMPLAINT ☒ LOSS ☐ RIFLING

4. ARTICLE WAS MAILED BY NITS-SITE, INC. ARTICLE WAS ADDRESSED TO Ms. Penney Pennington

5. RETURN ADDRESS AS ON ARTICLE MAILED P.O. BOX 0

6. CITY ROSEMOUNT 7. STATE MN. 8. ZIP CODE 55068

9. DAY TELEPHONE NUMBER 612-423-3736 10. DAY TELEPHONE NUMBER (Include time area) 202-342-6715

11. ART CLC MAILED ☒ 12. HOUR ☐ AM ☒ PM

13. MONTH 1 14. DAY 04 15. YEAR 82

16. SPECIAL SERVICES ☐ SPECIAL HANDLING ☐ SPECIAL DELIVERY ☐ CERTIFIED ☐ NO

17. TYPE OF MAIL ☐ LETTER ☐ PARCEL POST ☐ OTHER (Specify) ☒ PARCEL

18. NAME AND/OR ADDRESS OF LOCATION CHECKED Bloomington Branch, 9641 Garfield Ave.

19. PLACE OF MAILING Bloomington, Mn.

20. MAIN POST OFFICE ☐ STATION OR BRANCH ☒ COLLECTION BOX ☒

21. RESIDENCE (RMBUS-Ref 15)

22. CONTENTS OF ARTICLE (Number in first column - include name items in 2, 3, 4, and 5)

Package approx. 14"x12"x3" Brown paper wrapped. 3" filmment tape on all sides. Contains buff colored cards with numerous names and addresses.

ZIP CODE FOR LOCATION CHECKED

55420

1.2 VALUE

February 19, 1981

Mr. Elliel Knutsen
Mr. Julio Santiago
Lite-Site, Inc.
P.O. Box 0
Rosemount, MN 55068

Dear Messrs. Knutsen and Santiago:

Your expired Model 70H and Model 70S gunsights which were sent to us for disposal on December 22, 1980 have been wipe tested and disposed of as radioactive waste.

This lot consists of 182 units of Model 70H and 14 units of Model 70S gunsights. Before disposal all sights were smear tested for leakage of Promethium-147 which resulted in less than 0.0005 uCi removable activity for each sight.

Very truly yours,

S.W. Knutsen
Process Technologist

SWK:pr

7/20/82
Etl