

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

11-27405-01

Docket or Reference Number

030-32443

Amendment No. 02

Barnes, Inc.
P.O. Box 263
Lewiston, ID 83501

In accordance with NRC Form 314 dated March 14, 1997, License No. 11-27405-01 is hereby terminated.



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date MAY 13 1997

By

Jacqueline D. Cook

Jacqueline D. Cook
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

May 13, 1997

Barnes, Inc.
ATTN: David Judd
Office Manager
P.O. Box 263
Lewiston, ID 83501

SUBJECT: TERMINATION OF YOUR NRC RADIOACTIVE MATERIALS LICENSE

On March 14, 1997 you contacted the U.S. Nuclear Regulatory Commission and indicated that you wished to terminate your NRC radioactive materials license. The NRC staff has reviewed your sealed source leak test results. Based on its review, the staff has concluded that: 1) all licensable radioactive material has been removed from your facility 2) residual radioactive material attributable to licensed activities does not exceed current NRC criteria.

Based on these conclusions no further remediation or actions with respect to NRC regulated material is required. Your facility is suitable for unrestricted use and NRC license number 11-27405-01 for your facility at Lewiston, Idaho is hereby terminated.

If you have questions or require clarification on any of the information stated above, we encourage you to contact us at 817-860-8132.

Sincerely,

A handwritten signature in cursive script that reads "Jacqueline D. Cook".

Jacqueline D. Cook
Health Physicist
Nuclear Materials Licensing Branch

Docket: 030-32443
License: 11-27405-01
Control: 466349

Enclosures: As stated

MAY 13 1997

Barnes, Inc.

-2-

DOCUMENT NAME: L:\TERM97\11-27405-01

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:NMLB	N						
JDCook	<i>JDCook</i>						
05/1897							

OFFICIAL RECORD COPY

Materials License Termination/Retirement Form

LICENSE #: 11-27405-01

DOCKET #: 030-32443

LICENSEE: Barnes, Inc.

EXPIRATION DATE: November 30, 2001

ADDRESS: P.O. Box 263
Lewiston, ID 83501

DATE OF CONTACT: March 14, 1997

CONTACTED BY: David L. Judd

TITLE: Office Manager

TELEPHONE: 208-746-0184

LICENSE TERMINATED: ☒ X

LICENSE TRANSFERRED:

LICENSE TRANSFERRED TO:

NAME:

ADDRESS:

TELEPHONE:

BASIS FOR TERMINATION AND/OR RETIREMENT: Gauge transferred to another NRC licensee

TERMINATION DOCUMENTATION

1. License termination meets Type I criteria:

Y ☐ X ☒ N ☐

☒ X Licensee used sealed sources only and the most recent leak test demonstrates that they did not leak while in the licensee's possession

☐ Licensee used radioactive material with $T_{1/2} \leq 60$ days and it has decayed to less than the activity in 10 CFR Part 20, Appendix C

2. License termination meets type II criteria:

Y ☐ N ☒ X ☐

☐ Licensee possessed and used only sealed sources but cannot demonstrate that the sources did not leak while in the licensee's possession

☐ Licensee possessed unsealed radioactive material with $T_{1/2} \leq 60$ days but the maximum activity authorized under the license has not decayed to less than the quantity specified in 10 CFR Part 20, Appendix C

☐ Licensee possessed unsealed radioactive material with $T_{1/2} > 60$ days but ≤ 120 days

☐ Licensee possessed ^{14}C or ^3H but the total activity and use authorized under the license warrants decommissioning under Type II (describe rationale above)

3. License termination meets Type III criteria:

Y ☐ N ☐ X ☐

☐ Decommissioning qualifies for a categorical exclusion under 10 CFR 51.22(c) and

☐ Licensee will decommission its facility in accordance with the NRC's criteria for unrestricted use

4. License termination meets Type IV criteria: Y ☐ N ☒ X ☐

☐ Decommissioning does not qualify for a categorical exclusion under 10 CFR 51.22(c)

☐ Licensee will decommission its facility such that residual radioactive material may remain in excess of NRC's criteria for unrestricted use

5. Termination survey required: Y ☐ N ☒ X ☐

☐ Termination survey submitted by licensee

☐ Termination survey satisfies NRC survey requirements

6. Form 314 or equivalent submitted: Y ☒ X ☐ N ☐

☒ X ☐ Staff verified disposition of sealed sources or unsealed radioactive material by:
☐ letter from Form 314 recipient

☒ X ☐ call to Form 314 recipient (**call to Dan Horlander of Strata on: 4/8/97**)

7. Licensee transfer records discussed in 10 CFR Parts 30.35, 30.36, 30.51; 40.36, 40.42, 40.61; or 70.25, 70.38, 70.51 Y ☐ N ☒ NA ☐

☐ to USNRC

☐ To individual assuming responsibility for the license, with a copy of the cover letter to NRC

8. NRC closeout inspection required: Y ☐ N ☒ X ☐

☐ Closeout inspection performed:

on:

Inspector:

9. Closeout survey performed:

Y _____ N X _____

on:

by:

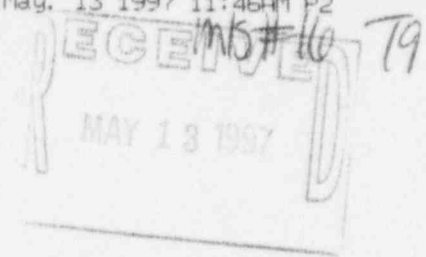
Licensing staff

completing form: *Jacqueline D. Cook*
Jacqueline D. Cook

Date: 5/13/97

Branch Chief: _____

Date:

BARNES, INC.BARRY M. BARNES - PRESIDENT
P.O. BOX 283 - LEWISTON, IDAHO 83501 - (208) 746-0184

April 11, 1997

U.S. Nuclear Regulatory Commission
Region IV

Attn: Jackie Cook

Heath Physicist

611 Ryan Plaza Drive, Suite 400

Arlington, Texas 76011-8064

Subject: Request to Terminate Radioactive Materials License No. 11-27405-01

Re: Statement Concerning Sealed Source Non-Leakage

Docket:	030-32443
License:	11-27405-01
Control	466349

Based on all leak tests, the sealed source in the nuclear densometer that Barnes, Inc. sold to Strata, Inc. did not leak any time while in Barnes, Inc. possession.

The final leak test was submitted with the request for Termination of License No. 11-27405-01.

Sections 30.35, 30.36, and 30.51 are not applicable since Barnes, Inc. submitted the leak tests and the above statement. If you need any information, you may contact me at the number listed at the top of the page.

Sincerely,

David Judd
Office Manager



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

April 8, 1997

Barnes, Inc.
ATTN: David L. Judd
Office Manager
P.O. Box 263
4310 Hatwai Road
Lewiston, ID 83501

SUBJECT: REQUEST FOR TERMINATION OF YOUR NRC LICENSE

In letter dated March 14, 1997, you informed NRC of your intent to terminate your Radioactive Materials License No. 11-27405-01. The NRC has specific requirements as specified in 10 CFR 30.36 for decommissioning facilities and for terminating licenses. The information outlined below may be helpful in understanding these requirements.

Licensees that used only sealed sources, and the most recent leak test demonstrates that the sources did not leak while in the licensee's possession (i.e., if leak test results have been $< 0.005 \mu\text{Ci}$), should:

1. Demonstrate to NRC that the sources never leaked, both while in your custody and upon arrival at the ultimate destination (i.e., by leak test records);
2. Transfer the records discussed in 10 CFR Parts 30.35, 30.36, and 30.51 to the NRC Region IV office;

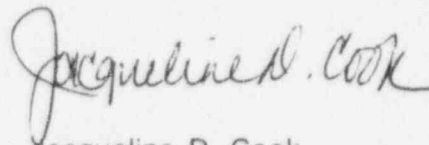
If you possessed and used only sealed sources, but cannot demonstrate that the sources did not leak while in your possession (i.e., leak tests are not available or indicate contamination $> 0.005 \mu\text{Ci}$) you should:

1. Determine the extent of contamination at your facility;
2. Remove residual radioactive material to levels that would permit release of the facility;
3. Determine the radiological status of your facility and perform further remediation, if necessary to meet NRC's criteria (See attached for a description of the surveys that should be performed for licensees meeting the criteria discussed above).
4. Submit the results of a survey of your facility demonstrating that residual radioactive material levels meet the NRC's criteria for unrestricted use or demonstrate that your facility, or portion of the facility, meets NRC's criteria for unrestricted use to NRC by some other means; and

5. Transfer the records discussed in 10 CFR Parts 30.35, 30.36, and 30.51 to the NRC, Region IV office.
6. Please note that if leak test results indicate a presence of 0.005 μCi or more of removable contamination, you must file a report with NRC in accordance with 10 CFR 30.50(b)(2) and your license conditions.

When you reply to this letter, please identify the license, docket, and control numbers specified below on your submittal. If you have questions or require clarification on any of the information discussed, you should contact a member of the Licensing Staff at (817) 860-8100.

Sincerely,

A handwritten signature in cursive script that reads "Jacqueline D. Cook".

Jacqueline D. Cook
Health Physicist
Nuclear Materials Licensing Branch

Docket: 030-32443
License: 11-27405-01
Control: 466349

Enclosures: As stated

INFORMATION THAT SHOULD BE SUBMITTED TO NRC STAFF TO SUPPORT LICENSE TERMINATION

In performing the decommissioning of its facility the licensee should first identify any areas in the facility that were involved in licensed material use by reviewing facility records and conducting a survey of the licensed material use area. This survey should be similar to the routine contamination surveys conducted under the licensee's radiological safety plan. The licensee should then remediate all surfaces in the areas at the facility that were involved in licensed material use or storage and dispose of all radioactive material and waste as discussed in the NRC regulations at 10 CFR 20 Subpart K.

If the licensee elects to demonstrate that its facility is suitable for unrestricted use by conducting a Final Status Survey, the licensee should design the survey so as to be of sufficient scope and quality to make this demonstration. In preparing for the Final Status Survey, the licensee should establish a method to identify individual measurement/sampling points, such as establishing reference grids on each surface in the indoor area that was involved in licensed material. At a minimum, the licensee's termination survey should consist of:

- 1) 100% scanning of all surfaces in the area at the facility where licensed material was used or stored using an appropriate radiation detection instrument (including scan sensitivity);
- 2) evaluations for total and removable radioactive material at each area exhibiting elevated radiation levels or at a frequency of one wipe comprising 100 cm² per grid; and
- 3) evaluations of radiation levels at one meter above surfaces

Particular attention should be afforded any drains, air vents or other fixtures or equipment that may have become contaminated during licensed material use. This is especially significant in situations where renovations have occurred and potentially contaminated areas may be inaccessible under current conditions.

The information that should be submitted to the NRC to support the final status survey should consist of:

- 1) a brief description of the remediation activities undertaken by the licensee;
- 2) a detailed drawing of the licensed material use areas indicating the sampling locations;
- 3) a table showing the results of the radiation levels and removable contamination surveys keyed to the detailed drawing (organized by survey unit);

- 4) the training and qualifications of the individual(s) performing the decontamination and surveys; and
- 5) a description of the type of equipment used by the licensee to evaluate the wipes and perform the surveys. This description should include all information required to determine the appropriateness of the equipment for determining the radiological status of the facility such as last calibration date, type of radiations detected, sensitivity of detection, efficiency, etc.

APR - 9 1997

Barnes, inc.

-3-

DOCUMENT NAME: P:\DEFICIEN\BARNES.DEF

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

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04/8/97							

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(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

Program Code: 03121
Status Code: 0
Fee Category: 3P
Exp. Date: 20011130
Fee Comments:
Dec'n Fin Assur Req'd: N

1997 MAR 26 PM 3:25

LICENSE FEE TRANSMITTAL

A. REGION IV

1. APPLICATION ATTACHED

Applicant/Licensee: BARNES, INC.
Received Date: 970325
Docket No: 3032443
Control No.: 466349
License No.: 11-27405-01
Action Type: Termination

2. FEE ATTACHED

Amount: 4
Check No.: 4

3. COMMENTS

Signed
Date

Dariusz Grynyski
3/26/97

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered 7/1)

1. Fee Category and Amount: 3P

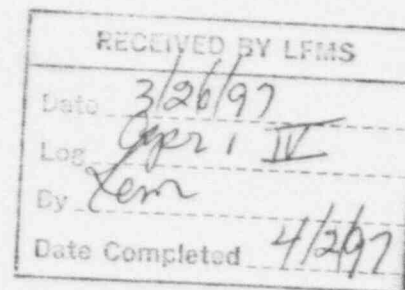
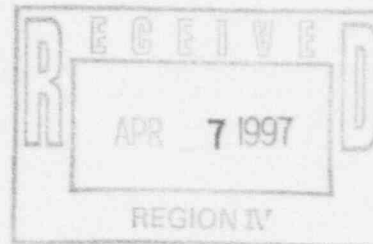
2. Correct Fee Paid. Application may be processed for:

Amendment ✓
Renewal
License

3. OTHER

Signed
Date

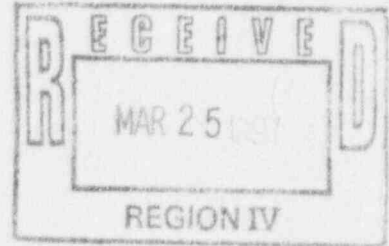
Rita Smesler
4/2/97



FEE EXEMPT

BARNES, INC.

BARRY M. BARNES - PRESIDENT
P.O. BOX 263 - LEWISTON, IDAHO 83501 - (208) 746-0184



March 14, 1997

US Nuclear Regulatory Commission
611 Ryan Plaza Drive
Suite 400
Arlington, TX 76011-8064

Re: License No. 11-27405-01

To whom it may concern:

Barnes, Inc. has sold its Nuclear Densometer (Troxler 3411-B S.N. 11656) to Strata, Inc.

We wish to Terminate our materials license, please see attached copies of the sales receipt and a copy of Strata's license.

Thank you,

David L. Judd
Office Manager

cc: Strata, Inc.

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee

1. Barnes, Inc.

3. License number 11-27405-01

2. P.O. Box 263
Lewiston, Idaho 83501

4. Expiration date November 30, 1996

5. Docket or
Reference No. 030-324436. Byproduct, source, and/or
special nuclear material7. Chemical and/or physical
form8. Maximum amount that licensee
may possess at any one time
under this license

A. Cesium-137

A. Sealed sources
(Campbell Pacific
Nuclear Model CPN-131)A. Not to exceed
10 millicuries
per source

B. Americium-241

B. Sealed neutron
sources (Campbell
Pacific Nuclear
Model CPN-131)B. Not to exceed
50 millicuries
per source

9. Authorized use

A. and B. For use in Campbell Pacific Portaprobe Model B(R), MC Series, or
500 Series moisture/density gauges for measurement of properties
of materials.

BARNES, INC.

BARRY M. BARNES - PRESIDENT
P.O. BOX 263 - LEWISTON, IDAHO 83501 - (208) 746-0184

BILL OF SALE

DATE: March 14, 1997

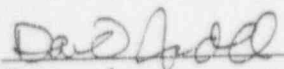
ITEM SOLD: 1 Troxler 3411-B, S.N. 11656

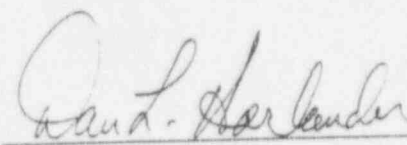
SOLD TO : Strata, Inc.
1428 South Main Street
Moscow, ID 83843

Price: \$100
Total Amount Due: \$100

(No Sales Tax Included)

~~Paid by personal check~~ *cash*


Barnes, Inc.


Strata, Inc.

(6-95)

10 CFR 30.36(e)(1)(iv)

10 CFR 40.42(e)(1)(iv)

10 CFR 70.38(e)(1)(iv)

CERTIFICATE OF DISPOSITION OF MATERIALS

INSTRUCTIONS: ALL ITEMS MUST BE COMPLETED BY PRINT OR TYPE.
SEND THE COMPLETED CERTIFICATE TO THE NRC OFFICE SPECIFIED ON THE REVERSE.

LICENSEE NAME AND ADDRESS

Barnes, Inc.
PO Box 263
Lewiston, ID 83501

LICENSE NUMBER

11-27405-01

LICENSE EXPIRATION DATE

9-30-97

MAR 25 1997

A. MATERIALS DATA (Check one and complete as necessary)

THE LICENSEE OR ANY INDIVIDUAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE LICENSEE CERTIFIES THAT:
(Check and/or complete the appropriate item(s) below.)

- ☐ 1. NO MATERIALS HAVE EVER BEEN PROCURED OR POSSESSED BY THE LICENSEE UNDER THIS LICENSE.
- OR
- ☒ 2. ALL ACTIVITIES AUTHORIZED BY THE LICENSE HAVE CEASED AND ALL MATERIALS PROCURED AND/OR POSSESSED BY THE LICENSE NUMBER CITED ABOVE HAVE BEEN DISPOSED OF IN THE FOLLOWING MANNER. (If additional space is needed, use the reverse side or provide attachments.)

Describe specific material transfer actions and, if there were radioactive wastes generated in terminating this license, the disposal actions including the disposition of low-level radioactive waste, mixed waste, Greater-than-Class-C waste, and sealed sources, if applicable.

Sold Troxler Model 3411-B Nuclear Densometer to Stata, Inc.

There were no radioactive wastes generated

For transfers, specify the date of the transfer, the name of the licensee recipient, and the recipient's NRC license number or Agreement State name and license number.

3/14/97

Strata, Inc.
7446 Lemhi Street
Boise, Idaho 83709

License No. 11-27320-01

Idaho

If materials were disposed of directly by the licensee rather than transferred to another licensee, licensed disposal site or waste contractor, describe the specific disposal procedures (e.g., decay in storage).

N/A

B. OTHER DATA

- ☒ 1. OUR LICENSE HAS NOT YET EXPIRED; PLEASE TERMINATE IT.
2. A RADIATION SURVEY WAS CONDUCTED BY THE LICENSEE TO CONFIRM THE ABSENCE OF LICENSED RADIOACTIVE MATERIALS AND TO DETERMINE WHETHER ANY CONTAMINATION REMAINS ON THE PREMISES COVERED BY THE LICENSE. (Check one)
- ☐ NO (Attach explanation)
- ☒ YES, THE RESULTS (Check one)
- ☒ ARE ATTACHED, or
- ☐ WERE FORWARDED TO NRC ON (Date)
- Device was leak tested (See attached leak test)

3. THE PERSON TO BE CONTACTED REGARDING THE INFORMATION PROVIDED ON THIS FORM

NAME

David Judd

TELEPHONE NUMBER
(Include Area Code)

(208) 746-0184

4. MAIL ALL FUTURE CORRESPONDENCE REGARDING THIS LICENSE TO

Barnes, Inc.
PO Box 263 Lewiston, ID 83501

CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE

SIGNATURE

DATE

David L. Judd OFFICE MANAGER

David Judd

03/14/97

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTIONS.



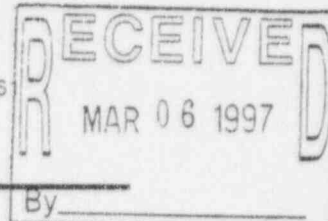
Troxler Electronic Laboratories, Inc.

3008 Cornwallis Rd., P.O. Box 12057

Research Triangle Park, NC 27709

Tel: (919) 549-8661 Fax: (919) 549-0761

License: NC 032-0182-1



LEAK TEST CERTIFICATE

DEVICE:

Model: 3411

Serial No: 11656

Sample Date: 2-25-97

SEALED SOURCES:

NUCLIDE	SERIAL NO.	INITIAL ACTIVITY (mCi)	CURRENT ACTIVITY (mCi)
CS-137	40 - 9203	8.0	6.0
AM-241:BE	47 - 7050	40.0	39.2

LEAK TEST ANALYSIS:

The sample has been analyzed using counting system capable of measuring beta, gamma, and alpha contamination.

Date of last calibration: 1/14/97

	ALPHA	BETA-GAMMA
Conversion factor (cpm/uCi)	5.11E+05	9.85E+05
Background measurement (cpm)	0	23
Sample measurement (cpm)	0	21
Activity (uCi)	< MDA	< MDA
Min. Detectable Activity (uCi)	6.2E-06	7.6E-06

This certifies that the above leak test results are:

Less than 0.005 uCi (200 Bq): ☒

Greater than 0.005 uCi (200 Bq): ☐

Measurement Date: 2/28/97

Certified by:

Ray Wells

If greater than 0.005 uCi:

Person Notified _____

Date _____

Phone _____

and/or Fax _____

RADIOACTIVE MATERIALS
TRANSPORTATION INFORMATION

OWNER OF DEVICE: Barnes, Inc.

ADDRESS: P.O. Box 263 Lewiston, ID 83501

PHONE NO. (208) 746-0184

DEVICE: Nuclear Densometer

MODEL: Troxler 3411-B S.N. 11656

ISOTOPE(S): Cesium 137

Americium 241 Be

ACTIVITY: 6.0 mCi

39.2 mCi

LABELING:

Proper Shipping Name: RADIOACTIVE MATERIALS, SPECIAL FORM, N.O.S.

Hazard Class: Radioactive Material

Identification Number: UN2974

YELLOW II

TYPE A

TRANSPORT INDEX: .4

*PLACARDS REQUIRED.

This is to certify that the above-named materials are properly classified, described, packaged, and marked and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SIGNED: David Judd

TITLE: Office Manager

DATE: 3/14/97

TOTAL P.O.:

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below, to use such material for the purpose(s) and at the place(s) designated below, to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee

1. Strata, Inc.
2. 7446 Lemhi Street
Boise, Idaho 83709

In accordance with letter dated
February 14, 1996

3. License number 11-27320-01 is amended in
its entirety to read as follows:

4. Expiration date September 30, 2000

5. Docket or
Reference No 030-32206

6. Byproduct, source, and/or
special nuclear material

A. Cesium-137

B. Americium-241

7. Chemical and/or physical
form

A. Sealed sources
registered either with
NRC under
10 CFR 32.210 or with
an Agreement State and
incorporated in a
compatible gauging
device as specified in
Item 9 of this license

B. Sealed sources
registered either with
NRC under
10 CFR 32.210 or with
an Agreement State and
incorporated in a
compatible gauging
device as specified in
Item 9 of this license

8. Maximum amount that licensee
may possess at any one time
under this license

A. See Condition
9.A.

B. See Condition
9.B.

9. Authorized use

- A. and B. To be used, for measurement purposes, in compatible portable Boart Longyear Company (formerly Campbell Pacific Nuclear Company), and/or Troxler Electronic Laboratories, Inc. gauging devices that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State license to receive, possess, and use the devices.

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee

1. Strata, Inc.
2. 7446 Lemhi Street
Boise, Idaho 83709

In accordance with letter dated
February 14, 1996

3. License number 11-27320-01 is amended in
its entirety to read as follows:

4. Expiration date September 30, 2000

5. Docket or
Reference No 030-32206

6. Byproduct, source, and/or
special nuclear material

A. Cesium-137

B. Americium-241

7. Chemical and/or physical
form

A. Sealed sources
registered either with
NRC under
10 CFR 32.210 or with
an Agreement State and
incorporated in a
compatible gauging
device as specified in
Item 9 of this license

B. Sealed sources
registered either with
NRC under
10 CFR 32.210 or with
an Agreement State and
incorporated in a
compatible gauging
device as specified in
Item 9 of this license

8. Maximum amount that licensee
may possess at any one time
under this license

A. See Condition
9.A.

B. See Condition
9.B.

9. Authorized use

A. and B.

To be used, for measurement purposes, in compatible portable Boart Longyear Company (formerly Campbell Pacific Nuclear Company), and/or Troxler Electronic Laboratories, Inc. gauging devices that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State license to receive, possess, and use the devices.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

PAGE	2	OF	4	PAGES
License number	11-27320-01			
Docket or Reference number	030-32206			
Amendment No.	03			

CONDITIONS

10. Licensed material may be used at the licensee's facilities located at 7446 Lemhi Street, Boise, Idaho; 4460 Kings Way, Unit #3, Chubbuck, Idaho; W. 280 Prairie Avenue, Coeur d'Alene, Idaho; 1428 S. Main Street, Moscow, Idaho and may be used at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11.
 - A. Licensed material shall only be used by, or under the supervision and in the physical presence of, James J. Cron or individuals who have successfully completed the manufacturer's training program for gauge users, have received copies of, and training in, the licensee's operating and emergency procedures, and have been designated by the Radiation Safety Officer.
 - B. The Radiation Safety Officer for this license is James J. Cron.
12.
 - A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210 or by an Agreement State.
 - B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
 - C. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
 - D. Sealed sources need not be leak tested if:
 - (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
 - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number	PAGE 3 OF 4 PAGES
11-27320-01	
Docket or Reference number	
030-32206	
Amendment No.	03

- E. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Radiation Safety and Safeguards. The report shall specify the source involved, the test results, and corrective action taken.
- F. The licensee is authorized to collect leak test samples for analysis by BHP Enterprises. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
13. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
14. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
15. Each portable gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage, or when not under the direct surveillance of an authorized user.
16. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from NRC before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective Certificates of Registration issued either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State.
17. Any cleaning, maintenance, or repair of the gauges that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
18. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
19. The licensee shall not use sealed sources or probes containing sealed sources at depths exceeding 3 feet below the surface.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

11-27320-01

Docket or Reference number

030-32206

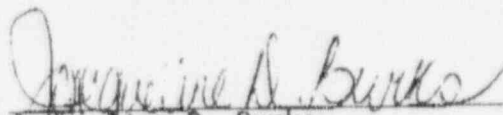
Amendment No. 03

20. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
21. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated June 15, 1995
 - B. Letter dated August 18, 1995
 - C. Letter dated August 31, 1995
 - D. Letter dated February 14, 1996
 - E. Letter dated February 29, 1996

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date MAR 5 1996

By

Jacqueline D. Burks
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

11-27303-01

Docket Reference Number

030-32260/IDA-179 IDA-292

Amendment No. 02

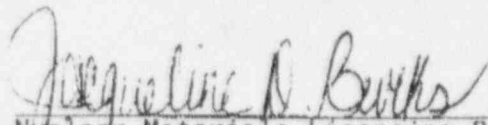
Howard Consultants, Inc.
7444 Lemhi Street
Boise, Idaho 83709

In accordance with NRC Form 314 dated February 27, 1996, and concurrent with the issuance of Amendment No. 03 to License No. 11-27320-01, License No. 11027303-01 is hereby terminated.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date JUN 25 1996

By



Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee

1. Howard Consultants, Inc.

2. 7444 Lemhi Street
Boise, Idaho 83709

In accordance with letter dated
May 26, 1995

3. License number 11-27303-01 is amended in
its entirety to read as follows:

4. Expiration date July 31, 1996

5. Docket or
Reference No 030-32260/IDA-179 IDA-292

6. Byproduct, source, and/or
special nuclear material

7. Chemical and/or physical
form

8. Maximum amount that licensee
may possess at any one time
under this license

A. Cesium-137

A. Sealed sources
registered either with
NRC under
10 CFR 32.210 or with
an Agreement State and
incorporated in a
compatible gauging
device as specified in
Item 9 of this license

A. See Condition
9.A.

B. Americium-241

B. Sealed sources
registered either with
NRC under
10 CFR 32.210 or with
an Agreement State and
incorporated in a
compatible gauging
device as specified in
Item 9 of this license

B. See Condition
9.B.

9. Authorized use

A. and B. To be used, for measurement purposes, in compatible portable CPN Company and/or Troxler Electronic Laboratories, Inc. gauging devices that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State license to receive, possess, and use the devices.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License number

11-27303-01

Docket or Reference number

030-32260/IDA-179 IDA-292

Amendment No. 01

CONDITIONS

10. Licensed material may be used at the licensee's facilities located at 7444 Lemhi Street, Boise, Idaho; W. 280 Prairie Avenue, Coeur d'Alene, Idaho; 1428 South Main Street, Moscow, Idaho and may be used at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. A. Licensed material shall only be used by, or under the supervision and in the physical presence of, J. Paul Bastian or individuals who have successfully completed the manufacturer's training program for gauge users, have received copies of, and training in, the licensee's operating and emergency procedures, and have been designated by the Radiation Safety Officer.
B. The Radiation Safety Officer for this license is J. Paul Bastian.
12. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210 or by an Agreement State.
B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
C. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
D. Sealed sources need not be leak tested if:
 - (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

11-27303-01

Docket or Reference number

030-32260/IDA-179 IDA-292

Amendment No. 01

18. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
19. The licensee shall not use sealed sources or probes containing sealed sources at depths exceeding 3 feet below the surface.
20. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
21. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
 - A. Application dated May 7, 1992
 - B. Letter dated June 3, 1992
 - C. Letter dated May 26, 1995

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date JUN 14 1995

By

Anthony D. Gaines

Anthony D. Gaines
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License number

11-27303-01

Docket or Reference number

030-32260/IDA-179 IDA-292

Amendment No. 01

- (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- E. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Radiation Safety and Safeguards. The report shall specify the source involved, the test results, and corrective action taken.
- F. The licensee is authorized to collect leak test samples for analysis by BHP Enterprises. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
13. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
14. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
15. Each portable gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage, or when not under the direct surveillance of an authorized user.
16. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from NRC before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective Certificates of Registration issued either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State.
17. Any cleaning, maintenance, or repair of the gauges that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.

Radioactive Materials License



Page 1 of 1 Pages

License Number WN-I0378-1

Amendment No. 1

Howard Consultants, Inc.
N. 2128 Pines Road, Suite 5N
Spokane, WA 99206

Attention: W. Mark Storey
Radiation Safety Officer

In accordance with letter and attachments dated May 12, 1992, Radioactive Materials License Number WN-I0378-1 is amended as follows:

License Condition 12 is amended to read:

12. The Radiation Safety Officer for this program shall be W. Mark Storey.

License Condition 22.B is added:

22.B. Letter and attachments dated May 12, 1992, RE: change of Radiation Safety Officer.



Arden C. Scroggs
Radiation Health Physicist
Industrial Compliance and Licensing
Radioactive Materials Section

Department of Health
Radiation Protection Division
Aircustrial Park, Bldg. 5, LE-13
Olympia, WA 98504

206/753-3355
SCAN 234-3355
FAX # 206/753-1496



FOR THE STATE OF WASHINGTON DEPARTMENT OF HEALTH

Date May 14, 1992
(92-05-28)

By Arden C. Scroggs
Arden C. Scroggs
Radioactive Materials Licensing



Radioactive Materials License

Page 1 of 4 Pages

Pursuant to the Nuclear Energy and Radiation Control Act, RCW 70.98, and the Radiation Control Regulations, Chapters 246-220 through 246-255 WAC, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations promulgated by the State of Washington Department of Health.

1. Licensee Name Howard Consultants, Inc.	3. License Number WN--I0378--1
2. Address N. 2128 Pines Road, Suite 5N Spokane, WA 99206	4. Expiration Date 31 May 1996
	5. Reference number(s) 91-05-01
6. Radioactive Material (element and mass number)	7. Chemical and/or Physical Form
	8. Maximum quantity licensee may possess at any one time

A. Cesium 137.

A. Sealed source (Troxler Electronic Laboratories Drawing No. A-102112).

A. No single source to exceed 10 millicuries (370 Megabecquerels).

B. Americium 241/
Beryllium.

B. Sealed source (Troxler Electronic Laboratories Drawing No. A-102451).

B. No single source to exceed 50 millicuries (1850 Megabecquerels).

C. Cesium 137.

C. Sealed source (Campbell Pacific Nuclear Model CPN-131).

C. No single source to exceed 10 millicuries (370 Megabecquerels).

D. Americium 241/
Beryllium.

D. Sealed source (Campbell Pacific Nuclear Model CPN-131).

D. No single source to exceed 50 millicuries (1850 Megabecquerels).

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CONDITIONS

9. Authorized use.

A&B To be used in Troxler Electronic Laboratories, Inc. Model 3400 series moisture/density gauges for the measurement of moisture and density of soil and construction materials.

C&D To be used in Campbell Pacific Nuclear Portaprobe Model MC series moisture/density gauges for the measurement of moisture and density of soil and construction materials.

Radioactive Materials License



Page 2 of 4 Pages

License Number WN-10378-1

10. Radioactive material shall be stored and/or used at East 6002 Alki Avenue, Spokane, Washington and may be used at temporary job sites of the licensee within the state of Washington. This condition does not prohibit use in states under U.S. Nuclear Regulatory Commission (NRC) jurisdiction or in other Agreement States under reciprocity procedures which may be established by the NRC or those states.
11. The licensee shall comply with the provisions of Chapter 246-220 WAC, "Radiation Protection — General Provisions"; Chapter 246-221 WAC, "Radiation Protection Standards"; Chapter 246-222 WAC, "Radiation Protection — Worker Rights"; and Chapter 246-235 WAC, "Radioactive Materials — Specific Licenses".
12. The Radiation Safety Officer for this program shall be ^{W. MARK Storey} ~~Chris C. Beck~~.
13. Radioactive material shall be used by, or under the supervision and in the physical presence of, individuals who have successfully completed a training course approved by the department on radiation safety and nuclear moisture/density gauge operation. The Radiation Safety Officer shall maintain training certificates for all qualified individuals.
14. The licensee shall maintain a utilization/transfer log for each gauge at East 6002 Alki Avenue, Spokane, Washington. The utilization/transfer log shall include, but not be limited to, dates of use, location of use, and the name of the authorized individual checking out the gauge.
15. The licensee's emergency procedures shall conform to procedures outlined in the "Application for Radioactive Materials License - Portable Gauge", Attachment B - Emergency Procedures.
16. The transport of licensed material by the licensee, or the delivery of licensed material to a carrier for transport, shall be in accordance with WAC 246-232-090, "Transportation".
17. A. Each sealed source listed in Subitems 7.A and B shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. Each sealed source listed in Subitems 7.C and D shall be tested for leakage and/or contamination at intervals not to exceed twelve (12) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, a sealed source received from another person shall not be put into use until tested.

Radioactive Materials License



Page 3 of 4 Pages

License Number WN-I0378-1

- B. The test shall be capable of detecting the presence of 0.005 microcurie (185 Becquerels) of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries (or Becquerels) and maintained for inspection by the department.
 - C. If the test reveals the presence of 0.005 microcurie (185 Becquerels) or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed in accordance with department regulations. A report shall be filed within five (5) days of the test with the department describing the equipment involved, the test results, and the corrective action taken.
 - D. The licensee is authorized to perform leak test sampling in accordance with their Radioactive Materials License Application. The analysis shall be performed by persons specifically authorized by the department, the U.S. Nuclear Regulatory Commission, an Agreement State, or a Licensing State to perform such services. Alternatively, leak test samples may be collected and/or analyzed by other persons specifically authorized by the department, the U.S. Nuclear Regulatory Commission, an Agreement State, or a Licensing State to perform such services. Licensing State authorization applies to naturally occurring and accelerator produced radioactive material (NARM) only.
- 18. Sealed sources containing radioactive material shall not be opened or removed from the nuclear gauges by the licensee.
 - 19. The licensee shall instruct all users that any maintenance or repair on the gauges involving removal of the source holders shall be performed only by the device manufacturer or by other persons specifically authorized by the department, the U.S. Nuclear Regulatory Commission, an Agreement State, or a Licensing State (for NARM only) to perform such services.
 - 20. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for inspection by the department, and shall include the quantities and kinds of radioactive material, location of sealed sources, and the date of the inventory.
 - 21. The licensee shall possess and use personnel monitoring (film badge or TLD from an approved supplier) capable of detecting at least gamma and neutron radiation. These personnel monitoring devices shall be exchanged at least quarterly.

Radioactive Materials License

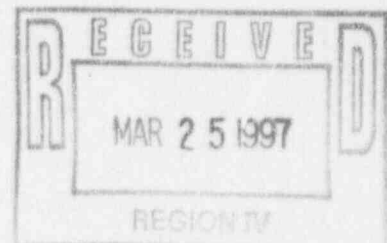


Page 4 of 4 Pages

License Number WN-I0378-1

22. Except as specifically provided by this license, the licensee shall possess and use radioactive material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in the documents listed below. The department's "Rules and Regulations for Radiation Protection" shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

A. Application and attachments dated 20 March 1991.



FOR THE STATE OF WASHINGTON DEPARTMENT OF HEALTH

Date 21 May 1991

By Arden C. Seroggs
① Arden C. Seroggs
Radioactive Materials Licensing