

MATERIALS LICENSE

Amendment No. 02

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, 36, 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

In accordance with letter dated
October 22, 19963. License Number 34-26653-01 is amended in
its entirety to read as follows:

4. Expiration Date October 31, 2005

5. Docket or
Reference No. 030-338566. Byproduct, Source, and/or
Special Nuclear Material7. Chemical and/or Physical
Form8. Maximum Amount that Licensee
May Possess at Any One Time
Under This LicenseA. Any byproduct
material with Atomic
Nos. 3-83, inclusive
and Atomic No. 95

A. Leak test samples

A. See Item 9.A. below

B. Any byproduct
material with Atomic
Nos. 3-83, inclusive
and Atomic No. 95B. Sealed sources which
have been evaluated
and approved by the
Commission in
accordance with
Section 32.210 of
10 CFR Part 32 or
equivalent Agreement
State requirements).B. No single source
to exceed 0.1
millicurie. Total
possession limit
not to exceed 1.0
millicurie.

C. Cesium-137

C. Sealed sources
(New England Nuclear
Model Nos. NES-356,
NES-360, or NES-367)C. No single source
to exceed 250
microcuries. Total
possession limit
not to exceed 1.0
millicurie.

D. Barium-133

D. Sealed sources
(New England Model
Nos. NES-358 or
NES-367)D. No single source
to exceed 300
microcuries. Total
possession limit
not to exceed 1.0
millicurie.

E. Technetium-99m

E. Any

E. 500 millicuries

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PDR ADOCK 03033856
C PDR

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**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

34-26653-01

Docket or Reference Number

030-33863

Amendment No. 02

9. Authorized Uses:

- A. Possession incident to the performance of tests for leakage and/or contamination on sealed sources and devices containing licensed material as specified in Item 10.4 of application dated May 5, 1995.
- B. through D. To be used for instrument calibration and testing.
- E. To be used for instrument calibration and testing for shielding evaluations.

CONDITIONS

- 10. A. Tests for leakage and/or contamination shall be performed only at temporary job sites of the licensee anywhere in the United States where the Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material. Analysis of leak test samples may be performed at the licensee's facility at 1412 Willowood Court, Painesville, Ohio and 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 the licensed material.
- B. Licensed material listed in Subitem B may be used at the licensee's facility located at 1412 Willowood Court, Painesville, Ohio and may be used anywhere in the United States where NRC maintains jurisdiction for regulating the use of licensed material.
- C. Licensed material listed in Subitems 6.C. through 6.E. may be stored at the licensee's facility located at 1412 Willowood Court, Painesville, Ohio, 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 the licensed material.
- 11. Licensed material shall be used by, or under the supervision of, David Close, Samuel A. Pontillo, Margaret M. Horgan, Danny H. Harris, Sharon L. Long and Michael W. Lairmore.
- 12. The Radiation Safety Officer for this license is David Close.
- 13. 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.
- 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.

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- 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. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. 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.
- F. 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 III, ATTN: Chief, Nuclear Materials Safety Branch, 801 Warrenville Road, Lisle, Illinois 60532-4351. The report shall specify the source involved, the test results, and corrective action taken.
- G. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to Perform such services.
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.

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15. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
16. 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."
17. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:
 - A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.
 - B. Before disposal as ordinary trash, byproduct material shall be surveyed at the container surface with the appropriate survey meter set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
 - C. A record of each disposal permitted under this License Condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
18. 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 U.S. 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 5, 1995; and
 - B. Letters dated September 4, 1995, October 2, 1995, October 15, 1995, July 2, 1996, July 31, 1996, and October 22, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date 10/24/96

By

James Mullins
Nuclear Materials Licensing Branch, Region III

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(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

Program Code: 03222
Status Code: 0
Fee Category: 3P
Exp. Date: 20051031
Fee Comments:
Decom Fin Assur Req: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: DAVID CLOSE CONSULTING
Received Date: 961023
Docket No: 3033856
Control No.: 301975
License No.: 34-26653-01
Action Type: Amendment

2. FEE ATTACHED

Amount: ~~-----~~
Check No.: ~~-----~~

* ADDL INFO
301569-R4

3. COMMENTS

Signed D. Hersey
Date 10-24-96

B. LICENSE FEE MANAGEMENT BRANCH (Check what fee type was entered / /)

1. Fee Category and Amount: 3P

FEE NOT REQUIRED

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

Amendment ☒
Renewal ☐
License ☐

3. OTHER

Signed SC
Date 10/28/96

1996 OCT 28 AM 11:34

OCT 31 1996

RECEIVED BY LFDCB	
Date	<u>Oct. 28, 1996</u>
Log	<u>Oct 12 III</u>
By	<u>SC</u>
Date Completed	<u>10/28/96</u>

NATIONAL PHYSICS CONSULTANTS, Ltd.

1412 Willowood Court
Painesville, OH 44077
Telephone (216)350-1242

Facsimile (216)350-1239
Phonemail (216)975-2176
(800)397-1710 PIN 2176

October 22, 1996

James Mullauer
Nuclear Materials Licensing Section
U. S. N.R.C., Region III
801 Warrenville Road
Lisle, Illinois 60532-4351

Re: Control No. 30569
License No. 34-26653-01

Dear Mr. Mullauer,

The following and the enclosed represents the notification of relocation of licensed operations to 1412 Willowood Court from 1591 Trotter Lane. A close-out survey for the Trotter Lane facility has been performed. A copy is enclosed. The Trotter Lane facility should be removed from the license.

No unsealed radioactive material has been used or stored at 1591 Trotter Lane. Only sealed sources have been stored at the facility in a locked cabinet when not in use at temporary job sites. A copy of the most recent leak tests of the source is enclosed. The sources were inventoried after relocation. A copy of the inventory is enclosed. The cabinet and all equipment have been relocated also. All that remains is the space where the cabinet was located.

The close-out survey was performed in the area where the storage cabinet was located. See the enclosed diagram. The floor was surveyed and wipe tested. A survey measurement was also taken at a height of 3 feet.

Your prompt attention is appreciated. If you have any questions, please contact me.

Sincerely,

David Close
David Close

Continuation of 301569
FEE NOT REQUIRED

Pm: 10-22-96

RECEIVED

OCT 23 1996

REGION III

301975
OCT 23 1996

CLOSE OUT SURVEY
1591 Trotter Lane Facility

Date: 10/22/96

David Close Consulting
1412 Willowood Court
Painesville, OH 44077

NRC License #34-26653-01

Survey Instrument: Victoreen Model # CDV-700 Serial # 67562
Last Calibration Date of Survey Meter: 8/15/96
Check Source Reading: 3.0 mR/hr

Wipe Test Analyzer: Tennelec SCA with NaI scintillation detector
Last Calibration: 10/22/96
Wipe Test Window: 50 keV and above
Minimum Detectable Activity: 135 dpm
Well Counter Efficiency: 85% with Co-57

Wipe Analysis Background: 1400 cpm
G-M Survey Background: 0.02 mR/hr

Surveyor: David Close

Area Surveyed:

A contact survey using a G-M survey meter on the lowest range was conducted on 10/22/96. The beta shield was open. The survey results indicated no exposure levels were in excess of 0.02 mR/hr.

Surface Wipe Tests:

Surface wipe tests were performed using dry smears (i.e. Nu-Con). Surfaces wiped included the floor. The wipe test results were converted to dpm. The gross count rate was 1396 dpm for a net of 0 dpm.

Results:

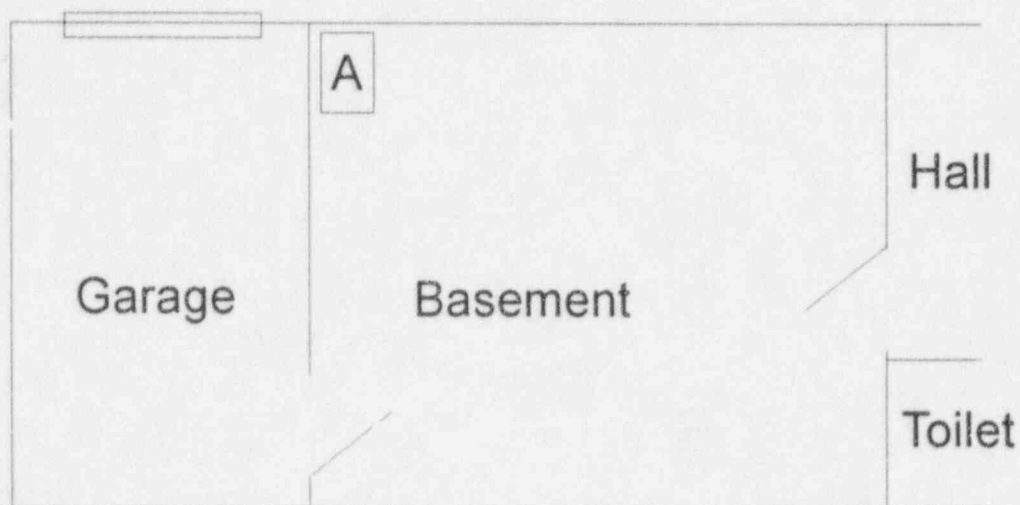
All surveys produced background readings from the survey meter and wipe test analysis. All caution signs indicating the presence of radioactive materials were removed.

Conclusion:

No radiation levels above background were detected. No removable contamination was found. All sources have been removed. The area is clear for release for unrestricted use.

A handwritten signature in cursive script, appearing to read "David Close".

David Close



A - Locked Cabinet, source storage.
Counting Equipment

HEALTH PHYSICS SURVEY SEALED SOURCE INVENTORY

FACILITY: NATIONAL PHYSICS CONSULTANTS DEPARTMENT:
LOCATION: PAINESVILLE, OHIO

Nuclide:	Cs-137	Ba-133	Co-57	Co-57	Co-57 (5)	Co-57 (5)
Type:	Vial E	Vial E	Vial E	Rod	Markers	Markers
Location:	Storage	Storage	Storage	Storage	Storage	Storage
Assay:	207 uCi	257 uCi	5.14 mCi	1.344 uCi	200 uCi ea.	200 uCi ea.
(Date)	9/19/83	3/29/83	9/1/92	8/1/90	6/1/92	12/1/94
Mgr:	NEN	NEN	N. Am. Scientific	Isotope Products	N. Am. Scientific	Isotope Products
Serial No.:	3560983A-13	3580383A-56	A0567	366-58	W01298-1	469-90
Model:	NES-356	NES-358	-----	-----		

DATE:						
9/11/95	X	X	X	X	X	
3/15/96	X	X	X	X	X	X
9/6/96	X	X	X	X	(A)	X
10/22/96	X	X	X	X		X

X - INDICATES SOURCE INVENTORIED

(A) Transferred to S. Long 9/5/96

HEALTH PHYSICS SURVEY SEALED SOURCE INVENTORY

FACILITY: NATIONAL PHYSICS CONSULTANTS DEPARTMENT:
LOCATION: PAINESVILLE, OHIO

Nuclide:	Cs-137	Ba-133	Co-60	I-129	Am-241	Gd-153
Type:	Rod	Rod	Rod	Rod	Rod	Rod
Location:	Storage	Storage	Storage	Storage	Storage	Storage
Assay: (Date)	.092 uCi 1/8/81	.104 uCi 11/25/87	0.1 uCi -----	0.129 uCi 12/30/80	.1002 uCi 2/1/88	.0827 uCi 2/10/88
Mgr:	NEN	Dupont	Amersham	NEN	Iso.Prod.	Iso.Prod.
Serial No.:	-----	-----	4147MT	-----	215-2-1	215-2-2
Model:	-----	-----	-----	NES-211S	-----	-----

DATE:						
9/11/95	X	X	X	X	X	X
3/15/95	X	X	X	X	X	X
9/6/96	X	X	X	X	X	X
10/22/96	X	X	X	X	X	X

X - INDICATES SOURCE INVENTORIED

HEALTH PHYSICS SURVEY

SEALED SOURCE LEAK TEST ANALYSIS REPORT

FACILITY: National Physics Consultants
LOCATION: Painesville, Ohio

DEPARTMENT:
ATTENTION:

Analysis of the WIPE used to conduct a leak test on the sealed sources identified below was performed by gas or scintillation detection and reveals removable contamination was less than 0.005 μCi , unless otherwise noted, when compared against NIST traceable standards.

Source: Cs-137, 207 μCi , 9/19/93, NEN, 3560983A-13

Date:	9/11/95	3/15/96	9/6/96
Wipe No.:	CL8276	CL9880	CL10984
MDA (μCi):	9E-5	9E-5	9E-5
Net CPM:	0	6	0
Net μCi :	< MDA	< MDA	< MDA
CPM for 0.005 μCi :	945	945	945
Analyst:	D. Close	D. Close	D. Close

Source: Ba-133, 257 μCi , 3/29/83, NEN, 3580383A-56

Date:	9/11/95	3/15/96	9/6/96
Wipe No.:	CL8277	CL9881	CL10985
MDA (μCi):	5E-5	5E-5	5E-5
Net CPM:	10	0	16
Net μCi :	< MDA	< MDA	< MDA
CPM for 0.005 μCi :	3103	3103	3103
Analyst:	D. Close	D. Close	D. Close

Source: Co-57, 5.14 mCi, 9/1/92, North American Scientific, A0567

Date:	9/11/95	3/15/96	9/6/96
Wipe No.:	CL8278	CL9882	CL10986
MDA (μCi):	2E-5	2E-5	2E-5
Net CPM:	0	0	0
Net μCi :	< MDA	< MDA	< MDA
CPM for 0.005 μCi :	10,587	10,587	10,587
Analyst:	D. Close	D. Close	D. Close

NOV 04 1996

David Close
Radiation Safety Officer
David Close Consulting
1591 Trotter Lane
Painesville, OH 44077

Dear Mr. Close:

Enclosed is Amendment No. 02 to your NRC Material License No. 34-26653-01 in accordance with your request.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Notify NRC, in writing, within 30 days:
 - a. When the Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or
 - b. When the licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).
3. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license when you decide to terminate all activities involving materials authorized under the license.
4. Request and obtain a license amendment before you:
 - a. Change Radiation Safety Officers;

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- b. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
 - c. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
 - d. Change ownership of your organization.
5. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

Sincerely,
Original Signed By
James R. Mullauer, M.H.S.
Health Physicist
Nuclear Materials Licensing Branch

License No.: 34-26653-01
Docket No.: 030-33856

Enclosure: Amendment No. 02

DOCUMENT NAME: M:\03033856.CL6

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OFFICE	DNMS/RII							
NAME	JMULLAUER:jaw							
DATE	10/2/96							

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