

## 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. Construction Engineering Labs, Inc.

2. 96-1173 Waihona St., Suite B7  
Pearl City, Hawaii 96782In accordance with letter received  
October 7, 19963. License number 53-23293-01 is amended in  
its entirety to read as follows:

4. Expiration date May 31, 2004

5. Docket or  
Reference No. 030-311566. 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  
(Troxler Dwg.  
A-102112)A. Not to exceed 10  
millicuries per  
source and 110  
millicuries total

B. Americium-241

B. Sealed neutron  
sources (Troxler  
Dwg. A-102451)B. Not to exceed 50  
millicuries per  
source and 200  
millicuries total

C. Americium-241

C. Sealed neutron  
sources (Troxler  
Dwg. No. A-100608)C. Not to exceed 100  
millicuries per  
source and 400  
millicuries total

D. Cesium-137

D. Sealed sources  
(Campbell Pacific  
Nuclear Model  
CPN-131)D. Not to exceed 10  
millicuries per  
source and 20  
millicuries total

E. Americium-241

E. Sealed neutron  
sources (Campbell  
Pacific Nuclear  
Model CPN-131)E. Not to exceed 50  
millicuries per  
source and 100  
millicuries total

## 9. Authorized use

A. and B. For use in Troxler Model 3400 Series Moisture-Density gauges to measure  
properties of construction materials.A. For use in Troxler Model 4640 gauges to measure surface density of construction  
materials.9612060118 961112  
PDR ADOCK 03031156  
C PDRo/h  
ML40

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

53-23293-01

Docket or Reference Number

030-31156

Amendment No. 3

9. Authorized use (Continued)

- C. For use in Troxler Model 3241 series gauges to measure asphalt content of construction materials.
- D. and E. For use in Campbell Pacific Nuclear Model MC Series gauges to measure properties of construction materials.

CONDITIONS

10. Licensed material may be used at the licensee's facilities located at 96-1173 Waihona St., B7; Pearl City, Hawaii 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 licensed material.
11. Licensed material shall only be used by, or under the supervision and in the physical presence of Ronald A. Pickering II, Chester Kahapea, or individuals who have successfully completed the Troxler Electronics Laboratories, Inc. or the Campbell Pacific Nuclear Company training program for gauge users, have been instructed in the licensee's routine and emergency operating procedures and who have been designated by the Radiation Safety Officer.
12. A. The Radiation Safety Officer for this license is Ronald A. Pickering II.
- B. In the absence of the Radiation Safety Officer for periods exceeding one month, Chester Kahapea may serve as the Alternate Radiation Safety Officer.
13. A. Sealed sources 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. 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.
- C. Sealed sources need not be leak tested if they 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 shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

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- D. 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(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.
- E. The licensee is authorized to collect leak test samples for analysis by Campbell Pacific Nuclear or Troxler Electronic Laboratories. 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.
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. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.
16. The licensee shall maintain records of information related to decommissioning at their Radiation Safety Officer's office as specified in 10 CFR 30.35(g) until their license is terminated by the Commission.
17. Each portable nuclear 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.
18. Any cleaning, maintenance, or repair of the gauge(s) 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.
19. 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."

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

53-23293-01

Docket or Reference Number

030-31156

Amendment No. 3

20. 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 April 7, 1994
- B. Letter received October 7, 1996
- C. Facsimile dated October 30, 1996

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date NOV 12 1996

By B. A. Prange  
Materials Branch  
Region IV, WCFO  
Walnut Creek, California 94596



BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: 03121  
Status Code: 0  
Fee Category: 3P  
Exp. Date: 20040531  
Fee Comments:  
Decom Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL

A. REGION V

1. APPLICATION ATTACHED

Applicant/Licensee: CONSTRUCTION ENGINEERING LABS, INC.  
Received Date: 961007  
Docket No: 3031156  
Control No.: 572420  
License No.: 53-23293-01  
Action Type: Amendment

2. FEE ATTACHED none

Amount:

Check No.:

3. COMMENTS

Signed

Date

Joan Garcia  
10-15-96

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered ✓)

1. Fee Category and Amount: 3P \$300

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

Amendment ✓

Renewal ✓

License ✓

3. OTHER

Signed

Date

Rita Messier  
11/4/96

Log	<u>Oct 2</u>
Remitter	
Check No.	<u>8062</u>
Amount	<u>\$300</u>
Fee Category	<u>3P</u>
Type of fee	<u>amcl</u>
Date Check Rec'd.	
Date Completed	<u>11/4/96</u>
By:	<u>Rita</u>

1996 OCT 23 AM 10:59

## LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH  
DIVISION OF ACCOUNTING AND FINANCE  
OFFICE OF THE CONTROLLER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001CONSTRUCTION ENGINEERING LABS, INC.  
ATTN: RONALD A. PECKERING, II  
VICE PRESIDENT  
96-1173 WAIHONA STREET, SUITE #B7  
PEARL CITY, HI 96782

## TYPE OF ACTION

- ☐ NEW LICENSE  
☐ RENEWAL OF LICENSE  
☒ AMENDMENT TO LICENSE

REQUESTED DATE

LICENSE NUMBER

53-23293-01

CONTROL NUMBER

572420 ATTN: RITA MESSIER, LFARB, T9E10

## I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
3P	\$	\$	\$ 300.00
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(s) DUE	\$	300.00
PAYMENT RECEIVED	\$	
AMOUNT DUE	\$	300.00

☒ Your request was received without the prescribed application fee.

☐ We received your Check No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_. Payment of the additional fee noted above is required.

☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

SIGNATURE -- LICENSE FEE ANALYST

RITA MESSIER

LFDCB

REMessier

10/23/96

FDGB

## II. FEE NOT REQUIRED

☐ Enclosed is Check No. \_\_\_\_\_ which accompanied your request. The fee is not required because:

☐ We received your Check No. \_\_\_\_\_ in payment of the fee.

☐ The Licensing staff has informed us that your request is to be considered as a continuation of your request dated \_\_\_\_\_, Control No. \_\_\_\_\_.

☐ Your request was combined, prior to review, with your \_\_\_\_\_ request, Control No. \_\_\_\_\_.

## III. CHECK RETURNED

☐ Enclosed is Check No. \_\_\_\_\_ which was returned to us by the bank for:

- ☐ INSUFFICIENT FUNDS  
☐ ACCOUNT CLOSED  
☐ OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

## IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

☐ License No. \_\_\_\_\_, Amendment No. \_\_\_\_\_, issued on \_\_\_\_\_ was issued without the required fee being collected. The fee required is noted in Section I of this form.

☐ The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section 1 of this form. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section 1 of this form.

Distribution:

OC/DAF RF  
Pending Fee File OC/DAF/SF(LF-327)  
LFARB R/F (2) Region WCF

DATE

10-23-96



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV

Walnut Creek Field Office  
1450 Maria Lane  
Walnut Creek, California 94596-5368

NOV 12 1996

Construction Engineering Labs, Inc.  
ATTN: Mr. Ronald A. Pickering II  
Radiation Safety Officer  
96-1173 Waihona St., Suite B7  
Pearl City, Hawaii 96782

SUBJECT: LICENSE AMENDMENT

Please find enclosed License No. 53-23293-01. You should review this license carefully and be sure that you understand all conditions. If you have any questions, please contact Kent M. Prendergast at 510/975-0255.

NRC expects licensees to conduct their programs with meticulous attention to detail and a high standard of compliance. Because of the serious consequences to employees and the public which can result from failure to comply with NRC requirements, you must conduct your program involving radioactive 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: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Possess radioactive material only in the quantity and form indicated in your license.
3. Use radioactive material only for the purpose(s) indicated in your license.
4. Notify NRC in writing of any change in mailing address (no fee required if the location of radioactive material remains the same).
5. Request and obtain written NRC consent before transferring your license or any right thereunder, either voluntarily or involuntarily, directly or indirectly, through transfer of control of your license to any person or entity. A transfer of control of your license includes not only a total change of ownership, but also a change in the controlling interest in your company whether it is a corporation, partnership, or other entity. In addition, appropriate license amendments must be requested and obtained for any other planned changes in your facility or program that are contrary to your license or contrary to representations made in your license application, as well as supplemental correspondence thereto, which are incorporated into your license. A license fee may be charged for the amendments if you are not in a fee-exempt category.

6. Maintain in a single document decommissioning records that have been certified for completeness and accuracy listing all the following items applicable to the license:
  - Onsite areas designated or formerly designated as restricted areas as defined in 10 CFR 20.3(a)(14) or 20.1003.
  - Onsite areas, other than restricted areas, where radioactive materials in quantities greater than amounts listed in Appendix C to 10 CFR 20.1001-20.2401 have been used, possessed, or stored.
  - Onsite areas, other than restricted areas, where spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site have occurred that required reporting pursuant to 10 CFR 30.50(b)(1) or (b)(4), including areas where subsequent cleanup procedures have removed the contamination.
  - Specific locations and radionuclide contents of previous and current burial areas within the site, excluding radioactive material with half-lives of 10 days or less, depleted uranium used only for shielding or as penetrators in unused munitions, or sealed sources authorized for use at temporary job sites.
  - Location and description of all contaminated equipment involved in licensed operations that is to remain onsite after license termination.
7. Submit a complete renewal application with proper fee, or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.
8. Request termination of your license if you plan to permanently discontinue activities involving radioactive material.

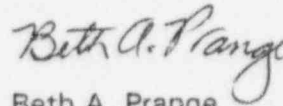
You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation; imposition of a civil



penalty; or an order suspending, modifying, or revoking your license as specified in the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), 60 FR 34381, June 30, 1995.

Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script, reading "Beth A. Prange".

Beth A. Prange  
Senior Health Physicist  
Materials Branch

Docket: 030-31156  
License: 53-23293-01  
Control: 572420

Enclosures: As stated

bcc:

Docket File

WCFO Inspection File

LFARB, T-9 E10

State of Hawaii (License Only)

DOCUMENT NAME: G:const-en

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

RIV:MB	<input checked="" type="checkbox"/>	C:MB	<input checked="" type="checkbox"/>						
KPrendergast	<input checked="" type="checkbox"/>	BPrange	<input checked="" type="checkbox"/>						
10/24/96		10/30/96		10/ /96		10/ /96		10/ /96	

OFFICIAL RECORD COPY

# TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

CHESTER F. KAHAPEA

of

ERNEST K. HIRATA & ASSOCIATES, INC.

HAS SUCCESSFULLY COMPLETED THE TROXLER ELECTRONIC LABORATORIES, INC.  
TRAINING COURSE FOR THE USE OF NUCLEAR TESTING EQUIPMENT.

SUBJECTS INCLUDED IN THIS COURSE WERE AS FOLLOWS:

## Radiological Safety

1. Principles and practices of radiation protection.
2. Leak testing procedures.
3. Mathematics and calculations basic to the use and measurement of radioactivity.
4. Biological effects of radiation.
5. Radioactivity measurement standardization and monitoring techniques and instruments.
6. Accident and incident procedures.
7. Procedures for nuclear gauge storage and transportation.
8. General safety precautions.

## Gauge Operation

1. Instrument theory
2. Operating procedures
3. Maintenance
4. Field application
5. Gauge calibration

Ted Y. Nissan  
INSTRUCTOR

11-29-83  
DATE

WILLIAM F. TROXLER  
PRESIDENT

No 03612

572420



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV

Walnut Creek Field Office  
1450 Maria Lane  
Walnut Creek, California 94596-5368

OCT 18 1996

Construction Engineering Labs, Inc.  
ATTN: Ronald A. Pickering II  
Vice President  
96-1173 Waihona Street, Suite #B7  
Pearl City, Hawaii 96782

SUBJECT: ACKNOWLEDGMENT OF REQUEST FOR LICENSING ACTION

REFERENCE: Letter received October 7, 1996

We have completed the administrative review and initial processing of your application.

Please note that the technical review may identify additional omissions in the submitted information or technical issues that require additional information.

Amendment actions are normally processed within 90 days, unless the technical review identifies:

- Major technical deficiencies
- Policy issues that require input and coordination with other NRC Regional offices, Agreement State offices, or NRC's Office of Nuclear Materials and Safeguards

A copy of your correspondence has been forwarded to our License Fee and Accounts Receivable Branch, Office of the Controller, who will contact you separately if the appropriate license fee has not been submitted for your request, or for billing if your request is subject to full cost recovery.

Any correspondence about this application should reference the Control number listed below.

Sincerely,

Beth Prange  
Sr. Health Physicist (Licensing)  
Materials Branch

Docket No. 030-31156  
License No. 53-23293-01  
Control No. 572420



bcc:  
Docket File

To receive a copy of this document, indicate in the box "C" - Copy without attachment/enclosure "E" - Copy with attachment/enclosure "N" - No Copy

OFFICE	RIV:AO:NMLB	N		N				
NAME	J. Garcia <i>JG</i>		B. Prange <i>BAP</i>					
DATE	10/18/96		10/18/96					



**CONSTRUCTION ENGINEERING LABS, INC.**

96-1173 Waihona St. • Suite #B7 • Pearl City, HI 96782

Phone (808) 455-1522 FAX (808) 455-1384

*Amendment*

RECEIVED  
OCT 7 1996  
PM 1:20

*030-31156*

Nuclear Regulatory Commission  
Region V  
1450 Maria Lane  
Walnut Creek, California 94596

Subject: Radiation Safety Officer

This letter is to request that Ronald A. Pickering II, replace Barbara Simon as the Radiation Safety Officer on our radioactive materials license # 53-23293-01. The alternate Radiation Safety Officer will be Chester Kahapea. The training documents are enclosed.

Please call our office if you need more information.

Sincerely,  
CONSTRUCTION ENGINEERING LABS, INC.

By: Ronald A. Pickering II  
Its: Vice President

*572420*

# Certificate Of Completion

*This is to certify that* RONALD A. PICKERING, II *has completed the*  
*CPN® Radiation Safety Officer Seminar for Nuclear Gauges,*  
*held this* 2nd *day of* MAY *19*<sup>96</sup> *in the*  
*City of* HONOLULU *State of* HI *by Boart Longyear Company.*

Boart Longyear Company  
2830 Howe Road  
Martinez, California 94553 USA  
Phone: (510) 228-9770  
Fax: (510) 228-3183



INSTRUCTOR  
*Douglas Carter*  
RADIATION SAFETY OFFICER

# TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

RONALD PICKERING, II

of

HAWAIIAN CONCRETE & ROCK

HAS SUCCESSFULLY COMPLETED THE TROXLER ELECTRONIC LABORATORIES, INC.  
TRAINING COURSE FOR THE USE OF NUCLEAR TESTING EQUIPMENT.

SUBJECTS INCLUDED IN THIS COURSE WERE AS FOLLOWS:

## Radiological Safety

- |  |   |
|--|---|
| 1. Principles and practices of radiation protection.                               | 5. Radioactivity measurement standardization and monitoring techniques and instruments. |
| 2. Leak testing procedures.  | 6. Accident and incident procedures.  |
| 3. Mathematics and calculations basic to the use and measurement of radioactivity. | 7. Procedures for nuclear gauge storage and transportation.                             |
| 4. Biological effects of radiation.  | 8. General safety precautions.  |

## Gauge Operation

- |                         |                      |
|-------------------------|----------------------|
| 1. Instrument theory    | 4. Field application |
| 2. Operating procedures | 5. Gauge calibration |
| 3. Maintenance          |                      |

Ted Nissen  
INSTRUCTOR

12/03/87  
DATE

W. F. Troxler  
PRESIDENT

Nº 21658



# Certificate Of Completion

*This is to certify that* CHESTER KAHAPEA *has completed the*  
*CPN® Radiation Safety Officer Seminar for Nuclear Gauges,*  
*held this* 2nd *day of* MAY *19*<sup>96</sup> *in the*  
*City of* HONOLULU *State of* HI *by Boart Longyear Company.*

Boart Longyear Company  
2830 Howe Road  
Martinez, California 94553 USA  
Phone: (510) 228-9770  
Fax: (510) 228-3183



**BOART  
LONGYEAR**

INSTRUCTOR

*Douglas Carter*  
RADIATION SAFETY OFFICER

# ENGINEERING-SCIENCE CERTIFICATE OF TRAINING

*This Certifies That*

*Chester F. Kahapea*

Employee Number: 576-42-6427

*Has Successfully Completed a 40 Hour Course of Instruction in*  
**HAZARDOUS WASTE OPERATIONS**

**In Accordance with 29CFR Part 1910.120(e)**

*Prepared and Conducted By*

**ENGINEERING-SCIENCE, INCORPORATED**  
**Pasadena, California**

April 29-May 3, 1991

Dates of Instruction

Honolulu, Hawaii

Course Location

*Timothy S. Mustard*  
Coordinator/Instructor