

Hammond, Michelle

From: Matt Lundgren [mattlundgren@boisestate.edu]
Sent: Tuesday, July 10, 2012 9:07 AM
To: Hammond, Michelle
Subject: Re: REQUEST FOR ADDITIONAL INFORMATION
Attachments: Gauge Shipping Documents 2012.02.08.pdf; Hevly Tech Services Rad License.pdf; Invoice from Hevly 11245 rental for 2011.pdf

License # 11-27388-01
Control # 577360

Ms. Hammond:

Attached you will find copies of the shipping documents, radioactive materials license for Hevly Technical Services, and the rental agreement for 2011.

Please let me know if you require any further information.

Thank you for your time,

Matt Lundgren

Assistant Director | Radiation Safety Officer
Boise State University | Office of Research Compliance
208.426.2345 | <http://www.boisestate.edu/research/compliance/> | MS-1139

On Mon, Jul 9, 2012 at 1:18 PM, Hammond, Michelle <Michelle.Hammond@nrc.gov> wrote:

License No.: 11-27388-01

Docket No.: 030-32218

Control No.: 577360

Dear Mr. Lundgren:

This is in reference to your amendment application dated May 3, 2012 and April 9, 2012 regarding Nuclear Regulatory Commission License No. 11-27388-01. In order to continue our review, we need the following additional information:

- 1) Please provide a shipping documentation for the gauge you wish to remove from your license.
- 2) Please provide documentation that Hevly Technical Services was an authorized recipient of the gauge.

We will continue our review upon receipt of this information. Please reply to my attention at the Region IV Office and refer to Mail Control No. 577360. Please respond to this e-mail by **June 12, 2012**. You may reply via e-mail as long as the response is attached in a PDF format or by fax to **817-200-1188**.

Please don't hesitate to contact me if you have any questions.

Thank You.

Best Regards,

Michelle M. Hammond, M.Sc.

Health Physicist

Region IV-Division of Nuclear Materials Safety, Branch B

office) 817-200-1127

fax) 817-200-1188



Hevly Technical Services

331 Valley Mall Parkway #352
East Wenatchee, WA 98802-4829

PNW

"Confidence in Testing"

INVOICE

DATE:	INVOICE #
1/1/2011	11245

TERMS	P.O. #
Due on receipt	

Vender ID #	Rental Month
	1/1/2011

CUSTOMER:

Boise State University
Warren Barrash
Boise Hydrogeophysical Research Site
CGISS, MG 206
Boise, ID 83725

UNITS	DESCRIPTION	PRICE	AMOUNT
1	One year rental agreement at \$1000 plus the freight charges each way. CPN Model Number: Hydroprobe 503, Serial Number: H311000562 with 1.5" subsurface electronic assembly, 503B-2.1 display and down the hole signal cable.	1,000.00	1,000.00
1	Shipping and Handling charges pre-paid by Hevly Technical Services for your package delivery. Tracking Number: 1z9860360227754576 Shipped a replacement display to Brady Johnson	30.00	30.00
Rental Gauges * TLD Badges * Used Gauge Sales * Training Classes On-Site Calibration & Service Radioactive Materials License Number: WN-I0335.		Total *****	
Phone #	E-mail	Web Site	Make Checks Payable to:
509 630 2686	duanehevly@msn.com	hevlyservices.com	Hevly Technical Services



USA Airbill

FedEx
Tracking
Number

839399313357

Form
101 No.

0200

Sender's Copy

1 From Please print and press hard

Date 02.08.12 Sender's FedEx Account Number 3027969555 Ref. 6936106257

Sender's Name Matt Lundgren Phone (208) 426 2345

Company Boise State University

Address 1910 University Dr

City Boise State ID ZIP 83725

2 Your Internal Billing Reference

3 To Recipient's Name Camille Koenig Phone (206) 682-5327

Company Horly Technical Services

Address 3790 South Airport Way

Address FedEx Ship Ctr @ Pargdorn Mem. Airport

City East Wenatchee State WA ZIP 98802

Try online shipping at fedex.com

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com
or call 1.800.Go.FedEx® 800.463.3339

4a Express Package Service

☐ FedEx Priority Overnight Next business morning☐ FedEx Standard Overnight Next business afternoon

Packages up to 150 lbs.

Delivery commitment may be later in some areas.
☐ FedEx First Overnight®
Earliest next business morning
delivery to select locations☐ FedEx 2Day
Second business day
FedEx envelope rate not available. Minimum charge: One pound rate☒ FedEx Express Saver
Third business day

4b Express Freight Service

Packages over 150 lbs.
Delivery commitment may be later in some areas.☐ FedEx 1Day Freight®
Next business day☐ FedEx 2Day Freight
Second business day☐ FedEx 3Day Freight
Third business day

* Call for Confirmation

5 Packaging

* Declared value first \$500

☐ FedEx Envelope®☐ FedEx Pak®
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Surety Pak☒ Other

6 Special Handling

SATURDAY Delivery

☐ Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select ZIP codesHOLD Weekday
at FedEx Location☒ MUST be available for
FedEx First OvernightHOLD Saturday
at FedEx Location☐ Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations

Does this shipment contain dangerous goods?

☐ No☒ Yes
As per attached
Shipper's Declaration☐ Yes
Shipper's Declaration
not required☐ Dry Ice
Dry Ice, 4 UN 1845☐ Cargo Aircraft Only

7 Payment Bill to:

☒ Sender☐ Recipient☐ Third Party☐ Credit Card☐ Cash/CheckFedEx Acct. No.
Credit Card No.

Total Packages

Total Weight

Total Declared Value¹

-1-

34 lbs

\$ - .00

¹Our liability is limited to \$100 unless you declare a higher value. See back for details.

FedEx Use Only

8 Release Signature

Sign to authorize delivery without obtaining signature

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

446

Rev Date 10/01 • Part #157612 • ©1994-2001 FedEx • PRINTED IN U.S.A. WCSL 02

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

(Provide at least three copies to the airline.)

02.08.12

Shipper

Matt Lundgren
Boise State University
1910 University Dr
Boise, ID 83725

Air Waybill No.

~~839599313357~~
839399313357

Page 1 of 1 Pages

Shipper's Reference Number

Consignee

Camille Koenig - Hevly Technical Services
3790 South Airport Way
Fedex Ship Center at Pangborn Mem. Airport
East Wenatchee, WA 98802

This shipper's declaration was prepared using a FedEx Express template.
It must be used ONLY for:

- * Class 7 radioactive shipments
- * Shipments using an 023 air waybill (IP1, IXF or ATA service)
- * Shipments originating from a non-US location

Two completed and signed copies of this Declaration must
be handed to the operator

WARNING

Failure to comply with all respects with the applicable
Dangerous Goods Regulations may be in breach of
the applicable law, subject to legal penalties.

TRANSPORT DETAILS

This shipment is within the
limitations prescribed for:
(delete non applicable)

Airport of Departure

BOI

PASSENGER
AND CARGO
AIRCRAFT

CARGO
AIRCRAFT
ONLY

Airport of Destination:

EAT

Shipment type: (delete non-applicable)

~~NON-RADIOACTIVE~~ RADIOACTIVE

NATURE AND QUANTITY OF DANGEROUS GOODS

UN Number or Identification Number, proper shipping name, Class or Division (subsidiary risk), packing
group (if required), and all other required information.

UN3332 Radioactive Material, Type A Package, Special Form, 7, RQ
Americium-241/Be
1 Type A x 1.85GBq (50mCi)

II-Yellow

TI 0.2

Dimensions 62cm x 33cm x 26cm

Special Form Certificate USA/0627/S attached.

Additional Handling Information

To be retrieved by Hevly Technical Services from Fedex Ship Center at Pangborn Memorial Airport.
Emergency Contact - Duane Hevly 206.682.5327

I hereby declare that the contents of this consignment are fully and
accurately described above by the proper shipping name, and are
classified, packaged, marked and labelled/placarded, and are in all
respects in proper condition for transport according to applicable
International and National Governmental Regulations. I declare that
all of the applicable air transport requirements have been met.

Name/Title of Signatory

Matt Lundgren, Radiation Safety Officer

Place and Date 2/8/2012

Boise, ID 2/8/2012

Signature

(see warning above)

206.682.5327

Emergency Telephone Number

FOR RADIOACTIVE MATERIAL SHIPMENT ACCEPTABLE FOR PASSENGER AIRCRAFT, THE SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN OR
INCIDENT TO RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT. ADR EUROPEAN TRANSPORT STATEMENT: CARRIAGE IN ACCORDANCE WITH 1.1.4.2.1

State of Washington
Radioactive Materials License



Page 1 of 8

As stated in the Nuclear Energy and Radiation Act, Revised Code of Washington 70.98, and the Radiation Protection Regulations, chapters 246-220 through 246-254 of the Washington Administrative Code, and in reliance on statements and commitments made by the licensee identified below, a license is issued authorizing the licensee to transfer, receive, possess, and use the radioactive material authorized below; and to use such radioactive material for the purpose(s) and at the place(s) authorized below. This license is subject to all applicable rules and regulations issued by the State of Washington Department of Health.

1. Licensee Name: HEVLY TECHNICAL SERVICES COMPANY	3. License Number: WN-I0335-1 RENEWAL Amendment Number 18
2. Address: 331 Valley Mall Parkway #352 East Wenatchee, Washington 98802-4829	4. Expiration Date: June 30, 2015 <hr/> 5. Reference Number(s): 11-02-11 Fee Code: 08

6. Radioactive Material
(element and mass number).

A. Cesium 137.

B. Americium 241/
Beryllium.

C. Californium 252.

D. Cesium 137.

7. Chemical and/or Physical
Form.

A. Sealed source
(manufactured and
distributed pursuant to
the requirements of a
specific license and
approved for use in the
gauge identified by
License Condition 9).

B. Same as 7.A.

C. Same as 7.A.

D. Same as 7.A.

8. Maximum quantity licensee may
possess at any one time.

A. No single source to exceed
370 megabecquerels
(10 millicuries).
* See footnote.

B. No single source to exceed
1850 megabecquerels
(50 millicuries).
* See footnote.

C. No single source to exceed
2442 kilobecquerels
(66 microcuries).
* See footnote.

D. No single source to exceed
370 megabecquerels
(10 millicuries).
* See footnote.

State of Washington
Radioactive Materials License

Page 2 of 8



License Number: WN-10335-1
Amendment No. 18

E. Americium 241/ Beryllium.	E. Same as 7.A.	E. No single source to exceed 1850 megabecquerels (50 millicuries). * See footnote.
F. Americium 241/ Beryllium.	F. Same as 7.A.	F. No single source to exceed 1850 megabecquerels (50 millicuries). * See footnote.
G. Americium 241/ Beryllium.	G. Same as 7.A.	G. No single source to exceed 3700 megabecquerels (100 millicuries). * See footnote.
H. Cesium 137.	H. Same as 7.A.	H. No single source to exceed 333 megabecquerels (9 millicuries). * See footnote.
I. Cesium 137.	I. Same as 7.A.	I. No single source to exceed 407 megabecquerels (11 millicuries). * See footnote.
J. Americium 241/ Beryllium.	J. Same as 7.A.	J. No single source to exceed 1628 megabecquerels (44 millicuries). * See footnote.
K. Cesium 137.	K. Same as 7.A.	K. No single source to exceed 370 megabecquerels (10 millicuries). * See footnote.
L. Americium 241/ Beryllium.	L. Same as 7.A.	L. No single source to exceed 1850 megabecquerels (50 millicuries). * See footnote.

State of Washington
Radioactive Materials License

Page 3 of 8



License Number: **WN-10335-1**
Amendment No. 18

- | | | |
|---------------------------------|-----------------|--|
| M. Radium 226/
Beryllium. | M. Same as 7.A. | M. No single source to exceed
166.5 megabecquerels
(4.5 millicuries).
* See footnote. |
| N. Cesium 137 | N. Same as 7.A. | N. No single source to exceed
407 megabecquerels
(11 millicuries).
* See footnote. |
| O. Americium 241/
Beryllium. | O. Same as 7.A. | O. No single source to exceed
1628 megabecquerels
(44 millicuries).
* See footnote. |

* Total possession limit not to exceed 50 gauges in any combination.

CONDITIONS

9. Authorized Use.

- A - C. 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, and for training, sales demonstrations, lease and/or rental arrangements.
- D & E. To be used in CPN International, Inc., Model MC Series portable moisture/density gauges for the measurement of moisture and density of soil and construction materials, and for training, sales demonstrations, lease and/or rental arrangements.
- F. To be used in CPN International, Inc., Model 500 Series moisture gauges for the measurement of depth moisture of soil materials, and for training, sales demonstrations, lease and/or rental arrangements.
- G. To be used in Troxler Electronic Laboratories Inc., Model 3241 Series moisture gauges for the measurement of depth moisture of soil materials, and for training, sales demonstrations, lease and/or rental arrangements.
- H. To be used in Troxler Electronic Laboratories Inc., Model 4640 Series density gauges for the measurement density of paving materials, and for training, sales demonstrations, lease and/or rental arrangements.

State of Washington
Radioactive Materials License

Page 4 of 8



License Number: WN-I0335-1
Amendment No. 18

- I & J. To be used in Humboldt Scientific, Model 5001 moisture/density gauges for the measurement of moisture and density of soil and construction materials, and for training, sales demonstrations, lease and/or rental arrangements.
- K – M. To be used in Seaman Nuclear Corporation, Models 75, and C-100, C-200 and C-300 Series moisture/density gauges for the measurement of moisture and density of soil and construction materials, and for training, sales demonstrations, lease and/or rental arrangements.
- N & O. To be used in InstroTek 3500 Xplorer moisture/density gauges for the measurement of moisture and density of soil and construction materials.
10. Radioactive material shall be stored and/or used at the licensee's facilities located at 1120 North Grover Avenue, East Wenatchee, Washington 98802 and may be used at temporary job sites, in areas NOT under exclusive federal jurisdiction, throughout the state of Washington. Before radioactive materials can be used at a temporary job site at any federal facility, the jurisdictional status of the job site must be determined. Authorization for use of radioactive materials at job sites under exclusive federal jurisdiction must be obtained from the appropriate regional office of the U.S. Nuclear Regulatory Commission. Before radioactive materials can be used at a temporary job site in another state, authorization must be obtained from that state if it is an Agreement State, or from the NRC if it is a non-Agreement State.
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"; chapter 246-231 WAC, "Packaging and Transportation of Radioactive Material"; chapter 246-235 WAC, "Radioactive Materials – Specific Licenses"; and chapter 246-247 WAC "Radiation Protection – Air Emissions"
12. The Radiation Safety Officer for this program shall be Duane A. Hevly.
13. Radioactive material shall be used by or under the supervision of Duane A. Hevly.
14. The licensee shall maintain a use/transfer log for each gauge at the storage location(s) stated in License Condition 10 or subsequent amendments. The use/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 Washington State Radiation Emergency Handbook revised November 1991 or subsequent revisions, or other procedures specifically approved by License Condition.

State of Washington
Radioactive Materials License

Page 5 of 8



License Number: WN-10335-1
Amendment No. 18

16. A. The licensee is authorized to transport licensed material in accordance with the provisions of chapter 246-231 WAC, "Packaging and Transportation of Radioactive Material." Transportation requirements include, but are not limited to, using an approved transport package appropriately labeled and marked, and having a shipping paper and emergency procedure within arm's reach of the driver.
- B. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source(s) from a shielded position. The gauge and its container must be locked when in transport, storage, or when not under the direct control of an authorized user.
- C. The licensee shall use a "three level" method of security at all times when the gauge is not under the physical control of the operator. This method is very important while a gauge is away from a licensed storage location. The outer two levels of security will be established so that each independently prevents the transport box, with gauge, from being removed from the transport vehicle by an unauthorized individual. The methods of security will assure two levels also keep the lid of the transport box from opening. The transport box will be kept out of sight. A device will be returned to a licensed storage location each day if the temporary job is less than 50 miles from that location. A performance audit will be made and documented on gauge user transportation security to assure all security measures are in use and are correctly applied. This document must be retained for Department review.
17. A. Each sealed source in each device listed in License Conditions 9.A - F, H - J, and N - O shall be tested for leakage and/or contamination at intervals not to exceed twelve (12) months. Each sealed source in each device listed in License Conditions 9.G and K -M shall be tested for leakage and/or contamination at intervals not to exceed six (6) 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.
- B. The test shall be capable of detecting the presence of 185 becquerels (0.005 microcuries) 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 becquerels (or microcuries) and maintained for inspection by the Department.

State of Washington
Radioactive Materials License



Page 6 of 8

License Number: WN-10335-1
Amendment No. 18

17. C. If the test reveals the presence of 185 becquerels (0.005 microcuries) 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 of in accordance with Department regulations. A report shall be filed with the Department within five (5) days of the test 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. Duane A. Hevly is authorized to perform as a commercial service, maintenance and repairs, including removal of source holders, on Troxler Electronic Laboratories Inc. Model 3400 Series, 3241 Series, and 4640 Series gauges, CPN International, Inc. Model MC Series and 500 Series, Humboldt Scientific Model 5001 gauges and Seaman Nuclear Corporation, Models 75, and C-100, C-200 and C-300 Series. The licensee shall instruct all users that any maintenance or repair on gauges involving removal of portable gauge 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.
19. 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.
20. The licensee shall possess and use personnel monitoring devices, such as but not limited to, film badge, TLD, OSL, or other approved technology, from an approved supplier. The device shall be capable of detecting at least gamma and neutron radiation. These personnel monitoring devices shall be exchanged at least quarterly.
21. Survey instruments shall be calibrated annually by persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission, or an Agreement State to perform such services.

State of Washington
Radioactive Materials License

Page 7 of 8



License Number: WN-10335-1
Amendment No. 18

22. The licensee is authorized to provide, as a commercial service, instruction for fixed and portable gauge radiation safety training to include, radiation safety officer training, authorized user training, general awareness training, training for ancillary staff and training for the operation and limited maintenance of portable gauges in accordance with procedures described in the radioactive materials license application, and Hevly Technical Services Radiation Safety & Portable Nuclear Moisture/Density Gauge Operation Revision 5.
23. A. In accordance with procedures described in the radioactive materials license application, the licensee is authorized to:
1. Perform routine maintenance and repairs, including inspecting and cleaning the gauge, checking the shutter assembly for proper operation, and performing leak test sampling, on fixed gauges containing Co-60, Cs-137, and or Am-241 sources.
 2. Assist the fixed gauge licensee in packaging and preparing for transport the device and sealed source for disposal or transfer of ownership.
 3. Under the direct surveillance and supervision of Duane A. Hevly, install, replace, remove, relocation, and perform initial radiation surveys of fixed gauges.
 4. Under the direct surveillance and supervision of Duane A. Hevly, persons employed by the licensed owner of the fixed gauge are authorized to install and or remove fixed gauges.
- B All other maintenance and repair of devices, including removal of fixed gauge source holders, shall be performed only by the device manufacturer or by other persons specifically authorized by the U.S. Nuclear Regulatory Commission, an Agreement State, or a Licensing State (for NARM only) to perform such services.
24. The licensee shall respond in the manner, and within the time frame, specified to any and all Department correspondence necessary to keep the license and related information current.
- Where the licensee has submitted proposed corrective action, such action shall be fully implemented in a timely manner, unless the Department has subsequently modified the licensee's proposed corrective action.
25. In the event the licensee chooses to terminate their Radioactive Materials License or vacate authorized use locations, the licensee shall follow the applicable requirements listed in chapter 246-221 WAC, chapter 246-232 WAC and/or chapter 246-246 WAC.

State of Washington
Radioactive Materials License




Page 8 of 8

License Number: WN-I0335-1
Amendment No. 18

26. 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.
27. A. Application and attachments dated February 2, 2011.

FOR THE STATE OF WASHINGTON DEPARTMENT OF HEALTH

Date: February 23, 2001

SM By: 
Craig Lawrence
Radioactive Materials Licensing