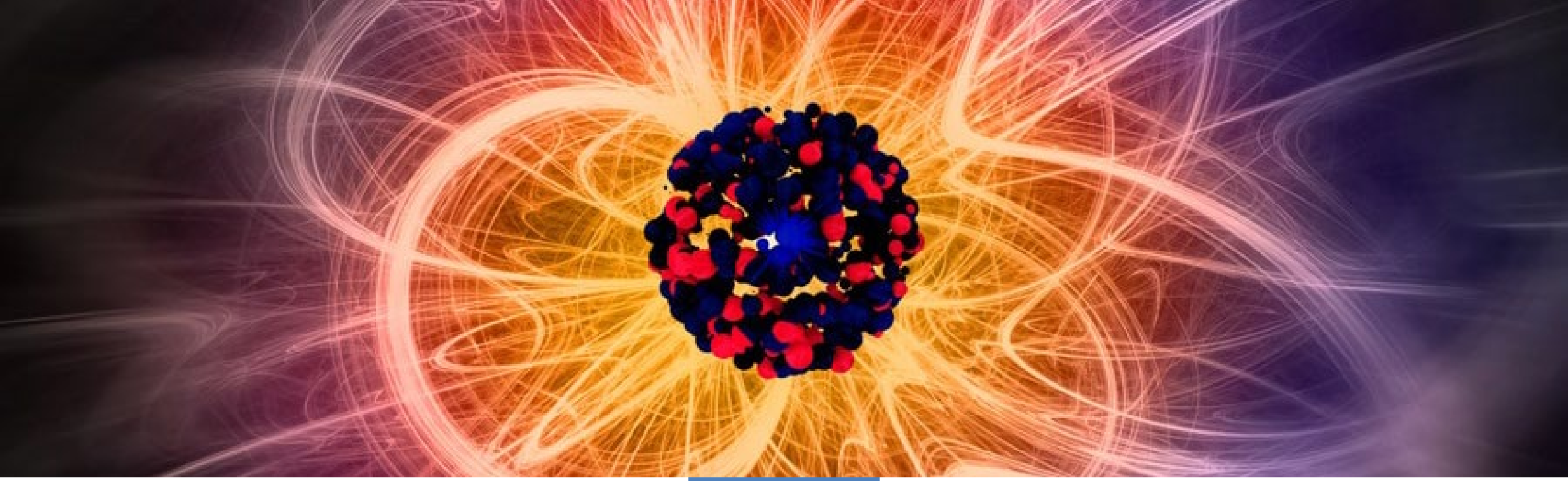


RADIATION ADVISORY COMMITTEE

Robert Berry, Chair

David Howe, Program Director
Radiation Protection Services

October 15, 2025

OREGON HEALTH AUTHORITY

INTRODUCTIONS
RAC MEMBERS
STAFF
AND
GUESTS

TELECONFERENCE PROCEDURES

- Record phone-in number and pass code (in case you lose connectivity)
- Phone-in number and conference ID# provided in Teams invitation email
- If phoning into meeting, use PowerPoint slides to follow meeting
- To unmute self, press *6

- Video (of yourself) is optional
- Please mute your microphones unless speaking
- Use the “raise hand” feature if you have a question
- When speaking, begin by stating your name when you are finished
- RPS staff will use screen share to share PowerPoint information and handouts
- The meeting will be recorded for purposes of accuracy in the minutes

RADIATION ADVISORY COMMITTEE MEETING AGENDA

October 15, 2025 Hybrid Meeting
800 NE Oregon St., Portland, Oregon
Phone-In Number 1-971-277-2343 ID: 538 044 241#

(* = Action Items)

10:00 a.m.

Registration/Public Session

- Call Meeting to Order – Bob Berry, Chair
- Introduction of guests
- Approval of Minutes – Bob Berry, Chair
- 2026 RAC Member Appointments (Jennifer Clayton & Dennis Wood)

10:15 a.m.

2025 RPS Program Updates

- RPS Budget
  - Future need for additional revenue – David Howe, Program Director
- Electronic/Tanning Products Update
  - Dosimetry – Improper Use – Brent Herring, Inspector - Lead Worker
  - Podiatry Imaging by Non-licensed Operator - Brent Herring
  - Notice of Intent to Impose Civil Penalties – Todd Carpenter, Licensing Manager
  - New Tanning Database for Inspections, Fiscal Component (pending) – Todd Carpenter
- Radioactive Materials Licensing – Tom Pfahler - Inspector, RSO
  - Executive Orders Impacting Selected Nuclear Regulatory Commission Regulations
  - New Web Portal Element to Download Licensing Documents
  - New RML Inbox Email Address

BREAK

- Emergency Response / Incidents – Tom Pfahler
  - FDA Safety Recall – Contaminated Shrimp
  - XRF Device Submission to RPS
  - Electron Capture Detector Disassembly in Violation of Oregon Administrative Rules
  - WWII Radium Scope Disposal
- RPS Training –
  - First Receiver Hospital Trainings – Tom Pfahler
  - Community Reception Center Interagency Drill – Tom Pfahler
  - Organization of Agreement States Annual Meeting – David Howe
  - Industrial Radiography – Brent Herring

11:30 a.m.

Exemptions/Rules/Statutes –

- OXOS Medical Inc. Update – Approval for Sale and Use in Oregon – Brent Herring
- Rulemaking for Therapy Rules – Todd Carpenter
- Veterinary Rules for Fluoroscopy and Computed Tomography – Tom Mynes, Inspector

12:00 p.m. Lunch

12:30 p.m.

Emergency Preparedness/Response

- Hanford Transuranic Waste (TRU) Removal – First Responder Training Along Transportation Route – Todd Carpenter
- RPS Reorganization - Dedicated Lab Team – Tom Pfahler

1:00 p.m. **New Business** – David Howe
1:15 p.m. **PUBLIC COMMENTS:**
1:30 p.m. **Announcements \\ Next meeting scheduled for February 11, 2026 /Adjourn**

OREGON HEALTH AUTHORITY

APPROVAL OF MINUTES FROM JUNE 11, 2025

Radiation Advisory Committee Meeting

OREGON HEALTH AUTHORITY

2026 RAC MEMBER APPOINTMENTS

DAVID HOWE

Jennifer Clayton
First Term 2026-2029

Dennis Wood
Second Term 2026-2029

2025 RPS PROGRAM UPDATES

RPS BUDGET

DAVID HOWE
PROGRAM DIRECTOR

- Future need for additional revenue

ELECTRONIC/ TANNING PRODUCTS UPDATE

BRENT HERRING
LEAD INSPECTOR

X-Ray and Tanning Update

ELECTRONIC PRODUCTS

Brent Herring
Lead X-ray Inspector

Inspection Update

- **Since last RAC meeting:**
  - 324 X-ray Inspections (medical, dental, vet, therapy, MQSA, and industrial)
    - 1024 Machines
    - 1028 Tubes
  - 15 Tanning Inspections
- Inspection Time – 447 Hrs.
- Inspection Travel Time – 351 Hrs.

Other Inspector Duties:

- CRC Events
- Building Tanning and RML Databases
- Maintaining X-Ray and RML Database
- Committees – CRCPD, OBMI, etc.
- Modality Working Groups (CRCPD)
- Radiation Safety Training Presentations
- Shielding Documentation Review
- New Equipment Review
- Vendor Applications
- Exemption Reviews
- Incident Investigations
- Training Reviews
- Inspection Protocols (New and Updated)

ELECTRONIC PRODUCTS

Brent Herring
Lead X-ray Inspector

X-Ray and Tanning Update

Violation Summary:

- X-ray – 60 citations with 70 instances
  - Machine registration – 15 violations
  - Personal Protection Equipment Checks – 3 violations
  - Patient not visible during exposures – 4 violations
  - Radiation exposure (dose) too high for set exams – 3 violations

- Tanning
  - Time not checked annually for accuracy and Emergency shut-off not test annually

IMPROPER USE OF DOSIMETRY

Brent Herring
Lead X-ray Inspector

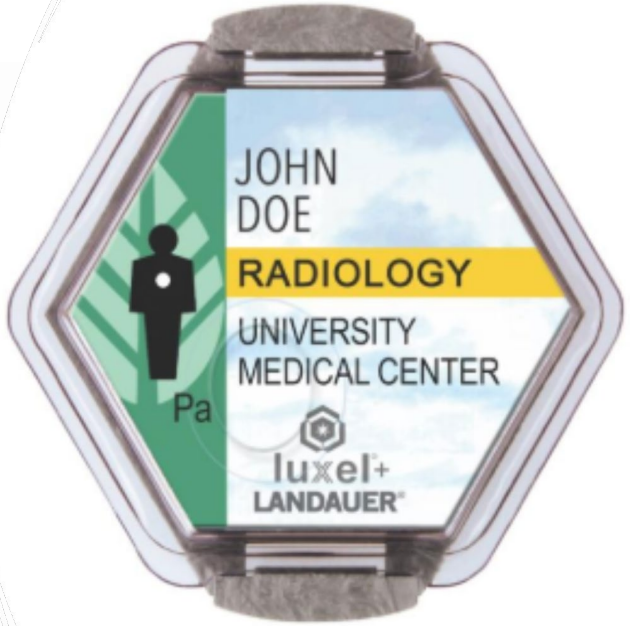
Discovered During Multiple Hospital Inspections

- Dosimetry reports showed most personnel having “ND” (non detectable) from multiple departments where personnel should be receiving some dose:
  - X-ray
  - Operating Room
  - Cath Lab
- Questions arose about
  - Was dosimetry being worn?
  - Badges lost or not turned in?
  - Badges worn improperly?
- Found out that most were wearing their one badge incorrectly (i.e. under their lead)

OREGON HEALTH AUTHORITY

IMPROPER USE OF DOSIMETRY

Brent Herring
Lead X-ray Inspector



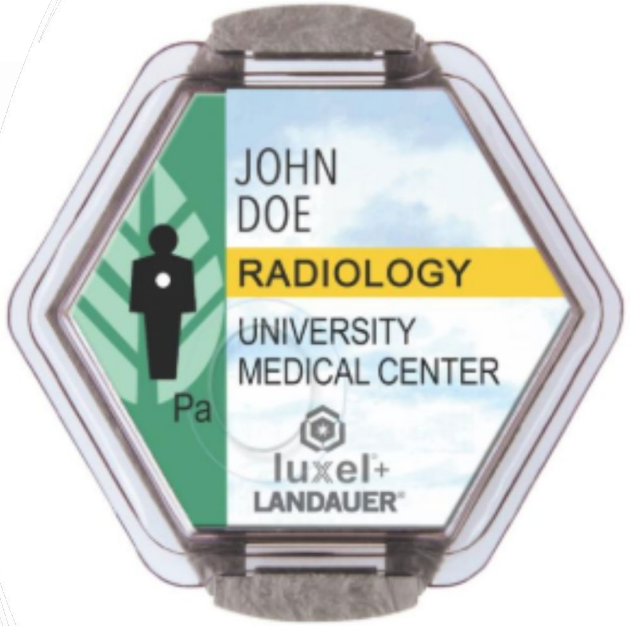
Current OARs

- **333-120-0215: Surveys & Monitoring: Location of Individual Monitoring Devices**
- Each licensee or registrant must ensure that individuals who are required to monitor occupational doses wear individual monitoring devices as follows:
- (1) An individual monitoring device used for monitoring the dose to the whole body must be worn at the unshielded location of the whole body likely to receive the highest exposure. When a protective apron is worn, the location of the individual monitoring device is typically at the neck (collar);
- (2) An individual monitoring device used for monitoring the dose to an embryo/fetus of a declared pregnant woman, must be located at the waist under any protective apron being worn by the woman;
- (3) An individual monitoring device used for monitoring the lens dose equivalent, to demonstrate compliance with OAR 333-120-0100(1)(b)(A), must be located at the neck (collar), outside any protective apron being worn by the monitored individual, or at an unshielded location closer to the eye;
- (4) An individual monitoring device used for monitoring the dose to the extremities, to demonstrate compliance with OAR 333-120-0100(1)(b)(B), must be worn on the extremity likely to receive the highest exposure. Each individual monitoring device must be oriented to measure the highest dose to the extremity being monitored.

OREGON HEALTH AUTHORITY

IMPROPER USE OF DOSIMETRY

Brent Herring
Lead X-ray Inspector



Response

RPS

- Reached out to Oregon Radiography Programs (OIT, PCC, and Linn-Benton)
- Discussions with Imaging Managers about dosimetry badges for future inspections
- Review past 3 years of dosimetry reports to look for patterns
- Forwarded OARs concerning how dosimetry badges are to be worn
- Working on Information Bulletin

Facilities

- One had discovered issue before inspection and self-corrected
- One is currently in middle of self audit and dose calculations.

OREGON HEALTH AUTHORITY

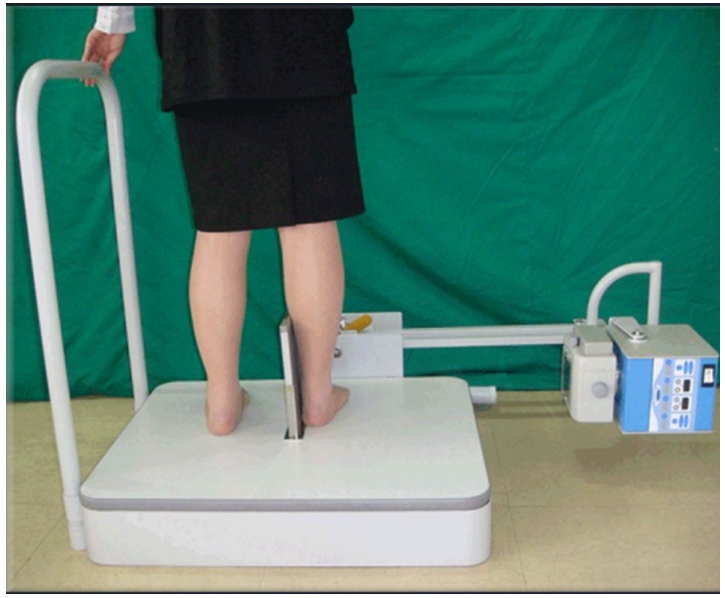
PODIATRY IMAGES BY NON-LICENSED OPERATORS

Brent Herring
Lead X-ray Inspector

Podiatric Imaging Performed by Non-Licensed Operators

PODIATRY IMAGES BY NON-LICENSED OPERATORS

Brent Herring
Lead X-ray Inspector



Podiatric Imaging Operators

- Need an Oregon Board of Imaging License (OBMI)
  - X-ray
  - Limited (LXMO)
- Not allowed to be operator unless licensed by OBMI
- Operator duties include, but not limited to:
  - Patient positioning
  - Machine positioning
  - Machine technique setup
  - Film Set up

OREGON HEALTH AUTHORITY

PODIATRY IMAGES BY NON-LICENSED OPERATORS

Brent Herring
Lead X-ray Inspector

Current Status

- Non-licensed operators have been discovered through
  - RPS inspections
  - OBMI investigations

- RPS Response
  - Information Bulletin release discussing rules for medical x-ray operators (specific to podiatric operators).

PODIATRY IMAGES BY NON-LICENSED OPERATORS

Brent Herring
Lead X-ray Inspector

Public Health Division
Radiation Protection Services

OREGON HEALTH AUTHORITY

Informational Bulletin 2025-06

October 13, 2025

TO: Facilities That Perform Podiatric Radiographs

From David M. Howe, Program Director, Radiation Protection Services

SUBJECT: OAR 333-106-0055 Subsections (1) and (4) Approved Operators for Radiographic Machines Used for Podiatric Imaging.

The Public Health Division, Radiation Protection Services (RPS), is releasing this informational bulletin to clarify rules related to approved operators for radiographic (X-ray) machines, operated in podiatric facilities.

Oregon Administrative Rule (OAR) 333-106-0055(1) states "the registrant shall assure that individuals who will be operating the X-ray equipment by physically positioning patients, determining exposure parameters, or applying radiation for diagnostic purposes shall have adequate training in radiation safety."

Oregon Administrative Rule (OAR) 333-106-0055(4) states "Diagnostic medical X-ray operators who meet the following requirements are considered to have met the requirements of section (1) of this rule":

- Holds a current license from Oregon Board of Medical Imaging (OBMI); or
- Holds a current limited x-ray machine operator permit from OBMI; or
- Is currently a student from an approved school of Radiologic Technology and is currently under direct supervision of a currently Oregon licensed radiologist or an OBMI licensed radiologic technologist; or
- Is currently a student in an OBMI approved limited operator permit program under direct supervision of a licensed OBMI radiologic technologist.

OBMI also has additional rules governing the use and operation of podiatric X-ray machines. They can be contacted at info@obmi.or.gov.

Any violation of RPS and OBMI regulations may result in significant civil penalties for both the facility and the operator.

If you have any questions, please contact Brent Herring, Radiation Protection Services, at 503-891-0098 or email: Brent.E.Herring@oha.oregon.gov

800 NE Oregon Street, Suite 640, Portland, OR 97232 | Voice: 971-673-0490 | Fax: 971-673-0553

NOTICE OF INTENT TO IMPOSE CIVIL PENALTIES

Todd Carpenter
Licensing Manager

Tanning Registration Civil Penalties

- Nine Registration Penalties

PROPOSED CIVIL PENALTY

OHA may impose a civil penalty in an amount not to exceed $500.00 per violation for violations of ORS 453.726 to 453.734 or rules adopted pursuant to ORS 453.726 to 453.734. Civil penalties under this section shall be imposed in the manner provided by ORS 183.745. It is a violation of ORS 453.729(2), OAR 333-119-0020(1), and OAR 333-103-0025(1) and (2) for failure to pay registration fees in a timely manner.

Civil penalties for failure to pay registration fees are calculated under OAR 333-124-0010(8) as follows:

2024: 4 device(s) x $175.00 registration fee = $700.00
2025: 4 device(s) x $175.00 registration fee = $700.00
Total registration fees overdue: $1,400.00

Start Date	End Date	Unpaid Fee	Penalty Rate	Daily Penalty		Days	Total Penalty
March 10, 2025	April 9, 2025	$1,400.00	3%	$42.00	X	30	$1,260.00
April 10, 2025	May 10, 2025	$1,400.00	5%	$70.00	X	30	$2,100.00
May 11, 2025	June 10, 2025	$1,400.00	10%	$140.00	X	30	$4,200.00
				Proposed Civil Penalty Amount:			**$7,560.00**

Therefore, RPS proposes to impose a civil penalty of **$7,560.00**.

NOTICE OF INTENT TO IMPOSE CIVIL PENALTIES

Todd Carpenter
Licensing Manager

STATE OF OREGON
OREGON HEALTH AUTHORITY

Ref File: [redacted]

IN THE MATTER OF:

[redacted]
Tanning Facility

) **Notice of Violation and Proposed**
) **Imposition of Civil Penalty;**
) **Opportunity for a Hearing.**
)
) Agency Case No. RPS [redacted]

[redacted]
Albany, OR 97321

Pursuant to Oregon Revised Statutes (ORS) 453.726 to 453.734 and Oregon Administrative Rules (OAR) 333-119-0020, 333-103-0025, and 333-124-0010, the Oregon Health Authority (OHA), Public Health Division, Center for Health Protection, Radiation Protection Services (RPS) proposes to order [redacted] **LLC** to pay their 2024 and 2025 registration fees and to impose a civil penalty against [redacted] in the amount of **$7,560.00** for failure to pay registration fees in violation of Oregon law. [redacted] s the registered agent of [redacted]

1. You have a tanning facility at [redacted] Oregon with 4 tanning device(s).
2. By March 1, 2024, you were required to pay RPS a $175.00 registration fee per tanning device for a total of $700.00 in registration fees (ORS 453.729(2), OAR 333-119-0020(1) and 333-103-0025(1) and (2)). To date, RPS has not received any registration fees.

NEW TANNING DATABASE FOR INSPECTIONS

Todd Carpenter
Licensing Manager

Inspections Go Live! Electronic Registration Coming Soon!

Inspection Results

Rule Results

Group	Device	Rule	Value	Comment	Citation
Tanning Safety Requirements	- - -	Protective Eyewear Available?	Yes		
		Eyewear CFR Compliant?	Yes		
		Are Clients Using Protective Eyewear?	Yes		
		Are General Areas and Devices Clean and Sanitized?	Yes		
		Is a Quat Based Sanitizer (400-800ppm) being used?	Yes		
		Are Sanitizer Test Strips Available?	Yes		
		Are Clean Towels Provided?	Yes		
		Restroom with Handwashing Sink?	Yes		
		Under 18 Rule Adherence?	Yes		

Group	Device	Rule	Value	Comment	Citation
Bed Requirements	**02 - 1158 - LOHMANN-WERKE - SONNENBRAUNE 524E**	Room | RAD-T		Rm 2/1159	
		Bed Type:	Base Plus Canopy		
		Device Properly Registered?	Yes		
		FDA Labeling Requirements:	Yes		
		Emergency Switch:	Yes		
		Acrylics & Shocks:	Yes		
		Pillows:	Yes		
		Warning Sign:	Yes		
		Non-UV Bulbs in Bed? (Non-UV Bulbs, Red Light, etc.) *Yes Indicates Violation*	No		

RADIOACTIVE MATERIALS LICENSING (RML) SUMMARY

Tom Pfahler
Inspector, RSO

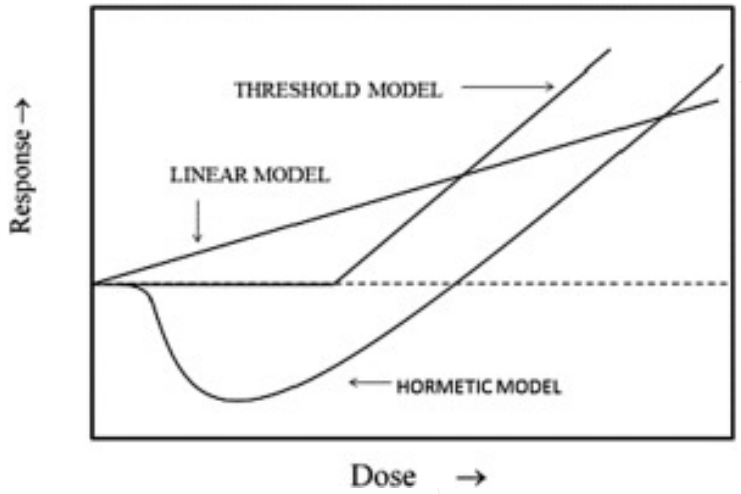
June 01 - September 30, 2025

Description	Count
Inspections performed	15
Inspections remaining	48
Closed Licensing Actions	61
Total Incidents	5
Closed Incidents	2

EXECUTIVE ORDERS IMPACT

Tom Pfahler
Inspector, RSO

Executive Orders Impacting Selected Nuclear Regulatory Commission Regulations



- **Executive Order 14300 – Ordering the Reform of the Nuclear Regulatory Commission**
  - LNT/ALARA under review
    - Disagreements on low dose vs 0 dose
  - NRC currently working on rule changes affecting the NNMP (National Nuclear Materials Program)
    - NRC working with OAS (Organization of Agreement States) for compatibility requirements
    - January 2026: proposed rule changes submitted to the Federal Register
    - 30 days for public comment
  - All is subject to change

EXECUTIVE ORDERS IMPACT

Tom Pfahler
Inspector, RSO

CRCPD Statement to NRC during the NRC Public Meeting on EO 14300 held 7/16/2025

1. Harmonization of radiation dose limits across all agencies and stakeholders. Now is the opportunity for the U.S. to adopt a national consensus standard.
2. Maintain current dose limits while enhancing practicality. We recognize that industry needs may not align with medical best practices, and we suggest considering the development of a separate threshold for radiation and medicine and industry.
3. Establish a de minimis threshold for regulation. The majority of professionals in the radiation protection community agree that there is a specific dose from all sources where health impacts begin. We suggest reaching consensus on that specific dose to establish a de minimis threshold.
4. Use scientific updates to keep regulations current and appropriate. You must use current and use scientific studies without losing sight of the lessons learned from past experience.
5. Ensuring independent regulatory authority. We need to maintain a level of commitment and accountability for radiation protection by having an independent regulatory authority.

New Web Portal Element to Download Licensing Documents

Tom Pfahler
Inspector, RSO

Public Health Division
Radiation Protection Services
Tina Kotek, Governor

OREGON HEALTH AUTHORITY

September 18, 2025

INFORMATIONAL BULLETIN 2025-04

To: Oregon Radioactive Materials Licensees, Radiation Safety Officers

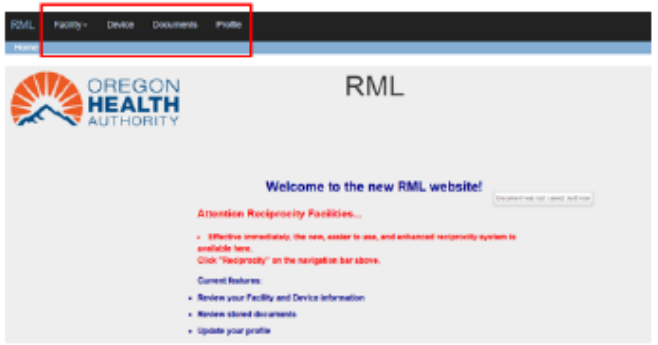
From: David M. Howe, Program Director
Radiation Protection Services (RPS)

Subject: Online Access to Licensee Services Web Portal

RPS is announcing the launch of a new Radioactive Material Licensing (RML) service option. To improve customer service, we are initiating enhanced electronic document access and editing. This provides an opportunity for a licensee's Radiation Safety Officer (or delegate) to view and download their licensing documents. In addition, users can edit the licensee's general information.

On December 1, 2024, RPS completed a conversion from Microsoft software to an electronic licensing program. Effective immediately, upon completion of a licensing action (new, amended, and renewal), the license will be converted to an Adobe Acrobat (Pdf) document. The licensee's delegated person is now able to login, via the web portal, and download current and past radioactive material licenses, validation certificates, payment notices, and update the licensee's profile. [Note: These features are not available to licensee's that possess *Materials of Safety and Security*].

For Licensee access to the web portal, go to RPS's home page at https://licenseeservices.rps.oregon.gov/. The Radiation Safety Officer (RSO) or delegate will need to click on the login button which will direct the user to the login menu. Within the menu, the username is the radioactive material license number. The initial password is a combination of the license number and the RSO's last name. For example, if the license number is 96123 and the RSO's last name is Smith, the initial password is 96123Smith. You will be required to change the password after the first login. After logging in, select "RML" from the menu located on the left side of the page. After clicking on "RML" you will see this web portal page and the user can select:



*Facility information

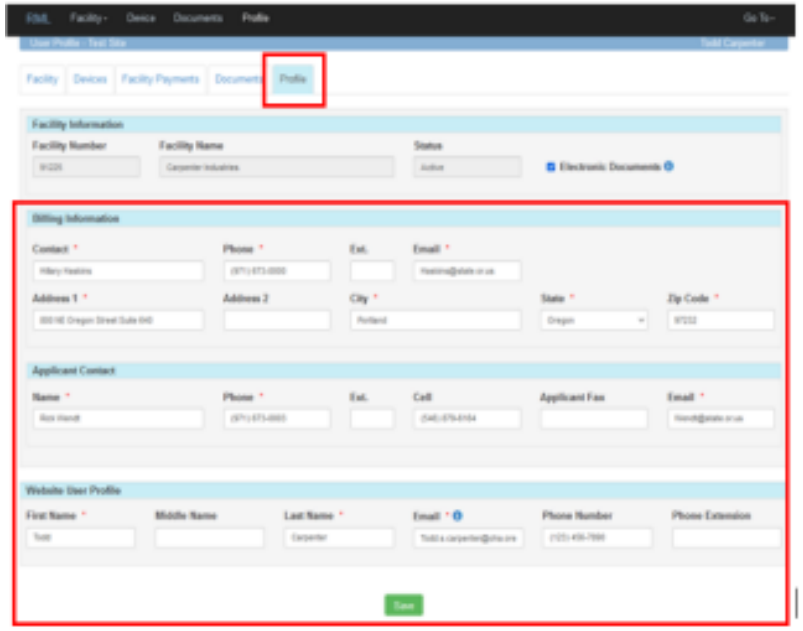
*Device information

*Downloadable Documents:
Validation Certificates
Licenses
Invoices

New Web Portal Element to Download Licensing Documents

Tom Pfahler
Inspector, RSO

*Licensee's profile information

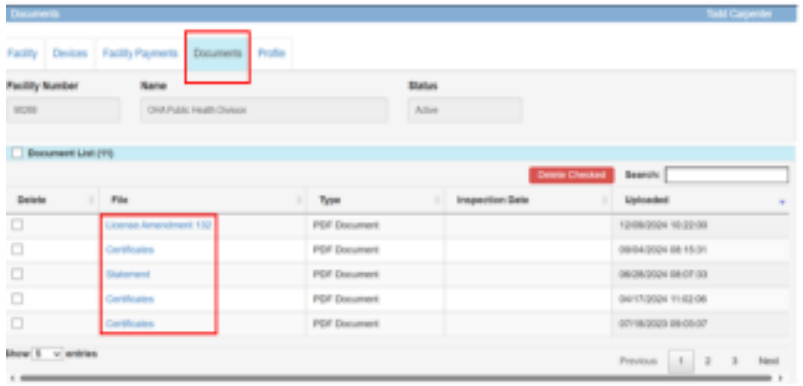


In the "Profile" tab, the licensee can see and edit their profile information.

*Profile information does not require a licensing amendment to edit this information.

*The licensee can change the website user which will change the person who can login to the RPS web portal.

If a user profile has been changed, the user will need to login using the license number then click on the "Forgot my Password" and follow the login instructions.



In the "Document" tab, the licensee can see and download their available documents.

f you have any questions about using the RPS web portal licensing services, please feel free to contact Lee .ind, 503-680-5161, email; Lee.Lind@oha.oregon.gov or Todd Carpenter, 971-673-0500, email;

NEW RML EMAIL ADDRESS

Tom Pfahler
Inspector, RSO

Public Health Division
Radiation Protection Services
Tina Kotek, Governor

OREGON HEALTH AUTHORITY

September 05, 2025

INFORMATIONAL BULLETIN 2025-03

To: Oregon Radioactive Materials Licensees

From: David M. Howe, Program Director
Radiation Protection Services (RPS)

Subject: Centralized Email Licensing Address

This bulletin is being issued to inform radioactive material licensees and interested parties that RPS has established a centralized email address to improve licensing services.

NEW EMAIL ADDRESS: RPS.RML.Licensing@oha.oregon.gov

Licensees and interested parties should use this email address for communications relating to licensing inquiries, licensing applications, licensing amendments, adding sources or devices, and other licensing actions. Emails and attachments received will be available to all licensing team members in a single email which will streamline communication with the goal of improving efficiency between RPS team members, licensees and interested parties. Our effort is to strive for improving operations for the members of the radioactive materials industry

If you have any questions or need clarifications, please contact Lee Lind at Lee.LIND@oha.oregon.gov or phone at (503) 680-5161.

Break Time

EMERGENCY RESPONSE / INCIDENTS

TOM PFAHLER
INSPECTOR, RSO

Emergency Response / Incidents – FDA Safety Recall – Contaminated Shrimp

FDA Statements

- There has been an FDA initiated recall of frozen shrimp from Indonesian company, PT. Bahari Makmur Sejati (BMS Foods), for finding chemical contaminants after testing by Customs and Border Protection (CBP).
- in that it appears to have been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with Cs-137 and may pose a safety concern.
- The level of Cs-137 detected in the detained shipment was approximately 68 Bq/kg, which is below FDA's Derived Intervention Level for Cs-137 of 1200 Bq/kg.
- At this time, no product that has tested positive or alerted for Cesium-137 (Cs-137) has entered the U.S. marketplace.

Indonesian Press

- Cs-137 industrial source accidently smelted ~ May 2025

EMERGENCY RESPONSE/ INCIDENTS

Tom Pfahler
Inspector, RSO

Improper Disposal of XRF Device by Licensee

- Licensee felt they were treated unfairly during routine inspection process and made decision to terminate materials license and “relinquish” an XRF device to RPS containing over 4 mCi of Am-241
- Material was sent in unmarked box to RPS
- Amongst other violations, shipping the radioactive device to RPS violates several license conditions:
- 10) Storage location
- 14) Provisions of OAR 333-102-0305
- 18) Transportation requirements
- 20) Control of licensed material in an unrestricted area
- Licensee believed material was decayed and “dead”
  - Half-life of Am-241 is ~432 years

EMERGENCY RESPONSE/ INCIDENTS

Tom Pfahler
Inspector, RSO

Improper Disposal of XRF Device (Cont'd)

- Typical license termination process for a general license includes:
  - Providing copy of most recent sealed source leak test for device
  - Licensee sends device back to manufacturer and provides copy of disposal certificate
  - Submit request, in writing, to terminate license
- In lieu of retaining material or incurring associated costs of disposal, our RPS senior inspector reached out to several licensees that might be interested in procuring an XRF
  - Facility was found that wanted an XRF, and the device was shipped to them and added to their license

EMERGENCY RESPONSE/ INCIDENTS

Tom Pfahler
Inspector, RSO

Electron Capture Detector (ECD) Disassembly in Violation of Oregon Administrative Rules

- RPS received whistleblower allegation that licensee's RSO was disassembling an ECD device and sanding internal surfaces.
  - Violates conditions of OARs, Sealed Source and Device Registry, and License
    - Ex. License Condition 18 states "Ensure that device installation, service, and removal from installation involving radioactive materials be performed by a person holding a specific license from the Authority, The U.S. Nuclear Regulatory Commission, or an Agreement State to perform such activities
- RPS contacted RSO of facility to inform them of allegation and to investigate incident. Verified that unauthorized maintenance had been performed.
- RPS required facility to perform leak test on device to ensure no damage to source and provide written statement stating that facility would commit to not performing any unauthorized maintenance on ECD
- Routine inspection scheduled with facility to verify corrective actions

EMERGENCY RESPONSE/ INCIDENTS

Tom Pfahler
Inspector, RSO

WWII “US/F Infrared Metascope” Disposal

- Contacted by PT 658 Heritage Museum about radioactive scope in their possession that they would like to dispose of
  - PT 658 is a non-profit organization that have preserved a WW2 motor torpedo boat and give tours
- http://www.uscarbinecal30.com/IRmetascopes.html
- Contains Ra-226. Activity unknown, but radiation measurements taken:
  - 21 mR/hr on contact
  - 0.35 mR/hr at 1 meter
- Based on initial calculations, estimated activity of Ra-226 well beyond activity threshold for Oregon Department of Energy (ODOE) disposal exemption (10 uCi)
- Contacted Source Collection and Threat Reduction (SCATR) program for assistance with disposal
  - SCATR provided shipping materials, instructions, and coordinated logistics of disposal. Material will be processed by Bionomics company out of Oak Ridge, TN.
  - Nominal cost to owner of material -- ~$300 for shipping fees

TRAINING AND CONFERENCES

DAVID HOWE
PROGRAM DIRECTOR

June 17th	First Receiver Training at Columbia Memorial Hospital in Astoria – Sarah Brodesser & Toby Irving
June 18th	First Receiver Training at Adventist Tillamook – Sarah Brodesser & Toby Irving
July 8th	First Receiver Training at Kaiser Sunnybrook Building – Sarah Brodesser & Toby Irving
July 9th	First Receiver Training at Providence Office Park in Portland – Sarah Brodesser
July 9th	First Receiver Training at OHSU – Hillsboro Medical Center – Toby Irving
July 10th	First Receiver Training at Kaiser Sunnybrook Building – Sarah Brodesser & Tom Pfahler
July 16th	Radiation Community Reception Center at Portland Community College Rock Creek
Aug 11-14th	Organization of Agreement States Conference in Washington DC – David Howe
Sept 15-19th	NRC Industrial Radiography Course in St. Rose, Louisiana – Brent Herring & Sarah Brodesser

TRAINING AND CONFERENCES

TOM PFAHLER
INSPECTOR, RSO

Community Reception Center (CRC) Interagency Drill "Rad Rock"

- Held at Portland Community College – Rock Creek on July 16th, 2025
- Approx. 70 individuals involved, representing several local/state public health and emergency management agencies
- Day divided into 2 parts:
  - Morning lecture - - topics included:
    - Radiation basics and elements of a CRC (RPS)
    - Radiological decontamination (Portland Fire Bureau)
    - Radiation burn injuries (Oregon Burn Center)
    - Military Support (Army-Air National Guard)
  - Afternoon practical exercise
    - Set up and run-through of CRC and all associated support stations (registration, medical, decon, etc.)
    - Actors used exempt-level sources to simulate contamination
    - Injects utilized to simulate real-world considerations
      - Pets
      - Faulty equipment
      - False positives

TRAINING AND CONFERENCES

TOM PFAHLER
INSPECTOR, RSO

“Rad Rock” Cont’d

- Community Reception Center “Toolkit” created
  - The “CRC Toolkit” provides information, resources, and templates that local jurisdictions can use or adapt to support the operation of a CRC.
  - 49-page document containing useful information that any public health agency could use to create a CRC:
    - Practical considerations and planning
    - Site selection
    - Objectives
    - Communications
    - Zones and flow of CRC
    - Staffing and explanation of roles
    - Equipment
    - Data collection
    - Forms
    - References

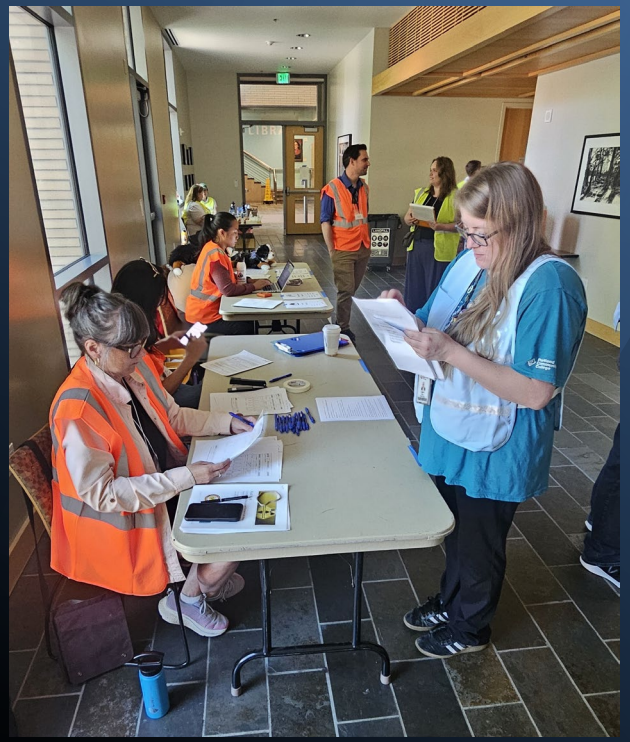
- Big shout-out to Robin Holm for an amazing job on creating this document!
  - Masters program intern
  - Works in Health Security, Preparedness and Response Program

TRAINING AND CONFERENCES

TOM PFAHLER
INSPECTOR, RSO

TRAINING AND CONFERENCES

TOM PFAHLER
INSPECTOR, RSO



TRAINING AND CONFERENCES

BRENT HERRING
LEAD INSPECTOR

Industrial Radiography H-305

Source Production and Equipment Company (SPEC) Facility

St. Rose, LA

TRAINING AND CONFERENCES

BRENT HERRING
LEAD INSPECTOR

Industrial Radiography

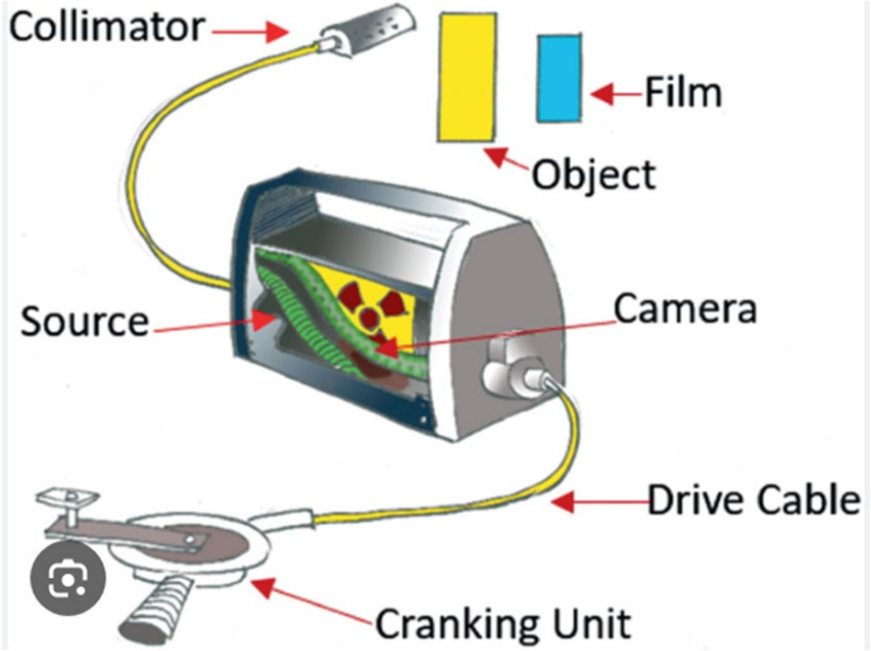
- Use of radioactive materials (Ir-192, Co-60, Se-75) to ensure weld integrity and approval.
- Gamma radiation and very hot sources.
- Job sites consist of buildings, roads, offshore platforms, etc.
- Operator training and radiation safety are extremely important

TRAINING AND CONFERENCES

BRENT HERRING
LEAD INSPECTOR

Topics of Discussion

- Industrial Radiography Equipment
- Health Physics
- Sealed Source Manufacturing
- Restricted Area Calculations
- Equipment Main. and Inspection
- NRC/State Regulations
- Security
- Emergency Procedures
- Emergency Source Retrieval
- Transportation Requirements
- Incidents



TRAINING AND CONFERENCES

BRENT HERRING
LEAD INSPECTOR

Topics – Lab Work

- Toured MFG area and Hot Cell
- Equipment set up and use
- Radiation Job Site Inspection
- Emergency Source Recovery
- Dark Room

Exemptions/Rules/Statutes

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

OXOS MC2

Update and Oregon Approval

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

Previous RAC Meeting

Items of Concerns:

- No Light Field
- No Standard Collimation (knobs)
- Max X-Ray Field is 9x9 inches
- No Spacer Cone (Fluoro)
- Weighs 8 pounds

RAC Member Questions:

- Can fluoro be turned off?
  - Can only be used in docked mode
- Hand-held mode and scatter?
  - Operators will need to wear lead
- Large knees->Grid->lower Source to Object Distance (SOD)?
  - System will not operate with small SOD. It becomes inoperable
- Will it replace a mini c-arm in Operating Room (OR)?
  - No. The machine is not FDA approved for the OR.

EXEMPTIONS & RULES

BRENT HERRING
LEAD INSPECTOR

Oregon Approval with Conditions

- July 3, 2025 Approval Letter states:
  - It is not to be used to replace a fixed machine. Facilities purchasing the device will need to follow handheld and mobile rules for operation
  - Extremity exams only
    - Proximal humerus (no shoulder) down
    - Knee down
  - It is not to be used in a sterile field setting (ex. operating room), in vehicular or moving environments, or in hallways or areas where the public could be exposed.
  - With the use of a foot pedal, fluoroscopy is used in non-handheld mode (docked) only. There is an interlock that prohibits use in fluoroscopy in hand-held mode. If the interlock becomes inoperable, then the machine is no longer approved for use.

EXEMPTIONS & RULES

TODD CARPENTER
LICENSING MANAGER

Proposed Amended Therapy Rules

- Last major revision in 2006.
- Staff review completed.
- New division 108 due to extent of proposed amendments. Current division 123 will be repealed.
- Looking for Subject Matter Experts for Rule Advisory Committee Members.

EXEMPTIONS & RULES

TODD CARPENTER
LICENSING MANAGER

OAR 333-108-0021 - Qualified Requirements for Medical Physicist

(1) The registrant for any therapeutic radiation machine subject to OAR 333-108-0085, 333-108-0175, or 333-108-0210 must require that the Medical Physicist(s), who are providing consultative services to them be licensed with the Oregon Health Authority, under the provisions of OAR 333-101-0020, as a provider of radiation services in the area of calibration and compliance surveys of external beam radiation therapy units. (The licensing requirement is only applicable to those physicists who provide medical physics consultation to facilities other than those of the registrant of which they are an employee).

(2) All Medical Physicists practicing in therapeutics radiological physics must be currently certified in Therapeutic Radiological Physics or Radiation Oncology by the American Board of Radiology in:

- (a) Therapeutic Medical Physics; or
- (b) Therapeutic Radiological Physics; or
- (c) Radiological Physics; or
- (d) Be currently certified by the American Board of Medical Physics in Radiation Oncology Physics or The Canadian College of Medical Physics in Radiation Oncology Physics.

OAR 333-108-0024 - Radiation Machine Operators Qualification of Operators

(1) Therapeutic Radiation Machine Operator's Qualifications. Individuals who will be operating a therapeutic radiation machine for medical use must be currently licensed by the Oregon Board of Medical Imaging and registered with the American Registry of Radiologic Technologists (ARRT) with a designation of RT(T). Individuals who are not ARRT RT(T) shall submit evidence that they have satisfactorily completed a radiation therapy technologist training.

EXEMPTIONS & RULES

TOM MYNES
INSPECTOR

VETERINARY RULES CT & FLUORO

Process Initiated

- RPS began drafting rules to cover operators of CT and fluoroscopy in veterinary medicine. RPS rules only address operators for human patients not animals.
- RPS currently verifies education and modality training on a case-by-case basis.

Stakeholder Engagement

- Peter Burns (Oregon Veterinary Medical Examining Board)
- Glenn Kolb (Oregon Veterinary Medical Association)

EXEMPTIONS & RULES

TOM MYNES
INSPECTOR

VETERINARY RULES CT & FLUORO

Focus Areas

- Aligning fluoroscopy rules with current practices for non-radiologic practitioners.
- Adding CT applications and user training requirements specific to Vet Settings.

Veterinary Assistants

- Current draft rules only focus on DVMs & CVTs.

Next Steps

- Continue drafting framework language.
- Circulate draft for broader review and comment.
- Issue Informational Bulletin to Veterinary Registrants.

EXEMPTIONS & RULES

TOM MYNES
INSPECTOR

VETERINARY RULES CT & FLUORO

Public Health Division

Radiation Protection Services

Tina Kotek, Governor

OREGON HEALTH AUTHORITY

Informational Bulletin 2025-05

October 8, 2025

To: Veterinary X-ray Registrants

From: David Howe, Program Director
Radiation Protection Services

Subject: Requirements for Veterinary Use of Fluoroscopy and Computed Tomography (CT) Machine Operator Requirements.

Radiation Protection Services (RPS) is releasing this Informational Bulletin regarding the use of CT and fluoroscopy imaging systems in veterinary facilities.

Current regulations do not specifically address requirements for veterinarian personnel operating a CT or fluoroscopic system. The use of these modalities in veterinary settings is relatively new, but Oregon Administrative Rules (OAR) do address training requirements for persons who operate these imaging systems on human patients.

RPS requires veterinary facilities to demonstrate that CT and fluoroscopic tube operators meet OAR 333-106-0205 (Activation of the Fluoroscopic Tube) and 333-106-0370 (Computed Tomography Operator Requirements) OARs. RPS allows a Doctor of Veterinary Medicine (DVM) or the Certified Veterinary Technician (CVT), licensed by the Oregon Veterinary Medical Examining Board, to operate a CT or fluoroscopic systems after receiving approved CT and/or fluoroscopic training.

The established RPS pathway for veterinary registrants to operate these specific imaging devices is for Interested parties to request/submit an application which outlines the facility and operator requirements for each imaging system (email your request to RPS.Exemption@oha.oregon.gov).

To address this new technology in veterinary facilities, RPS is developing new OAR language to allow a DVM and CVT to operate a CT or fluoroscopic system. In the future, Registrants will receive a Notice of Public Rule Making for the proposed rule language and be notified when final rules are effective.

If you have any questions, please feel free to contact RPS.Exemption@oha.oregon.gov.

LUNCHTIME

EMERGENCY PREPAREDNESS/RESPONSE

EMERGENCY PREPAREDNESS /RESPONSE

TODD CARPENTER
LICENSING MANAGER

Hanford Transuranic Waste Removal

Transuranic (TRU) waste transport involves loading waste into NRC-certified shipping casks, which are then placed on specially designed trailers and hauled by highly trained drivers to the Waste Isolation Pilot Plant (WIPP). *Source generated AI.

* First Responder and Receiver Training Program.

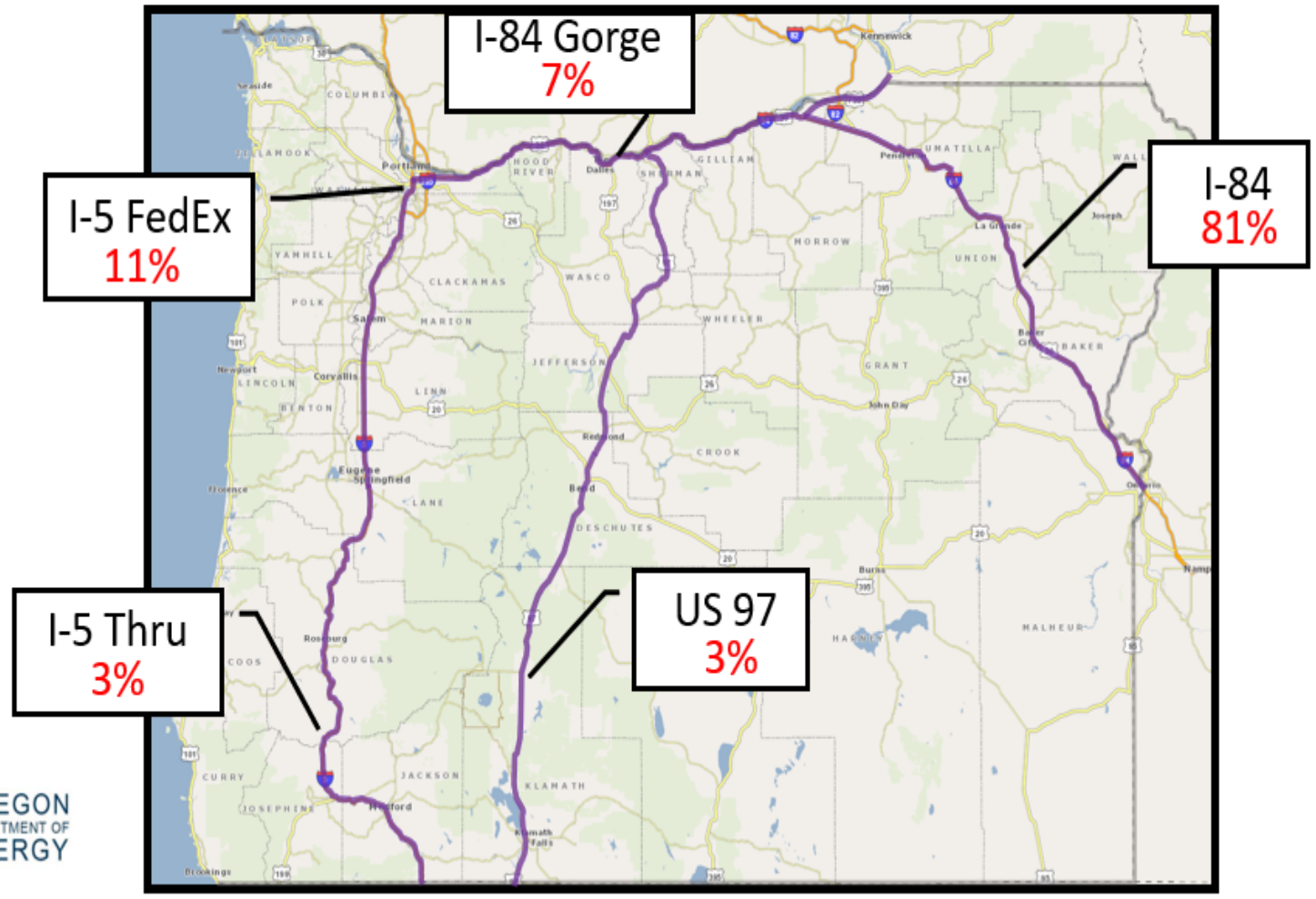
EMERGENCY PREPAREDNESS /RESPONSE

TODD CARPENTER
LICENSING MANAGER

OREGON DEPARTMENT OF ENERGY

Average rad shipments by route

Typical Year



EMERGENCY PREPAREDNESS /RESPONSE

TODD CARPENTER
LICENSING MANAGER

TRANSURANIC (TRU) WASTE

The Waste Isolation Pilot Plant (WIPP) permanently disposes of transuranic (TRU) waste that is the byproduct of the nation's nuclear defense program.

TRU waste consists of tools, rags, protective clothing, sludges, soil and other materials contaminated with radioactive elements, mostly plutonium. These man-made elements have atomic numbers greater than uranium on the periodic table of elements (thus "trans-uranic" or beyond uranium).

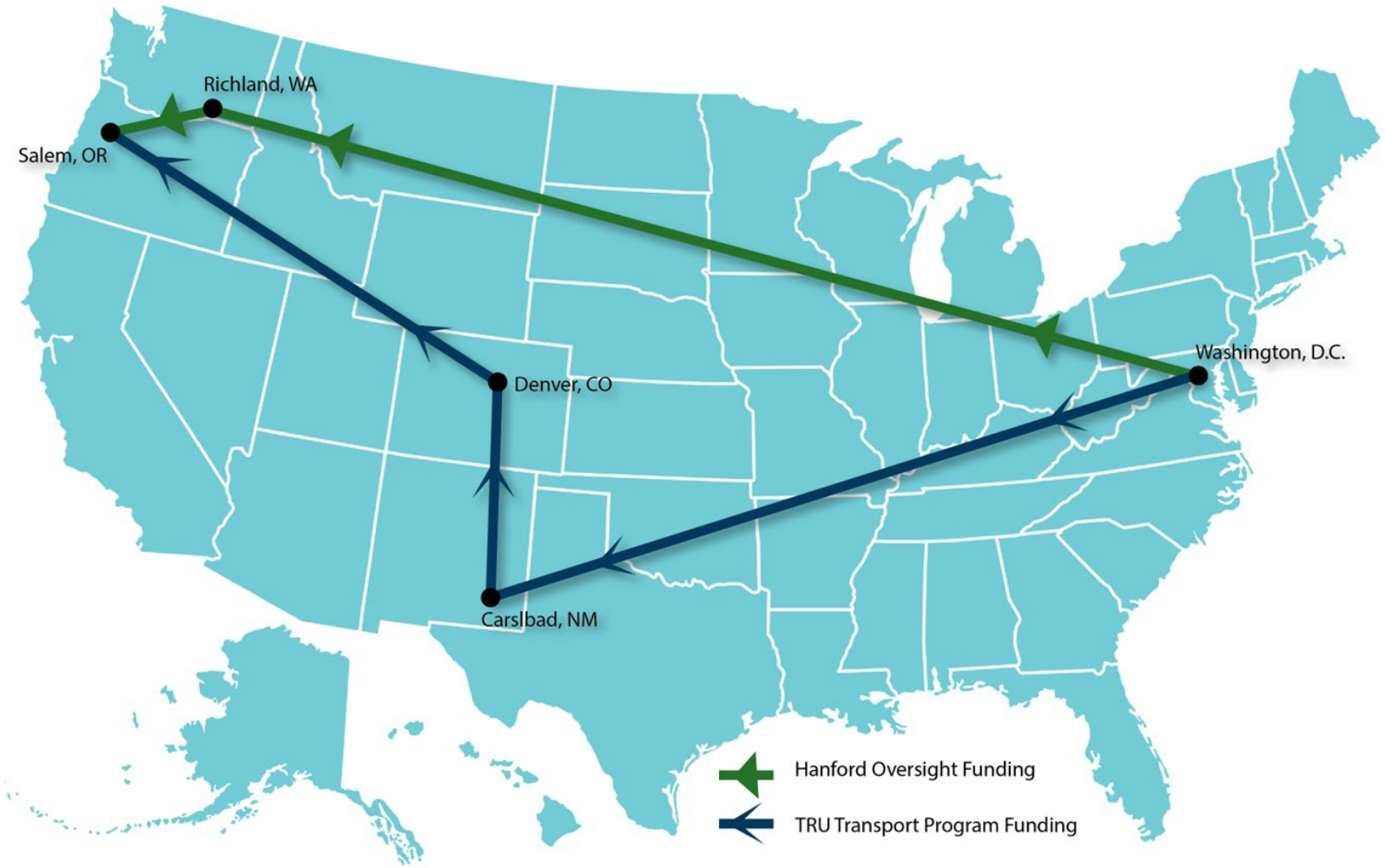
WIPP was designed to dispose of two kinds of TRU waste. Contact-handled (CH) TRU waste has a radiation dose rate not greater than 200 millirem (mrem) per hour, as measured at the surface of the waste container. Remote-handled (RH) TRU waste can have a dose rate up to 1,000 rem per hour. About 96 percent of the waste to be disposed of at WIPP is CH TRU waste. When transported, both RH and CH TRU waste have the same dose rate limit on the outside of the shipping casks due to lead shielding.

CH TRU waste barrels and boxes are stacked in rows on the floor of WIPP's underground disposal rooms, while RH TRU waste canisters are placed in boreholes drilled into the walls of the same rooms.

EMERGENCY PREPAREDNESS /RESPONSE

TODD CARPENTER
LICENSING MANAGER

DOE TRU Shipping Program Funding



EMERGENCY PREPAREDNESS /RESPONSE

TODD CARPENTER
LICENSING MANAGER

WIPP TAG – Waste Isolation Pilot Plant Transportation Technical Advisory Group

The WIPP TAG is a group of western state nuclear waste transportation officials who are involved in the movement of defense-generated transuranic waste to the Waste Isolation Pilot Plant, a repository mined in salt in New Mexico. The WIPP TAG works with the U.S. Department of Energy and others to identify and resolve issues as they arise, coordinate, and streamline shared activities, and do whatever else is needed to keep the WIPP transportation program running safely and without incident.

EMERGENCY PREPAREDNESS /RESPONSE

TOM PFAHLER
INSPECTOR, RSO

RPS Reorganization – Dedicated Lab Team

Brent Herring
Lead Worker
Health Physicist
Environmental Health Specialist 3

Michelle Martin
Health Physicist
Environmental Health Specialist 3

Daryl Leon
Health Physicist
Environmental Health Specialist 3

Rama Wusirika
Health Physicist
Environmental Health Specialist 3

Toby Irving
Health Physicist
Environmental Health Specialist 3

Thomas Pfahler
Health Physicist
Environmental Health Specialist 3

Sarah Brodesser
Health Physicist
Environmental Health Specialist 3

Richard Patterson
Health Physicist
Environmental Health Specialist 3

Thomas Mynes
Health Physicist
Environmental Health Specialist 3

Sarah Brodesser
Health Physicist
Environmental Health Specialist 3

Rama Wusirika
Health Physicist
Environmental Health Specialist 3

Toby Irving
Health Physicist
Environmental Health Specialist 3

Daryl Leon
Health Physicist
Environmental Health Specialist 3

NEW BUSINESS

DAVID HOWE
PROGRAM DIRECTOR

- Radiation Advisory Committee Member Training

PUBLIC COMMENTS

OREGON HEALTH AUTHORITY

THANK YOU FOR ATTENDING

Next Radiation Advisory Committee Meeting:

February 11, 2026