



OREGON
HEALTH
AUTHORITY



RADIATION ADVISORY COMMITTEE

October 14, 2026

Robert Berry, Chair

Todd Carpenter

Interim Program Director
Radiation Protection Services

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

Agenda



Public Health Division
Radiation Protection Services



RADIATION ADVISORY COMMITTEE MEETING

October 14, 2026 – Virtual Meeting 10 a.m. ~ 2 p.m.
800 NE Oregon Street, Room 612, Portland, Oregon
Phone-In Number 1-971-277-2343 ID: 281 551 10#

Registration/Public Session

*Action Item

Call Meeting to Order	
Introduction of Guests	Bob Berry
Approval of Minutes	
*RAC Members	Todd Carpenter
– Alicia Zambelli & Garrett Frey Term Ending 2026	
Staffing Transition	Erin DeSempie
Recruitment	

2026 RPS Program Updates

RPS Budget/Fee Increase	Todd Carpenter
Radioactive Material Licensing	Erin DeSempie
Fusion Update Report	

Exemption/Rules/Statutes

PET CT/SPEC CT clarification of performance evaluation requirements	Brent Herring
Informational Bulletin	
Vet Assistant Guidelines as Operators of CT & Fluoro Machines	Todd Carpenter
Clarification on Veterinary Rules	
RML Medical Event Language Correction	
Therapy Rules	Todd Carpenter
Evaluation of Radiation Safety Training Programs for Veterinary Facilities	Rich Patterson & Brent Herring
Executive Order 14300 update	Hillary Haskins

Emergency Preparedness/Response

Incidents & Allegations:	
Alarms for ODOE Waste and Scrap	Todd Carpenter

Public Comments

Announcements

Next meeting scheduled for February 10, 2027

Adjourned

Introduction of Staff and Guests



Approval of Meeting Minutes



Radiation Advisory Committee Members

Name	*First Term	Second Term	Third Term	Comments
Zambelli, Alicia	01/01/23-12/31/26			Vice Chair-1 st Term 01/01/25-12/31/26
Berry, Bob	01/01/20-12/31/23	01/01/24-12/31/27		Chair- 1 st term 01/01/25- 12/31/26
Livran, Mechele	01/01/25-12/31/28			
Hamby, David	05/07/20-12/31/23 Replaced M. Krahenbuhl	01/01/24-12/31/27		
Clayton, Jennifer	01/01/26-12/31/29			
Wood, Dennis	01/01/22-12/31/25	01/01/26-12/31/29		
Frey, Garrett	01/01/23-12/31/26			
Beaty, Krista	01/01/25-12/31/28 Replaced S. Sousa Melo			

*May be partial term due to replacing a member. Bylaws state a member can serve two full terms after the bylaws were adopted.

Terms Ending 12/2026

Alicia Zambelli

Garrett Frey

Staff Transition – Erin DeSemple

Recruitment Update

Timeline:

- Environmental Health Specialist (EHS) position for Licensing posted on August 27, 2026 and closed on September 10, 2026.
- Currently in the interview stage of the recruitment



2026 RPS Program Updates

Todd Carpenter



Budget Projections and Proposed Fee Increases

RPS Budget Projection with Current Fee Structure

Current Budget Projection

	2025-27	2027-29	2029-31
Projected Fee Revenue	6,682,070	6,682,070	6,682,070
Balance from Prior Biennium	(27,849)	(917,426)	(2,462,164)
Revenue Total	6,654,221	5,764,644	4,219,906
Projected Expenses	7,571,647	8,226,808	8,615,893
Remaining Balance	(917,426)	(2,462,164)	(4,395,987)

Increased fees will maintain budgetary solvency through the 29-31 biennium

Since 1989, RPS has implemented five user-fee increases

Last Fee Increase 2020

- Increased fees 50% for the X-ray program
- Increased fees 30% Radioactive Material License (RML).
- Increased fees 50% for RML licensees that did not have fee increases due to the previous statutory fee caps. Became effective 2022.
- Increase Tanning registration fees 16%.

Projected Budget with Fee Increases

	2025-27	2027-29	2029-31
Projected Fee Revenue	6,682,070	10,023,105	10,023,105
Balance from Prior Biennium	(27,849)	(917,426)	878,871
Revenue Total	6,654,221	9,105,679	10,901,976
Projected Expenses	7,571,647	8,226,808	8,615,893
Remaining Balance	(917,426)	878,871	2,286,083

Cost Reducing Practices

- Have reduced FTE positions from 22 to 17.
- Cross Training Team Members to provide regulatory practices for all RPS's programs.
- Implement Electronic Field Reporting System.
- Increase website access to the registrant's and licensee's documents. Shift operations from service assistant to self-service.
- Maintain two vacated positions.
- Decrease data base development fees.

Amend Statutory Language Relating to Licensing and Registration Fee Caps

RML \$5,000 to \$10,000 ORS 453.757(2); and
Tanning bed \$200 to \$500 ORS 453.729(2)

Proposed fees would be to maintain the three RPS programs and is not designed to expand services but to prevent further regulatory program erosion.

Projected Expenses

	2025-27	2027-29	2029-31
Personnel	5,596,478	6,150,973	6,458,523
S&S	477,439	476,661	499,994
Cost Alloc AD	368,546	368,546	368,546
Cost Alloc ID	1,129,184	1,230,628	1,288,830
Total	7,571,647	8,226,808	8,615,893

Proposed Administrative Fees

RML licensing non-refundable application fee in the amount of 25 percent of the license type fee. This fee is being proposed to demonstrate that an applicant is committed to ensuring that all request for information pertaining to licensing is being received in a timely manner. An application for a specific license becomes void if the authority requests additional information and an applicant does not provide the information within 90 days of the request. The fee will be refunded if RPS determines that a license is not necessary.

License amendment fee for each amendment requested in excess of three such requests within the annual certification period in the amount of 10 percent of the licensing fee. This fee is being proposed to reduce administrative time by having the licensee batch amendments when possible.

X-ray therapy and interventional device application fee to recover cost associated with planning review in the amount of 25 percent of the registration fee. The application fee would be for each newly installed device that requires a planning review. This fee program counterparts the RML application fee language.

Radioactive Material Licensing

Fusion Update Report - Erin DeSempole

- Regulatory framework for Fusion Machines is in the process with the Nuclear Regulatory Commission (NRC).
- Agreement states are responsible for regulatory practices for fusion machines.
- Radiation Protection Services (RPS) will adopt regulatory standards for facilities utilizing fusion machines within a couple years.
- More to come in the next couple years with this technology and the administrative rules to follow.

Exemptions/Rules/Statutes



Positron Emission Tomography (PET CT)/Single-Photon Emission Computed Tomography (SPECT CT) Clarification of Performance Evaluation Requirements – Brent Herring

SPECT /CT



Siemens Intevo



Philips Brightview XCT



GE Discovery NM/CT 670

PET / CT



Siemens mCT Flow



Philips Vereos



United Imaging uMI 780

PET / SPECT /CT



GE Discovery IQ



Toshiba Celesteion



Mediso Anyscan

Clarification Question on CT Acceptance Testing from Physicist

Oregon Administrative Rule (OAR) 333-106-345

- (1) OAR 333-106-0350 through 333-106-0369 (most if not all the CT rules) establishes requirements governing the use of CT scanners in the healing arts; and
- (2) Applies to all registrants who use a CT scanner for the intentional exposure of humans for diagnostic imaging.
- Seeking interpretation of (2) for the purposes of identifying which diagnostic CT scanners meet the requirement for initial acceptance testing under 333-106-0364(1) Initial and Annual Qualified CT Medical Physicist Scanner Performance Evaluations



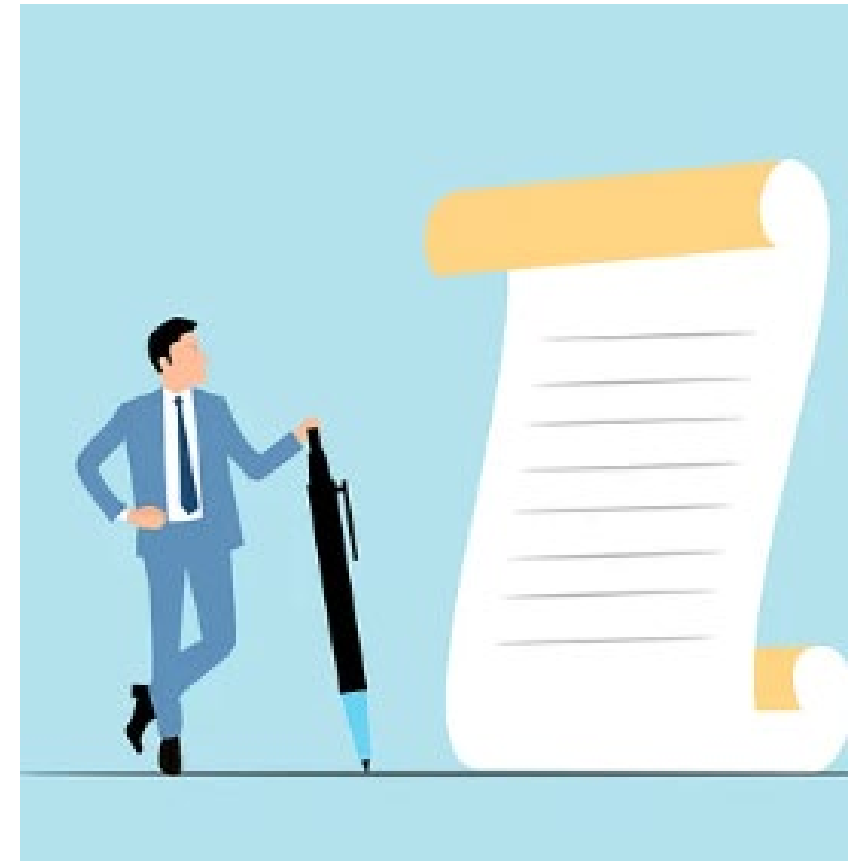
History of CT Rule Making

- Physicist states that when the CT section was originally broken out of x-ray requirements (2012 - 2013), the intent stated by RPS and the CT Working Group was to cover all CT scanners designed for diagnostic imaging. Some original wording included systems capable of diagnostic imaging, and as such, includes the CTs in the Single-Photon Emission Computed Tomography (SPECT-CT), Positron Emission Tomography (PET-CT) and radiotherapy treatment planning settings.



Current Rules

- The current wording in OAR 333-106-0345(2) uses "for diagnostic imaging".
- Many of the physicists' clients interpret this to mean any CT scan that is billed as a Radiology study. They believe that their treatment planning CT attached to their PET system is not subject to OAR 333-106-0364, even though treatment planning scans have higher Computed Tomography Dose Index (CTDI) than diagnostic radiology due to the need for excellent soft-tissue resolution for definition of the treatment volume.



Questions?

- Does the wording refer to CT scanners only located in departments of Radiology, in which procedures are billed as diagnostic imaging?
- Or does it apply to all CT scanners designed for diagnostic imaging; for example, CT tubes having milliamps (mA) tube currents?
- Physicists understand that CBCT and micro-Amp systems that use Rad/Fluoro tubes are not subject to this section.





CT and Fluoroscopy Machine Operator Requirements in Veterinary Facilities

Todd Carpenter



Informational Bulletin 2026-02

August 14, 2026

To: Veterinary Facilities

From: Todd Carpenter, Interim Program Director, Radiation Protection Services

SUBJECT: Clarification of Veterinary Rules Pertaining to Training Requirements for the Operation of Computed Tomography (CT) and Fluoroscopy Equipment.

The Public Health Division, Radiation Protection Services (RPS), is releasing this informational bulletin informing veterinary registrants and interested parties that Oregon Administrative Rules have recently been amended to provide regulatory guidance relating to veterinary CT and fluoroscopy operator training requirements. Oregon Administrative Rules (OAR) were amended to allow a licensed veterinarian or a certified veterinarian technician who has completed the required training to operate these imaging devices.

Recent written comments received during the rulemaking public comment period demonstrated the need to allow veterinary assistants to activate a CT or fluoroscopic X-ray tube. Amended rules do not address veterinarian assistants who are currently operating CT and fluoroscopic equipment or provide training guidance for future veterinary assistants.

This bulletin is generated to communicate that OAR 333-100-0025 allows for RPS upon its own initiative to grant exemption to administrative rule. Therefore, by meeting the training criteria within the directive listed below, will allow the registrant's veterinary assistant to operate CT and fluoroscopic equipment.

Current Operators

- Successfully complete the X-ray operator training requirements outlined in OAR 333-106-0055(5). Training must be completed by July 1, 2027.
- The registrant provides the assistant with a letter signed by a veterinarian attesting to the type of imaging device's make and model being operated; and complete at least one year's experience activating a CT or fluoroscopic X-ray tube.

Future Operators

- Computed Tomography
 - Successfully complete the X-ray operator training requirements outlined in OAR 333-106-0055(5).

Fluoroscopic and Computed Tomography (CT) Operator Training for Veterinary Assistant (VA)

- Complete training requirements as outlined in OAR 333-106-0055 and 333-106-0370 (CT) or 333-106-0205 (fluoroscopic)
- Complete the manufacturers applications training

VA currently operating CT or fluoroscopic machines

- Successfully complete the X-ray operator training requirements outlined in OAR 333-106-0055(5). Training must be completed by July 1, 2027.
- The registrant provides the assistant with a letter signed by a veterinarian attesting to the type of imaging device's make and model being operated; and complete at least one year's experience activating a CT or fluoroscopic X-ray tube.

Role Definitions for Certified Veterinary Technician (CVT), Veterinary Technician and Veterinary Assistant

Certified Veterinary Technician (CVT)

Scope of Work

Role: A credentialed member of the veterinary team who assists with patient exams, anesthesia, surgical preparation, laboratory testing, and diagnostic imaging.

Restricted Duties: Only CVTs and veterinarians can perform specific tasks in Oregon, such as inducing anesthesia, performing dental extractions, or administering the rabies vaccine.

Supervision: They operate under the direct or indirect supervision of a licensed Oregon veterinarian depending on the specific clinical task

Maintenance: Renew certification annually and complete 15 hours of continuing education every two years.

Veterinary Technician

Scope of Work

Clinical Tasks: They gather patient histories, run laboratory tests, take X-rays, prep animals for surgery, and administer authorized medications or vaccines.

Restrictions: Uncertified staff cannot perform specific high-risk tasks like inducing anesthesia, doing dental extractions, or giving rabies vaccines

Veterinary Assistant

Scope of Work

Patient Care: Feed, exercise, and monitor hospitalized or recovering animals.

Procedure Support: Restrain animals during exams, blood draws, and treatments, and help prepare surgical rooms.

Facility Maintenance: Clean and disinfect cages, exam tables, and surgical instruments.

Administrative Tasks: Schedule appointments, greet clients, and manage patient records

Oregon Administrative Rule 333-106-0001

Purpose and Scope

This Division establishes requirements, for which a registrant is responsible, for use of X-ray equipment by or under the supervision of an individual authorized by and licensed in accordance with state statutes to engage in the healing arts or veterinary medicine.

The provisions of this Division are in addition to, and not in substitution for, other applicable provisions of these rules.

Oregon Administrative Rule 333-106-0345

Purpose and Scope

- (1) OAR 333-106-0350 through 333-106-0369 establishes requirements governing the use of computed tomography (CT) scanners in the healing arts; and
- (2) Applies to all registrants who use a CT scanner for the intentional exposure of humans for diagnostic imaging.

GENERAL TECHNICAL CT REQUIREMENTS IN VETERINARY CLINICS

Machine Physics Report

An Oregon approved CT medical physicist shall complete an initial performance evaluation before first use and annually thereafter. A performance evaluation also needs to be completed after any change in the equipment which might cause a change in radiation output or image quality by a CT medical physicist.

Shielding Study

A shielding survey will also need to be completed by a CT medical physicist. Any change in placement of the CT machine changes the shielding requirements. If your machine is on wheels, you need to be very specific about what you plan to do with it.

GENERAL TECHNICAL FLUOROSCOPY REQUIREMENTS IN VETERINARY CLINICS

Machine Physics Report

An Oregon approved Medical Physicist must complete an initial performance evaluation before first use and annually thereafter. A performance evaluation also needs to be completed after any change in the equipment which might cause a change in radiation output or image quality by a medical physicist.

Shielding Survey

Will need to be completed by an Oregon approved Medical Physicist. Any change in placement of the fluoroscopy machine changes the shielding requirements. If your machine is on wheels you need to be very specific about what you plan to do with it.

Veterinary CT and Fluoroscopy Clarification – Brent Herring



- Recent questions from registrant
 - Where are these requirements listed in the rules?
 - How can RPS enforce the current rules?
 - Rules state “humans.” No mention of animal or veterinary.
 - How are registrants supposed to know this?
 - Where does animal research, medical school training, and animal industrial CT and fluoroscopy fall into these rules?

Where are these requirements listed in rules?

RPS Response

- Currently there are no such requirements related to veterinary CT and fluoroscopy stated in our rules. We have been relying on the medical (human) rules until we have completed rule changes.

CT and Fluoroscopy Clarification

How can RPS enforce the current CT rules when it states “humans” and no mention of animal or veterinary?

RPS Response

- Yes, our rule state 333-106-0345
 - (1) OAR 333-106-0350 through 333-106-0369 (most if not all the CT rules) establishes requirements governing the use of CT scanners in the healing arts; and
 - (2) Applies to all registrants who use a CT scanner for the intentional exposure of humans for diagnostic imaging.
- RPS have been using the medical rules for regulation because there are no specific veterinary rules for guidance and radiation protection. RPS regulation has been more education and follow up as apposed to violations under 333-106-0345. Plan review and shielding fall under different rules.

How are registrants supposed to know this if it is not listed in the rules?

RPS Response

- RPS has been contacting facilities that currently machines registered to inform them of the rules they need to follow. We have also been contacting registrants that have recently registered new machines as well.

CT and Fluoroscopy Clarification

Where does animal research, medical school training, and animal industrial CT and fluoroscopy fall into current and proposed rules?

RPS Response

- With the possible complexities and differences of operations listed above each operation would have reviewed on a case-by-case basis using the current and proposed rules.

Radioactive Material Licensing Medical Event Language Correction



OAR 333-116-1000
Report and Notification of a
Medical Event

Todd Carpenter

Therapy Rules

Todd Carpenter



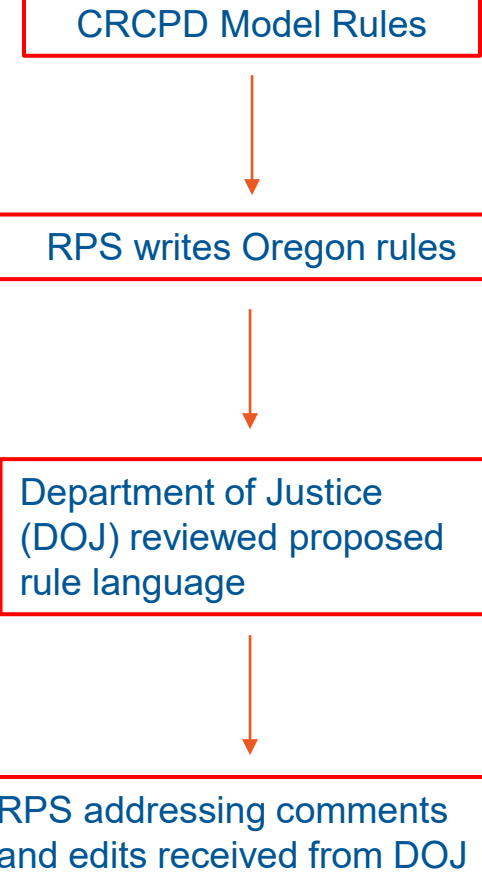
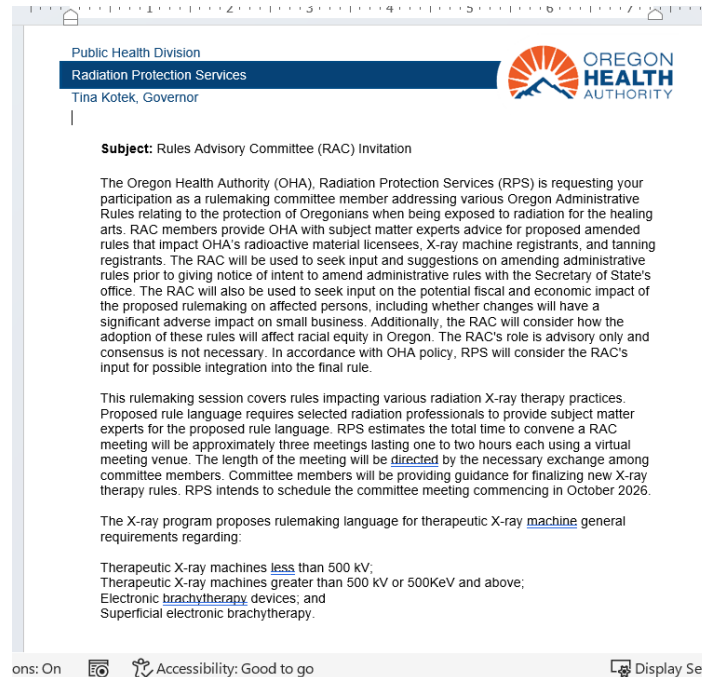
Division 108

THERAPEUTIC RADIATION MACHINES

OAR 333-108-0002

Purpose and Scope

- (1) This division establishes requirements for registrants of therapeutic radiation machines. Nothing in this division relieves the registrant from complying with other applicable federal, state and local regulations.
- (2) The use of therapeutic radiation machines shall be by, or under the supervision of an authorized physician who meets the definition in OAR 333-108-0006(4)(a) or (b).



Evaluation of Radiation Safety Training Programs for Veterinary Facilities

Richard Patterson and Brent Herring



Evaluation of Radiation Safety Programs for Veterinary Facilities

Current Process



Vendor submits

- Course materials (handouts, slideshow, etc.)
- Quizzes and Tests
- Proposed instructors (have to be approved)

RPS Role

- Review all materials submitted and ensure instructors are qualified
- All information is reviewed for accuracy, flow, and ease of understanding
- Communication sent back to vendor on areas needing attention and/or correction
- Takes at least 3 submission attempts before approval is granted
- Approval conditions:
 - No changes can be made without prior approval
 - All new instructors must be submitted and reviewed

Current Issues and the Future

- The reviews take up a lot of an inspector's time
 - Some courses are 300+ slides
- Reviews can take up to a year
- No fee charges
- Looking to expand approval process to higher education institutions and Oregon approved health physicists



Executive Order 14300 Update - Hillary Haskins



Emergency Preparedness/Response



Incidents and Allegations

RPS Responses to Portal Alarms for Oregon Department of Energy for Waste and Scrap

Since the last Radiation Advisory Committee Meeting : 8 Alarms

Scrap Metal Alarms: 3

Medical Waste Alarms: 5

4 Alarms Responses for Lutetium 177 (Lu-177)

1 Alarm Response for Iodine 131 (I-131)

PUBLIC COMMENTS



ANNOUNCEMENTS



Next meeting is scheduled for
February 10, 2027

