## Radiation Advisory Committee Meeting

October 11, 2023

#### Attending:

Radiation Advisory Committee Members

David Hamby - OSU Emeritus in Health Physics & Nuclear Engineering

Dennis Wood – Medical Physicist at Bay Area Hospital, Coos Bay

Saulo Sousa Melo - Oral Maxillofacial Radiologist at OHSU School of Dentistry

Robert Berry – Nuclear Medicine Lead & Radiation Safety Officer at Providence Portland Medical Center and East Portland

Garrett Frey – Safety Manager, Radiation Safety Officer @ KnifeRiver (Industrial)

Alicia Zambelli – Veterinarian & Co-owner of Fern Hill Veterinary Care in Happy Valley

Barbara Smith – Portland Community College Instructor in Radiologic Technology, Retired

Mandy Henrikson – COO of Palm Beach Tanning

#### **Radiation Protection Services**

Alex Parker	Brent Herring	Todd Carpenter	Dong Lim
David Howe	Hillary Haskins	Michelle Martin	Toby Irving
Rama Wusirika	Judy Smith	Patty Thompson	Tom Mynes

Lee Lind Rich Patterson Daryl Leon

#### <u>Guests</u>

Thomas King – Oregon Board of Medical Imaging

Catherine Hess – Radiation Safety Officer, Legacy Health Systems

Betty Brown – Portland Open Bible Community Pantry representing Community Based Organizations

Maggie Leach – company representative which provides goods and services to law enforcement and correctional facilities

## Approval of the Minutes from June 14, 2023 - Barb Smith

Motioned by Bob Berry Second by Garrett Frey Minutes approved

### Nomination of 2024 RAC Member Candidates for Re-Appointment by OHA Director – David Howe

- David Hamby Oregon State University Emeritus in Health Physics and Nuclear Engineering; CEO Renaissance Code Development
- Robert Berry Nuclear Medicine Lead and Radiation Safety Officer at Providence Portland Medical Center

Motion by Garrett Frey

Second by Mandy Henrikson

Nominations approved for forwarding to OHA Director for appointment consideration.

#### <u>Staffing and Organizational Changes – David Howe</u>

- Public Health Division Director Rachel Banks is resigning from her position. The current Deputy Public Health Director, Cara Biddlecom, will serve as Interim Director until a national search has been completed to fill the permanent Public Health Division Director vacancy. The Senior Operations Manager, Kirsten Aird will become the interim Deputy Public Health Director. Wendy Polulech from the Public Health Director's office will become the interim Senior Operations Manager.
- RPS is hosting NRC Intern, Mary Casto from September 25, 2023 to November 17, 2023
- RPS has one vacant authorized position (Environmental Health Specialist 3) created by Hillary Haskins being selected as the RPS Operations/Emergency Response Manager. RPS is evaluating funding capacity to fill the vacancy.

#### **Budget – Todd Carpenter**

#### RPS Fiscal Budget July 1 2022 through June 30, 2023

	Payroll WD	Payroll ePay					
Budget Period	Beginning Balance	Revenue AY23/Budget	Accrued Revenue	Expenditure	Remaining Balance	% Spent	% Budget Period
7/1/2021-6/30/2023	(1,132)	10,888		19,894	(10,138)	183%	100%
7/1/2021-6/30/2023	74	3,339,227		3,401,888	(62,586)	102%	100%
7/1/2021-6/30/2023	(179,213)	2,256,304		2,233,725	(156,634)	99%	100%
7/1/2021-6/30/2023	59,967	393,559	10,580	262,773	190,753	67%	100%
7/1/2021-6/30/2023	1,922	-	-	-	1,922	-	88%
7/1/2021-6/30/2023	19,249	20,000		7,039	32,210	35%	100%
1/1/2021-12/31/2022	70,353	18,400		5,319	83,434	29%	100%
7/1/2019-6/30/2023	(7,824)	112,000	-	141,042	(36,866)	126%	100%
7/1/2022-6/30/2023		277,992	-	65,108	212,884	23%	100%
5/1/2021-6/30/2022	243,568	289,755	-	330,479	202,843	114%	100%
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	7/1/2021-6/30/2023 7/1/2021-6/30/2023 7/1/2021-6/30/2023 7/1/2021-6/30/2023 7/1/2021-6/30/2023 7/1/2021-6/30/2023 1/1/2021-12/31/2022 7/1/2019-6/30/2023 5/1/2021-6/30/2023 Total O Total G Total F	Budget Period Beginning Balance  7/1/2021-6/30/2023 (1,132)  7/1/2021-6/30/2023 74  7/1/2021-6/30/2023 (179,213)  7/1/2021-6/30/2023 59,967  7/1/2021-6/30/2023 1,922  7/1/2021-6/30/2023 19,249  1/1/2021-12/31/2022 70,353  7/1/2019-6/30/2023 (7,824)  7/1/2022-6/30/2023  5/1/2021-6/30/2022 243,568	Budget Period         Beginning Balance         Revenue AY23/Budget           7/1/2021-6/30/2023         (1,132)         10,888           7/1/2021-6/30/2023         74         3,339,227           7/1/2021-6/30/2023         (179,213)         2,256,304           7/1/2021-6/30/2023         59,967         393,559           7/1/2021-6/30/2023         1,922         -           7/1/2021-6/30/2023         19,249         20,000           1/1/2021-12/31/2022         70,353         18,400           7/1/2019-6/30/2023         (7,824)         112,000           7/1/2022-6/30/2023         277,992           5/1/2021-6/30/2022         243,568         289,755           Total OF (35,472)         6,139,490           Total GF         -         -           Total FF 243,568         567,747	Budget Period         Beginning Balance         Revenue AY23/Budget         Accrued Revenue           7/1/2021-6/30/2023         (1,132)         10,888           7/1/2021-6/30/2023         74         3,339,227           7/1/2021-6/30/2023         (179,213)         2,256,304           7/1/2021-6/30/2023         59,967         393,559         10,580           7/1/2021-6/30/2023         1,922         -         -           7/1/2021-6/30/2023         19,249         20,000         -           1/1/2021-12/31/2022         70,353         18,400         -           7/1/2019-6/30/2023         (7,824)         112,000         -           7/1/2022-6/30/2023         277,992         -           5/1/2021-6/30/2022         243,568         289,755         -           Total OF         (35,472)         6,139,490         10,580           Total GF         -         -         -           Total GF         -         -         -           Total FF         243,568         567,747         -	Budget Period         Beginning Balance         Revenue AY23/Budget         Accrued Revenue         Expenditure           7/1/2021-6/30/2023         (1,132)         10,888         19,894           7/1/2021-6/30/2023         74         3,339,227         3,401,888           7/1/2021-6/30/2023         (179,213)         2,256,304         2,233,725           7/1/2021-6/30/2023         59,967         393,559         10,580         262,773           7/1/2021-6/30/2023         1,922         -         -         -           7/1/2021-6/30/2023         19,249         20,000         7,039           1/1/2021-12/31/2022         70,353         18,400         5,319           7/1/2019-6/30/2023         (7,824)         112,000         -         141,042           7/1/2022-6/30/2023         277,992         -         65,108           5/1/2021-6/30/2022         243,568         289,755         -         330,479           Total OF (35,472) (6,139,490         10,580         6,051,786           Total GF	Budget Period         Beginning Balance         Revenue AY23/Budget         Accrued Revenue         Expenditure         Remaining Balance           7/1/2021-6/30/2023         (1,132)         10,888         19,894         (10,138)           7/1/2021-6/30/2023         74         3,339,227         3,401,888         (62,586)           7/1/2021-6/30/2023         (179,213)         2,256,304         2,233,725         (156,634)           7/1/2021-6/30/2023         59,967         393,559         10,580         262,773         190,753           7/1/2021-6/30/2023         19,249         20,000         7,039         32,210           1/1/2021-12/31/2022         70,353         18,400         5,319         83,434           7/1/2019-6/30/2023         (7,824)         112,000         -         141,042         (36,866)           7/1/2022-6/30/2023         277,992         -         65,108         212,884           5/1/2021-6/30/2022         243,568         289,755         -         330,479         202,843           Total GF         -         -         -         -         -         -         -           Total GF         -         -         -         -         -         -         -         -	Budget Period         Beginning Balance         Revenue AY23/Budget         Accrued Revenue         Expenditure         Remaining Balance         % Spent           7/1/2021-6/30/2023         (1,132)         10,888         19,894         (10,138)         183%           7/1/2021-6/30/2023         74         3,339,227         3,401,888         (62,586)         102%           7/1/2021-6/30/2023         (179,213)         2,256,304         2,233,725         (156,634)         99%           7/1/2021-6/30/2023         59,967         393,559         10,580         262,773         190,753         67%           7/1/2021-6/30/2023         1,922         -         -         -         1,922         -           7/1/2021-6/30/2023         19,249         20,000         7,039         32,210         35%           1/1/2021-12/31/2022         70,353         18,400         5,319         83,434         29%           7/1/2019-6/30/2023         (7,824)         112,000         -         141,042         (36,866)         126%           7/1/2022-6/30/2023         277,992         -         65,108         212,884         23%           5/1/2021-6/30/2022         243,568         289,755         -         330,479         202,843         11

### <u>Electronic/Tanning Inspection Update – Brent Herring</u>

- Inspections since last RAC meeting
  - o 347 X-ray inspections (medical, dental, vet, therapy, MQSA and industrial)
    - 1234 machines
    - 1241 tubes
  - 16 tanning inspections
- Violation Summary (most prevalent)
  - X-ray
    - Not registering machines
    - Dental operators not completing machine specific applications training
- Tanning
  - Timers not being checked annually for accuracy
  - Emergency shut-offs not being tested annually

- Acquisition of New X-ray Detectors and Lumbar Phantoms
  - 12 new RadCal detectors to replace outdated Unfor detectors (no longer be serviced at the end of 2023)
  - o 8 new lumbar phantoms for on-site inspections

### RML Program Update - Hillary Haskins

Activity from June 1 to September 30, 2023

- 40 completed inspections
- 11 closed licensing actions
- 21 closed incidents
- 13 open incidents

## IMPEP (Integrated Material Performance Evaluation Program) Pending Periodic Meeting — Hillary Haskins

The Periodic Meeting is a mid-cycle federal audit process that our radioactive materials licensing program completes as a part of the 5-year IMPEP formal audit cycle. Various performance indicators are reviewed including staff training, quality of inspections, licensing actions, and incident/allegation response, and license compatibility. RPS staff are preparing for the scheduled Feb. 22, 2024 Periodic Meeting with two NRC staff.

#### **Emergency Response/Incident Highlights – Hillary Haskins**

- Stolen Portable Gauge
  - June 6, 2023- a truck containing a portable moisture-density gauge was stolen from a job site in Portland. It was recovered a short time later by Salem law enforcement.
- Damaged Portable Gauge
  - July 7, 2023- a portable gauge was struck/damaged by an on-site construction vehicle
  - There was no contamination or injuries
- Multiple waste/scrap facility portal monitor alarms- involving medical I-131 and Lu-177 and scrap metal

#### **RPS Training Update – Hillary Haskins**

Date	Conferences, Trainings and Events		
July 13 <sup>th</sup>	Gryphan Scientific – Grace Adams presenting on When to Evacuate & Decontamination		
July 24-26 <sup>th</sup>	ICS 300: Intermediate Incident Command System for Expanding Incidents		
Aug 7-10 <sup>th</sup>	Organization of Agreement States Annual Meeting – Seattle, WA		
Aug 8-9 <sup>th</sup>	ICS 400: Advanced Incident Command Systems for Complex Incidents		
Aug 14-18 <sup>th</sup>	NRC (S-201) Materials Control & Security, Albuquerque, NM		
Aug 21-24 <sup>th</sup>	NRC (G-109) Licensing Course, Chattanooga, TN		
Aug 21-25 <sup>th</sup>	REP Executive Course, Monterey, CA		
Aug 28-31 <sup>st</sup>	MARSSIM course		
Sept 19-21st	102 <sup>nd</sup> National Guard Civil Support Team Evaluated Drill – Chemeketa Community College in		
	Salem		
Sept 25-Nov 17 <sup>th</sup>	NRC Intern Rotation		
Sept 25-29 <sup>th</sup>	NRC (H-130) Environmental Sampling		
Sept 27 <sup>th</sup>	102 <sup>nd</sup> National Guard Civil Support Team Hazmat/Radiation Presentation –		
	Tualatin Valley Training Center		
Oct 10 <sup>th</sup>	U.S. Navy invitation to inspect reactor compartment packages Ex-Dallas (SSN700) –		
	Bremerton, WA		

#### **Exemptions/Rules/Statutes**

### <u>Year-To-Date Number of Exemptions (a higher number than normal) – Brent Herring</u>

- 29 Exemptions as of end of September 2023 (17 new and 12 amended exemptions)
- Previous years

2022 - 10 exemptions 2019 - 10 exemptions 2021 - 2 exemptions 2018 - 11 exemptions 2020 - 5 exemptions 2017 - 5 exemptions

## <u>Biology Guided Radiotherapy (BGRT) Operator Training Requirement Review – Brent Herring</u>

- BGRT is a new technology approved by FDA earlier this year and was presented at the June 2023 RAC meeting. Because BGRT involves both PET/CT and LINAC, operator training requirements are an issue. RPS staff have determined there are two options.
- The first option is to require two operators, a Radiologic Technologist (RT-T) for LINAC and a Certified Nuclear Medicine Technologist (CNMT) for PET/CT.
- The other option is to allow one operator. RPS staff believe this can happen if a Radiation Therapist meets the Oregon Administrative Rules (OARs) for PET/CT operators. Operators that are qualified to perform nuclear medicine component (CNMT's) that are licensed through Oregon Board of Medical Imaging (OBMI). The restricting factor is on the LINAC side, where only radiation technologists and therapists can be operators. Having a single operator, would require an RT-T to work under an authorized user similar to what we have under the nuclear medicine side. They would need to have basic radiation safety training, plus 40 hours specific to PET.
- Oregon Board of Medical Imaging advised RPS that their existing rules do not allow for one operator. OBMI has a rules advisory committee that has been enabled to look at emerging technology. Current OBMI rules require that, if you're going to operate in a modality, you need to be credentialed in the modality.

# <u>Clear Choice Dermatology Superficial Brachytherapy Machine Operation Update – Brent Herring</u>

- At the June, 2023 RAC meeting, there was a presentation and exemption request from Clear Choice Dermatology relating to use of a new superficial brachytherapy machine. The request was to allow the dermatologist to provide general supervision, versus direct supervision of the Radiologic Technician serving as the operator. RAC recommended denying the exemption and RPS staff concurred.
- Following the RAC meeting, RPS staff worked with Clear Choice Dermatology to ensure adherence to OAR facility/machine, dermatologist and operator requirements. Even though Clear Choice had been using the machine, they still needed to submit

documentation on Authorized User (Dermatologist)/Operator training and floor plans. There were issues with the floor plan, including where the machine and cutoff switch tied into room doors, etc. After Clear Choice submitted requested documentation, RPS gave approval at the end of August 2023 for direct supervision and machine operation. A follow up RPS inspection is slated for the end of 2023.

#### Clinic of Dermatology & Wellness (Skincure Oncology) - Brent Herring

 This Medford dermatology facility acquired the same device being used by a registrant in Bend, Oregon. The facility submitted all proper documentation regarding operator training and device registration. RPS gave approval at the end of June 2023 to use the device including direct supervision and business operation requirements. An RPS first inspection was recently performed.

### New Vendor Application for Medical Physicists Pre-2007 – Brent Herring

RPS received an application for a medical physicist to work in the State of Oregon. OAR 333-123-0015(2) states that the medical physicist must be board certified. There is an exemption for Medical Physicists being Board certified who have been working prior to January 1, 2007 and have been actively working in therapeutic radiation in the State of Oregon. The first application was denied because the Medical Physicist had left Oregon and worked in Nevada. The application was resubmitted and reevaluated. Based upon documented education and work history from Nevada and Oregon, RPS granted an approval based on the pre-2007 exemption date.

### <u>GoHealth Facility Exemption Violation & Corrective Action – Brent Herring</u>

- Exemption 375 Originally, GoHealth was granted an exemption, on Nov. 5, 2015, from rule 333-106-0045(4) which states portable or mobile x-ray equipment shall be used only for examinations where it is impractical to transfer the patient(s) to a stationary x-ray installation due to the medical status of the patient or inability of the patient to be left alone during the imaging procedure.
- Exemption conditions included:
  - Completion of shielding studies on each treatment room
  - Shielding studies must be performed by qualified expert
  - Shielding studies must be submitted to RPS for approval prior to putting x-ray machine in clinical use
  - Shielding study must address all items in 333-106-0120 (Information on Radiation Shielding for Plan Review)
  - If shielding study indicates additional shielding is needed, then GoHealth must follow recommendations before x-ray machine use
- 2023 facility inspections found that six new facilities had not completed/submitted shielding studies to RPS. RPS subsequently notified GoHealth that they were in violation of their exemption.
- GoHealth then submitted new shielding plans.
- Recent inspections found other violations to the exemption. It was noted that primary x-ray beams were being aimed at secondary shielded walls or walls with no lead protection.
- RPS notified GoHealth that based on their second exemption violation they were now subject to possible fines and loss of the exemption.
- An RPS meeting was conducted with GoHealth corporate representatives where they submitted corrective actions accepted by RPS, including:.

- Only primary shielded walls will be used
- o A shielding study will be used as a guide for each treatment room
- A map of each room will be used to ensure proper machine use
- All techs will be trained on the use of machines in each room
- o RPS will visit each facility within the following weeks to verify compliance

## <u>Direct vs. Personal Supervision of Radiologic Technologists in Fluoroscopic Procedures – Brent Herring</u>

 This subject was brought up earlier this year at a RAC meeting. OAR 333-106-0205(4)(c) states that Radiologic Technologists (RT's) who have a permanent or temporary license from OBMI to practice radiography may operate fluoroscopic equipment under the personal or direct supervision of a radiologist or a non-radiologist practitioner who has had proper training tin the use and operation of fluoroscopic x-ray equipment. RPS inspectors are encountering situations where medical facilities are using a radiologist as the direct (in the building) supervisor of radiologic technicians and/or non-radiologist practitioners who do not have fluoroscopy training who are supervising radiologic technicians in the treatment rooms. Because it is unreasonable to assume a radiologist can provide adequate direct supervision of one or more RT's from another part of the facility, while performing their own professional radiology responsibilities, RPS staff are proposing to require personal (in the treatment room) supervision of RT's. This would mean removing "or direct supervision" language from RPS OAR's. The practical result is that all non-radiologist practitioners would need fluoroscopy training in order to provide personal supervision (in the room) of radiologic technicians since they are responsible for directing the RT to activate the fluoroscopy machine causing exposure to patients. RAC supported/recommended the RPS proposal requiring all non-radiologist practitioners to complete state-approved fluoroscopy training.

# <u>Tanning Rules – Installer with Electricians License Requirement Clarification – Brent Herring</u>

A tanning bed servicer (vendor) asked for clarification about OAR 333-119-0100(4) which
states that all persons hired for servicing and repair of tanning devices shall have a State
of Oregon Electricians' License. The vendor questioned why a licensed electrician was
required to install a tanning machine and/or replace tanning device parts. RPS' rule
interpretation is that a licensed electrician is only required for electrical circuit/box work
and not for a machine installations and maintenance (e.g., replacing bulbs or acrylics).
RPS is considering a rule amendment to provide more clarity.

### **Emergency Preparedness/Response Update - Hillary Haskins**

- RPS staff participated in a Puget Sound Naval Shipyard Nuclear Core Compartment Inspection and Tour
- RPS staff supported an Oregon National Guard Civil Support Team Evaluated Drill held at Chemeketa Community College on September 19, 2023
- RPS has purchased (2) Ortec RADEAGLET Radioisotope Identification Devices (RIID's) for performing emergency response assays and (12) New RadCal Accu-Gold Touch X-ray Detectors for completing on-site facility inspections.

- RPS is pursuing funding options (Oregon Emergency Management/FEMA/DHS/ODOE) to acquire new Personal Electronic Dosimetry for Emergency Response Team (ERT) members
- RPS participated in a Civil Support Team/FBI/Hazmat Vehicle Rollover Scenario Drill
  which included the OSFM Hazmat team, FBI WMD Coordinator; FBI Bomb Techs, Oregon
  State Public Health Laboratory, RPS, CBRN Enhanced Response Force Package (CERFP)
- There have been recent media articles about Fukushima Tritium Releases into the Pacific Ocean. Resources include:
  - Statement from US State Department link
    - https://www.state.gov/government-of-japans-announcement-onfukushima-treated-water-release-decision/
  - o International Atomic Energy Agency (IAEA) link
    - https://www.iaea.org/topics/response/fukushima-daiichi-nuclearaccident/fukushima-daiichi-alps-treated-water-discharge

#### **New Business – David Howe**

- Upcoming 2023/2024 Training and Events 2023
  - December 11-14<sup>th</sup> NRC G-109 Licensing Course offered by RPS staff
     2024
    - o February 6-7<sup>th</sup> CGS FEMA evaluated dress rehearsal
      - Ingestion Pathway Exercise
    - February 22<sup>nd</sup> NRC IMPEP Periodic Meeting
    - March 26-27<sup>th</sup> CGS FEMA evaluated full exercise
- Send out of RPS Information Bulletin to Mammography Facilities regarding Patient Dense Breast Tissue Notification which allows language from either RPS or FDA; after September 10, 2024, only FDA language will be permitted.

#### **Public Comment**

- No Public Comments
- Next RAC meeting is February 14, 2024
- Meeting adjourned at 12:45 pm