ADAMS Accession # **ML24199A072**

From: Mary Hennings Frank
To: R4Enforcement
Subject: [External_Sender] Report 030-39216/2021-002 and 4-2019-007 Avera McKennan
Date: Monday, June 17, 2024 11:39:22 AM
Attachments: Radiation Safety Observation 2024.docx
Importance: High

To Whom It May Concern:

I wanted to inform you that I have revised the "Field Observation Program" audit form. This will take effect upon the NRC's approval.

Please let me know what other information you may need to complete this order.

Kind Regards,

Mary Hennings-Frank

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RADIATION SAFETY EVALUATION

Employee Name: _____
Employee Signature: _____
Employee Job Title: _____
Date: _____
Signature of RSO: _____
Announced Visit: Y N

Competency	Questions to ask	Competent	Comments
Technologist follows Time, Distance and Shielding for safe use and handling of RAM (ALARA)	Demonstrate your choice for shielding (example: Dose Carrier; L-Shield; Syringe shield)	Yes No	
Gloves being used while handling RAM?	When should you be wearing gloves? (Ex: Patient IV, RAM, eggs)	Yes No	
Technologist is aware of the emergency procedure instructions for a radioactive spill and where the form is located.	When do you fill-out a spill report? (Ex: when the trigger limit is exceeded in any area. Restricted areas > 1.0 mR/hr or Unrestricted areas > 0.1 mR/hr)	Yes No	
Spill Kits	Where are they located?	Yes No	
Spill report	Where is the spill report located? (Q-Drive or in the Inspection Book or call RSO)	Yes No	

Technologist can describe the process of a spill clean up and also show where this is posted.	**NOTIFY**: Persons in the area that a spill has occurred. Then notify the RSO/Manger PEVENT THE SPREAD: cover the spill with absorbent paper **PRE-CLEAN UP**: Determine radiation levels prior to deep cleaning **CLEAN UP:** Wear gloves and protective clothing Carefully fold the absorbent paper. Place in radioactive storage for decay. **SURVEY & WIPE:** the area with a low-range radiation detector survey meter. Check the area, hands, clothing, shoes, etc. for contamination. Perform swipe tests t measure removable contamination. **REPORT:** The incident to the RSO	Yes No	
Technologist is wearing personal Dosimeter monitoring devices.	Collar at collar Waist at Waist Ring	Yes No	
Syringes and Vials containing radioactive material is properly labeled and shielded!	Patient names are on the label/Isotope/activity/expiration/etc.	Yes No	
Food or drink in a restricted area!	What is considered a Restricted Area? Any area that reads > 2 mrem (0.02 mSv)n 1 hour or 100 mrem (1 mSv) in 1 year	Yes No	
Technologist is able to access radiation policies and procedures!	Q-Drive	Yes No	
Show me the procedure for performing daily flood and bars! Where can you find the written procedure?	In Nebraska it is in the Inspection Book	Yes No	
Show me the procedure for COR. Where can you find this procedure?		Yes No	
What would you do if the camera malfunctioned and started to come down on the patient?	Find the emergency shut off for the camera. Where is this? Show all.	Yes No	

Is there adequate control to prevent unauthorized individuals from entering restricted area?	Technologist present at all time? Doors are locked when unoccupied.	Yes No	
Demonstrate blocking and bracing of the RAM.	Demonstrate how you place the ammo can in the bracket and thread the bungee through the handle of the can and attach it to a sturdy surface.	Yes No	
Where do you keep the BOL when you are driving?	The BOL is kept within reach of the driver. Usually, passenger seat or driver door.	Yes No	
Where do you place the BOL when you have to leave the vehicle with doses left in the back?	When you have to leave your locked car with doses inside, place the BOL paperwork on the driver's seat.	Yes No	
How often do you need to take the DOT Training?	DOT training is needed every three years unless you ship by air. Then you need it every two years.	Yes No	
How big of an area do you wipe on your package?	300 cm2 if you are talking DOT, otherwise it is 100 cm2 (daily survey). About the size of a dollar bill.	Yes No	
Show me how you convert from cpm to dpm?	(cpm x efficiency) = dpm	Yes No	
When you first get to you site or location, what is the first thing that you, instrument wise, before the start of the day?	Perform battery and constancy check on the survey meter.	Yes No	
What if the battery does not spike?	Check batteries	Yes No	
What is the percent range for the constancy on the survey meters?	10%	Yes No	
What do you do if your survey meter constancy doesn't fall within the percent or does not match up?	Check to see of the battery is low or cable needs a more stern attachment.	Yes No	
What do you do if your constancy doesn't fall in range?		Yes No	

After the Survey Meter, what will you do next to get ready for your day?	Perform Constancy on the Dose Calibrator.	Yes No	
What do you do if your constancy on the dose calibrator is not within range?	Turn off/on; check for a sturdy connection on all ports.	Yes No	
What would you do if the constancy is still not in range or the dose calibrator is not working properly?	Call the RSO or unit doses can be used using the decay table.	Yes No	
Show me the procedure for performing constancy on the dose calibrator.	Use the Cs vial that you have, and select the appropriate isotopes.	Yes No	
What would you do next to prepare for the patients?	Camera QC. Show me the QC or demonstrate this.	Yes No	
How often do you perform Constancy, Accuracy, and Linearity?	Constancy= daily Accuracy = Yearly Linearity = Quarterly	Yes No	
If asked by an inspector, could you show them how to perform the QC on the Dose Calibrator?		Yes No	
What other QC would you perform before injecting patients?	Well counter QC.	Yes No	
What would you do if your Well Counter was not in the constancy range?	Check cable connection. Turn off on. See if there are other sources around. Then try again. Call RSO	Yes No	
What do you do with used Vent Kits?	Place them in an ammo can and take back to Avera Sioux Falls for decay and disposal.	Yes No	
Where do you survey and wipe test during the daily surveys?	Camera, Stress Lab, Dose Prep, Injection Chair, etc.	Yes No	
Can you tell me the limit of a survey in an unrestricted area, such as: Stress Lab	0.1 mR/hr	Yes No	

Can you tell me the limit of contamination in an unrestricted area, such as: Stress Lab	200 dpm/100 cm2	Yes No	
Can you tell me the limit of a survey in a restricted area, such as: Injection Room	1.0 mR/hr	Yes No	
Can you tell me the limit of contamination in a restricted area, such as: Injection Room	2000 dpm/100 cm2	Yes No	
How long can you keep Tc-99m waste before you dispose of it?	10 half-lives and background	Yes No	
Why do you notify the AU when in Nebraska?	We need to notify the AU each time for two reason. As a technologist we can only use RAM under an AU supervision. We do not have the authority to inject without authorization. Also, if there is an emergency we have a physician on alert that we are there.	Yes No	
How can you find out what AU is at your location or can authorized the dose?	On the RML	Yes No	
Who is the AU on your dose script?		Yes No	
Can you demonstrate checking in a package?	Survey at surface and 1 meter away. Take a wipe outside the package and inside.	Yes No	
Are you familiar with what is considered a misadministration?	Wrong Route, Wrong Patient, Wrong Isotope	Yes No	
Leadership Safety Values and Actions (Leaders demonstrate a commitment to safety in their decisions and behaviors)		Yes No	

Problem Identification and Resolution: (Issues potentially impacting safety are promptly identified, full evaluated, and promptly addressed and corrected commensurate with their significance).	Where can you find the Compliance Hotline number to call in on safety issues anonymously? ("Stop Work Policy"; Knowledge NET-Resource Hubs-Compliance)	Yes No	
Personal Accountability: (All individuals take personal responsibility for safety.)	Give me an example of how an individual understands and demonstrate personal responsibility for the behaviors and work practices that support radiation protection.	Yes No	
Work Process: (The process of planning and controlling work activities is implemented so that safety is maintained.)		Yes No	
Continuous Learning: (Opportunities to learn about ways to ensure safety are sought out and implemented.)	Do you fell that Avera provides training and ensures knowledge transfer to maintain a knowledgeable, technically competent workforce and instill radiation Safety values.	Yes No	
Environment for Raising Concerns: (A safety conscious work environment is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment, or discriminations.)		Yes No	
Effective Safety Communication: (Communications maintain a focus on safety.)	Do you feel comfortable in communicating openly and candidly, both up, down, and across the organization and with oversight, audit, and regulatory organizations?	Yes No	

Respectful Work Environment: (Trust and respect spread throughout the organization.)	Do you feel comfortable in voicing concerns, provide suggestions, and raise questions. Differing opinions are respected.	Yes No	
Questioning Attitude: (Individuals avoid feeling self-satisfaction especially when accompanied by unawareness of actual dangers and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action.)		Yes No	

Is there anything that you are struggling with that maybe I can help or get someone to help you?

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Do you have any ideas on improving the department?

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