

TRAINEE INDUSTRIAL RADIOGRAPHER (TIR) PRACTICAL ASSESSMENT

X-RAY RADIOGRAPHY

Candidate:	(Print full name and include signature)	ID:			
SPBNDT Affiliate No:		RT Level 3 providing Assessment			
1. Radiation Protection (6 Points)		Pass (✓)	Fail (x)	Assessor Initials	Expectations
Has Direct reading dosimeter (DRD), audible dosimeter, dosimeter issued by licensed dosimetry service, and radiation survey meter in possession					As per Directorate Radiation Control (DRC) Regulations the IR must show that they are knowledgeable of and have the ability to properly operate all instruments and equipment
Turned on alarming dosimeter and survey meter before starting					
Ensure power level of batteries are sufficient for operation					
Equipment checked for valid calibration dates					
DRD was zeroed prior to start or ensure a minimum of 2 mSv (200 mR) total dose range					
Continuity/Function check for radiation detection equipment					
2. Inventory Control (4 Points)		Pass (✓)	Fail (x)	Assessor Initials	Expectations
Proper survey and recording for of dose equivalent rate from leakage radiation measured at a distance of one meter from the focus.					
Use of all required daily records required by Authority Holder					
3. Prepare Work Area (5 Points)		Pass (✓)	Fail (x)	Assessor Initials	Expectations
Initiates Job hazard assessment of work area					Demonstrate safety and security when preparing work area
Broken or deficient equipment is quarantined (may be done orally)					
Posts sufficient # of signs and barriers to prevent entry into area					
Evacuate persons from the controlled area					
All equipment has been safely placed to prevent any incidents					
4. Use of Equipment		Pass (✓)	Fail (x)	Assessor Initials	Expectations
Use of survey meter during equipment assembly for operation					The Trainee Industrial Radiographer (TIR) must demonstrate a good basic understanding of the devices used. They must be able to take accurate radiation measurements during setup and
Equipment checks prior to operation					
• Lead cap used and fitted correctly during warm up procedure					
• Diaphragms fitted as necessary					
• Correct length of extension cable					
• Control panel is positioned correctly					
• A key is used to activate the control panel					

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Collimator and/or effective use of shielding used				conduct all the necessary equipment checks.
Demonstrates ability to connect the remote controls and tube head together to prepare for an operation.				
Door switches are operating correctly				Failure to conduct these required checks could result in a serious unplanned event.
Knowledge of procedure manual and instruction manual for the system.				
5. Operation (10 Points)	Pass (√)	Fail (x)	Assessor Initials	Expectations
Proper use of survey meter				
Unlock and safely connect the exposure device and associated equipment in the correct order according to the manufacturer's specification.				
Exposing the source				
Verify barrier dose rates and radiation warning sign positions on first exposure using the survey meter				
Verify that operational procedures are followed				
Implementation of ALARA and basic radiation protection principles				
6. Post Exposure (8 Points)	Pass (√)	Fail (x)	Assessor Initials	Expectations
Survey post exposure				
Disassemble the equipment in the correct order according to the manufacturer's specifications				
Final site survey sweep				
Removal of posted radiation warning signs and barriers				
7. Record Keeping (6 Points)	Pass (√)	Fail (x)	Assessor Initials	Expectations
Documented sign out device (dates/locations of use)				
Documented all equipment checks required by Authority Holder				
DRD readings				
Trainee supervisor consent form				
8. Emergency Preparedness (oral examination) (6 Points)	Pass (√)	Fail (x)	Assessor Initials	Expectations
Recognize an emergency situation				
Knowledge of location emergency procedures				
Knowledge of initial emergency steps				
Knowledge of correct contact information				

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9. Transportation (if applicable) (5 Points)		Pass (✓)	Fail (x)	Assessor Initials	Expectations
Verifies the device is locked and secured					The TIR must show knowledge of transport requirements including all package, signage and security measures
All requirements for the appropriate shipping document have been met					
Type A or Type B package requirements are met.					
Proper labelling/placarding with the radiation symbol, UN#, contact information.					
Properly placed within the vehicle for transport.					
10. Security (2 Points)		Pass (✓)	Fail (x)	Assessor Initials	Expectations
Candidate was in control of equipment at all times throughout operations					
Verifies that when not in use the device was locked and secured.					
Result					
Allocated 1 point for every ✓ Total Score (out of XX points)			÷ XX x 100 =		%
Result (≥ 90% is required)		Pass	Fail		
Authorized Assessor					
Assessors Name (Print)		Title		SPBNDT RT Level 3 No.	
Company Name		Tel.		Email	
Assessors Signature		Tel.		Date	
Candidates Signature		Tel.		Date	
(Circle one)					
Yes Candidate has demonstrated the skills and attitude to safely operate a x-ray system.					
No Candidate does not demonstrate the skills and attitude to safely operate a x-ray system.					
Remedial Practical Instructions:					