

DOCUMENT CONTROLLED ELECTRONICALLY UNCONTROLLED WHEN PRINTED

Production of Ionising Radiation Regulations 1999 Compliant Local Rules to be used at University of Exeter

This document provides a means for the production of Local Rules that shall be compliant with the Ionising Radiations Regulations 1999 (IRR99) Regulation 17.

The Principle Investigator (PI), in cooperation with the University Radiation Protection Officer (URPO) and Radiation Protection Supervisor (RPS) is responsible for the production of this document.

The following template is to be raised for all work with ionising radiations.

When completed, and ahead of the commencement of work, a copy is sent to the University Radiation Protection Officer (URPO) for review and approval.

NOTE: THIS DOCUMENT RELATES TO RISK ASSESSMENTS FOR WORK WITH IONISING RADIATIONS. IT DOES NOT COVER CONVENTIONAL SAFETY ASPECTS OF THE WORK (e.g. Manual Handling, COSHH, Electrical).

Document Control

Production of Local Rules that shall be compliant with the Ionising Radiations Regulations 1999 (IRR99) Regulation 17		
Author:	Name:	
	Date:	
Approved by / date:	Name:	
	Date:	
	Review date:	
Periodic review:	Author:	
	Date:	
Review approved by / date:	Name:	
	Date:	

Local Rules for Use of Radioisotopes Including Radiation Risk Assessment and Scheme of Work

College		
Group Name		
Date		
Process Name		
Additional Information		
RPS		
Supervisor name		
Users		
Building:		
Laboratory name:		
Office phone:		
Work location:		

Source:		Half life (if applicable)	
Emission		Energy KeV	
Activity used		Description of X-ray equipment	

FOR SEALED AND UNSEALED SOURCES ONLY (NOT FOR X-RAY OR NEUTRON GENERATORS)

Is a suitable radiation source available in another laboratory?	<input type="checkbox"/>	If Yes	Contact URPO and attempt to arrange transfer or agreement to use
	<input type="checkbox"/>	If No	Contact URPO to confirm that sufficient capacity remains in Environment Agency Holding Permit
Can more of the radioisotope be purchased without exceeding the Environment Agency Permit Holding or Discharge Permits? (Confirm each time radioactive material is required)	<input type="checkbox"/>	If Yes	Contact URPO and arrange purchase of radioisotope
	<input type="checkbox"/>	If No	Contact URPO and discuss way forward, potentially amending the Environment Agency Permits

Radiation Monitor Details:

Date of purchase	Probe Type and (Serial Number)	Meter Type and (Serial Number)	Calibration Date

Details of x-ray generator used if applicable

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Justification - A brief statement on why this work is being done in this way

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Risk Assessment
<i>What are the hazards?</i>
<i>Can they be removed?</i>
<i>Who may be harmed?</i>
<i>How could they be harmed?</i>
<i>What are you already doing to reduce the risk?</i>
<i>Can anything else be done?</i>
<i>Are all exposures ALARP?</i>
<i>Is PPE required / available?</i>
Area access control details
Dose investigation level

Summary of working instructions and written arrangements or reference documents / papers

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Possible exposure levels (consider exposure time, dose-rates and how often source used)

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Arrangements for delivery of radioactive materials

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Radioactive material or radiation generator storage and security arrangements

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Radioactive materials record keeping arrangements

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Specific other hazards e.g. COSHH or electrical

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Area radiological designation and description of area (Supervised, controlled or undesignated)

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Personal dose monitors required - *Consult the URPO*

CONTINGENCY ARRANGEMENTS

Actions in case of spillage or lost source / equipment

Decontamination Procedures

Action if personal contamination occurs

Action if person receives radiation dose above risk assessment prediction

Action taken if there is a breakdown of controls (i.e. a failure to follow University procedures or a breach of EA Permit limits)

Actions to be taken in the event of loss of waste or accidental release of gas or liquid

Protocol / SOP

Waste Disposal arrangements

EPR Permit limits must not be exceeded.

How will you dispose of any radioactive waste generated?

Contamination monitoring procedures (unsealed source use only)

As a minimum radiation and contamination monitoring should be completed before commencement of work, during and on completion with the results recorded.

Monthly surveys of the laboratory should also be carried out.

Contact Person if RPS is not available

Estimated Overall Risk (low, medium, high)

Consider emission, dose-rate and frequency of use in relation to control measures.



Low



Medium



High

No experiment may be carried out that carries a high or medium risk of exposure without first consulting the URPO and modifying protocol where necessary to reduce risk and ensure any exposures are ALARP and extra protection is in place where this is required

Supervisor	
Date	
RPS	
Date	
<p><u>Please send electronic copy of the completed form to the URPO for sign off before work commences</u></p>	
<p>Instructions for completing the form After completing all relevant information, then click the SUBMIT button. You will get a pop up window from Outlook pre-filled to b.robertson@exeter.ac.uk - simply click send. Click for further help.</p>	

