



Risk Management – Risk Assessment

Safe Work Method Statement and Environmental Protection Plan

Preliminary

SWMS file No.:	TBA	WO No.:	TBA	Site specific induction req'd:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Location: building/area:	NMC B081 room 0038 and 0037			Environmental risk assessment req'd:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Planned start date:	TBA			Potential ionising radiation exposure:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Activity description:	Remove hot cells in room 0038/37			Radiation survey performed:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Responsible Officer:	Phil Hanson			Radiation dose constraints specified:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Company performing work:	TBA			Recommended dosimetry:	EPD <input checked="" type="checkbox"/> TLD <input type="checkbox"/> Extremity <input type="checkbox"/>
ANSTO personnel:	1x fitters, 1x HPS, 1x safety adviser, 1x RO, 1x builder			Radiation Protection Advisor:	Prashant Maharaj
Contractors personnel:	1x fitters; 1x Rigger				

Licences:	Chemicals:
Rigger's ticket; mechanical trades certificate	None
Permits required:	Equipment:
Safe Work Permit	Safety boots; safety glasses; heavy duty gloves Fitters hand tools; Electric drill Hydraulic lifter; Trolley; portable Hoist, lifting slings. Platform ladder, fork lift 2 ton 10 pallets RCD supply, power leads
Planning:	Abbreviations:
Gary Simms / Algis Lencus / Alec Kimber	
Notes:	
This SWMS is preliminary only – final details are dependent on selected contract staff and equipment.	
This SWMS is for the removal of the 4x Von Gahlen hot cells in Room 00037 and the single large Von Gahlen hot cell in room 0037. The small FDG cell is not included in this SMWS because it shall be removed with out disassembly and will present a different risk profile.	

Shielding to these cells is by lead bricks, which will be removed individually and loaded to a trolley for packaging and transport.

Dismantling operations shall follow a stop-work staged review approach to ensure optimal and safe means of dismantling is effected. Daily toolbox meetings are to be employed.

These cells shall be disassembled carefully with special attention to manual handling. Sacrificial safety boots to be used to avoid use of overshoes to avoid trips and slips.

Activity List the tasks required to perform the job in the sequence they are carried out	Hazard Against each task, list the hazards present when the task is being performed	Risk Rating Use AG 2395 risk assessment matrix to calculate the risk rating	Controls Record the safety controls that will be implemented to reduce the risk associated with each hazard	Risk Rating Calculate risk after control in place	Responsible List those responsible to implement the control measure
Preparation					
Check lifting gear currency and capacity					RO
Check electrical equipment is tagged					RO Electrician
Review PPE equipment					RO
Review this document					ALL
Sign off on paperwork					RO / area supervisor / ALL
Implementation					
HPS survey of area and Hot cell internal	Contamination Radiation	Low	Qualified HPS to perform survey Appropriate PPE	V. Low	RO HPS
Isolate and tag out power and remove control wiring and control cabinets and instruments	Electrical shock Falls- Working at height Cuts	High	To be tagged by authorised electrical isolator Access work platform Appropriate PPE	Low	RO Authorised electrical isolator
Remove false panelling above hot cells	Cuts Contamination Falls- Working at height	Med	Access work platform Appropriate PPE HPS survey	Low	RO

Isolate & disconnect chilled water	Slip Cuts/abrasion	Low	Appropriate PPE Trained staff	V. Low	RO Plumber
Isolate and disconnect compressed air	Air embolism Bruising	Low	Appropriate PPE Trained staff	V. Low	RO Plumber
Remove sheet metal corners	Cuts Eye injury Working at heights	Low	Access work platform Appropriate PPE HPS survey	V. Low	Fitter
Remove panelling above and below hot cells	Cuts Eye injury Working at heights Contamination	Low	Access work platform Appropriate PPE HPS survey	V. Low	Fitter HPS
Blank off exhaust duct	Cuts Working at heights Contamination	Low	Access work platform Appropriate PPE HPS survey	V. Low	Fitter HPS
Disconnect & remove exhaust duct (ventilation remains running)	Cuts Working at heights Contamination	Low	Access work platform Appropriate PPE HPS survey	V. Low	Fitter HPS
Remove shielded target transfer duct under cell	Slip Cuts/abrasion Contamination Poor handling technique	Med	Appropriate PPE HPS survey Use of lifting equipment Manual handling training Two-person task	Med	Appropriate PPE HPS survey
Removal of hot cell doors	Crushing injury Pinching	High	Appropriately rated lifting equipment Trained rigger/dogman Clear lift & set-down areas	Low	Fitter Dogman
Remove hot cell panelling (3mm plate) to reveal lead brick shielding	Cuts/abrasion Contamination Crushing injury Pinching Poor handling technique	Med	Two-person task Clear lift & set-down areas Appropriate PPE HPS survey	Low	Fitters HPS
Remove hot cell pass-through	Cuts/abrasion Contamination Crushing injury Pinching Poor handling technique	Low	Appropriate PPE HPS survey	V Low	Fitters HPS
Remove lead bricks on top side of cell	Cuts/abrasion Contamination Crushing injury Pinching	Med	Two-person task Clear lift & set-down areas Appropriate PPE HPS survey	Low	Fitters HPS

	Poor handling technique Working at heights		Access platform		
Slide out inner cell liner	Cuts/abrasion Contamination Crushing injury Pinching Poor handling technique	Low	Appropriately rated lifting equipment Two-person task Clear lift & set-down areas Appropriate PPE HPS survey	V Low	Fitters HPS
Remove lead bricks to side walls	Cuts/abrasion Contamination Crushing injury Pinching Poor handling technique Working at heights	Med	Two-person task Clear lift & set-down areas Appropriate PPE HPS survey Access platform	Low	Fitters HPS
Remove lead bricks to bottom of cell	Cuts/abrasion Contamination Crushing injury Pinching Poor handling technique	Med	Two-person task Clear lift & set-down areas Appropriate PPE HPS survey	Low	Fitters HPS
Disassemble structural frame	Cuts/abrasion Contamination Crushing injury Pinching Poor handling technique Working at heights Power tools	Med	Appropriately rated lifting equipment Two-person task Clear lift & set-down areas Appropriate PPE HPS survey Access platform Power tools <18V	Low	Fitters HPS
Movement of materials to loading dock	Cuts/abrasion Crushing injury Pinching Poor handling technique	Low	Appropriately rated material handling equipment Clear lift & set-down areas Appropriate PPE	V Low	Fitters
Tidy cabling	Cuts/abrasion Poor handling technique Working at heights	Low	Appropriate PPE Access platform	V Low	Electrician
Install temporary trench cover plate	Cuts/abrasion Crushing injury Pinching Poor handling technique	Med	Two-person task Appropriate PPE	Low	Fitters

Conclusion					
Remove all debris/tidy area	Poor handling technique Cuts/abrasion	Low	Appropriate PPE	V. Low	Fitter
Complete HP survey	Residual Contamination	Low	Qualified HPS to perform survey Appropriate PPE	V. Low	RO HPS
Sign off on Safe work Permit					
Remove all tags					
Sign off on all RCCC					

The SWMES is to be signed by all participants in the work. Signing acknowledges that the work methods proposed will be followed.

Prepared by:		
Name	Signature	Date
Gary Simms		
Algis Lencus		
Alec Kimber		
Reviewed by:		
Name	Signature	Date