

THE RISK ASSESSMENT STEPS

Step 1, Hazard Identification
Step 2 (A and/or B), Risk Assessment
Step 3, Hazard Action Plan

Steps 1 - Hazard identification:

- is everyone's responsibility and a key part of the risk assessment process;
- uses the non-exhaustive table below as a guide; and
- Ensures that everyone is aware of the potential harm of the hazards they're exposed to, particularly when the harm is not obvious such as the long-term, low-level exposure to a hazardous substance.

Work Practice Hazards		Workplace hazards		Hazardous Substances	
Awkward postures	<input checked="" type="checkbox"/>	Access / Egress	<input checked="" type="checkbox"/>	Asbestos	<input type="checkbox"/>
Contractors	<input type="checkbox"/>	Confined space work	<input type="checkbox"/>	Biological hazard (e.g., bacteria, HIV)	<input type="checkbox"/>
Driving	<input type="checkbox"/>	Depth work (excavations)	<input type="checkbox"/>	Hepatitis, Legionella, Leptospira.)	<input type="checkbox"/>
Falling objects	<input type="checkbox"/>	Display screen equipment	<input type="checkbox"/>	Corrosive substance (i.e., dust / fluid / gas / mist / fume / vapour)	<input type="checkbox"/>
Housekeeping	<input type="checkbox"/>	Height	<input type="checkbox"/>	Explosive (incl. pyrotechnic) subst.	<input type="checkbox"/>
'Hot' work (burning/cutting)	<input type="checkbox"/>	Mobile work equipment	<input type="checkbox"/>	Flammable substance	<input type="checkbox"/>
Highly repetitive actions	<input type="checkbox"/>	Scaffolding	<input type="checkbox"/>	Highly / Extremely flamm. subst.	<input type="checkbox"/>
Inadequate breaks / poor shifts	<input type="checkbox"/>	Traffic routes	<input checked="" type="checkbox"/>	Oxidising agent	<input type="checkbox"/>
Lone working	<input type="checkbox"/>	Vehicles	<input type="checkbox"/>	Toxic substances	<input type="checkbox"/>
Manual Lifting & handling	<input type="checkbox"/>	Water (working by or over)	<input type="checkbox"/>		
Mental overload / stress	<input type="checkbox"/>				
Night work	<input type="checkbox"/>	Mechanical Hazards		Electrical Hazards	
Obstructions (slips /trips)	<input checked="" type="checkbox"/>	Abrasion	<input type="checkbox"/>	Direct or Indirect Contact	<input type="checkbox"/>
Visual fatigue	<input type="checkbox"/>	Cutting / shearing	<input type="checkbox"/>	Short Circuit / Overload	<input type="checkbox"/>
Violence	<input type="checkbox"/>	Crushing	<input type="checkbox"/>	Source of Ignition (sparks)	<input type="checkbox"/>
		Drawing-in / Trapping	<input type="checkbox"/>		<input type="checkbox"/>
Environmental Hazards		Ejection of material	<input type="checkbox"/>	Radiation Hazards	
Humidity	<input type="checkbox"/>	Entanglement	<input type="checkbox"/>	Non-ionising (Microwave)	<input type="checkbox"/>
Lighting	<input type="checkbox"/>	Hand tools	<input type="checkbox"/>	Ionising radiation (X-rays)	<input type="checkbox"/>
Noise	<input type="checkbox"/>	High Pressure Injection	<input type="checkbox"/>		<input type="checkbox"/>
Outdoor (sun, rain etc.)	<input type="checkbox"/>	Impact (striking against)	<input checked="" type="checkbox"/>	Other Work Hazards	
Vibration (general)	<input type="checkbox"/>	Pressurised system(s)	<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/>	Vibrating tools / equipment	<input type="checkbox"/>		<input type="checkbox"/>

Step 2 - Risk Assessment:

- has two options, **Step 2A**, the **Initial Risk Assessment** (*Appendix 2*) for minor risks that do not need a **Risk Rating**, and **Step 2B** for the assessment of **Significant Hazards** that do (*Appendix 3*);
- a risk rating allows risks to be **prioritised** and effort concentrated on serious hazards;
- Although 'significant' is not defined in legislation, the SPS uses a risk rating of **12 or more** (see the SPS 'Risk Matrix' & "Action Timetable" in *Appendix 5*.)

Step 3 - The Hazard Action Plan (*Appendix 4*):

- summarises the prioritised risk assessments along with a record of the action to be taken; and
- Can be used to represent any managerial level from a single workplace through a function to an Establishment or a Directorate.

STEP 2A - INITIAL RISK ASSESSMENT

Establishment: HMP Glenochil.		Workplace: Link Corridor, Workshop Plantrooms and Stores, Old Oil Store and Boiler Room.
Task / Activity: Identification, Assessment and Management of RAAC panels.	Date: 02/11/23	Assessment No: GLO/RAAC/2023 – V4
Assessor(s): [REDACTED]		
<p><u>Documents Informing this Assessment.</u></p> <p>Doc 1 - SCOSS Alert May 2019 Doc 2 - IStructE - RAAC Panels Investigation and Assessment - Feb 2022. Doc 3 - IStructE - RAAC Panels Investigation and Assessment - Further Guidance - Apr 2023. Doc 4 - Scottish Government Letter to all Public Bodies – 05 Sept 2023 Doc 5 - Internal SPS Emails of Inspection Process and Findings. Doc 6 - HSE statement on RAAC panels. Doc 7 - RAAC Survey report completed by Structural Engineer [REDACTED] dated 20 December 2023. Doc 8 - Propping design.</p>		

Hazards & Risks of Activity	Existing Control measures
<p>Identify the Materials.</p> <p>Identification & Initial Condition assessment of RAAC panels at HMP Glenochil in the following locations –</p> <ul style="list-style-type: none"> i. Link corridor; ii. Part of workshops; iii. Boiler plantroom; iv. Boiler plantroom corridor; and, v. Old oil store. 	<p>Doc 2, 3 & 5 – <u>Identification inspection</u> Took place on the 22nd September to begin the process of assessment of the identified RAAC panel. (Doc 5 - See emails of 9th October at 5.52PM for breakdown of sequence of inspection and findings based on professional opinion of the SPS surveyor).</p> <p>Doc 2 & 3 – <u>Visual Inspections</u> Crack defect and recording – Visual inspections completed on the 29th September 2023. SPS carried out a visual inspection of all RAAC panels. Structural engineer to carry out further confirmatory surveys with comprehensive report provided to SPS on completion.</p> <p><u>Visual Survey</u> Vertical deflection and condition assessment. SPS have record of visual deflection survey and of panels surveyed, their locations and photos of issues of concern located on SharePoint.</p> <p><u>Regular Monitoring Inspection</u> First monitoring inspection carried out on Friday 27th October. Full photographic record of bearing</p>

	<p>points along accessible areas recorded on SharePoint.</p> <p><u>Structural Engineer</u> Structural engineer to carry out further confirmatory surveys starting Wednesday 8th November. Structural Engineer will be employed under an SPS Framework Contract, the consultancy is [REDACTED]</p> <p><u>Non-Destructive Testing</u> If required will be carried out and specified by the external structural engineer.</p> <p><u>Intrusive Surveys</u> If required, to be specified and carried under the guidance and supervision of the structural engineer.</p> <p>Doc 3 (and additional) <u>Structural Inspection</u> The Structural Engineer will record:</p> <ul style="list-style-type: none"> • Measurement of deflections • Records of cracks and deflections • Record of evidence of water leaks • Records of panels cut after manufacture • Records of any alteration or penetrations through panels after construction • Hammer tap testing for signs of debonding • End bearing assessment (critical) • Corrosion of reinforcement <p>Doc 7 <u>Structural Engineer's Report</u> Commissioned from [REDACTED] Following site visits on 1st and 8th December, to survey the RAAC panels for the following conditions in-line with the scope and recommended survey approach in accordance with the IStructE guidance:</p> <ul style="list-style-type: none"> • Confirm existence and extent of RAAC* • Measurement of deflections • Recording of cracks & defects • Recording evidence of water leaks • Hammer tap testing for signs of debonding concrete • Recording of cut panels after manufacture. • Recording of any alterations or penetrations after manufacture.
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	<p>*Some areas were inaccessible due to the presence of asbestos and these will need to be assessed once asbestos has been removed.</p> <p>The findings of the report were received by the SPS on 22 December 2023.</p> <p>Ongoing inspection of RAAC panels.</p>
<p>Assess the Materials.</p> <p>Defects found at HMP Glenochil – Mainly along the link corridor.</p> <ul style="list-style-type: none"> • Minor cracking and spalling in the soffit of the panels, • Cutting of panels post manufacture, • Drilled holes for the structural supports of the roof installed over the top of the corridor. • Breakthrough of the panels for rainwater downpipes in link corridor • Previous skylights in link corridor where panels have been cut and end panel support brackets integrity is inconclusive. 	<p>Doc 5</p> <p>The ‘competent person’ who carried out the visual inspection for the SPS is an SPS employee who is a Chartered Building Surveyor.</p> <p>Risk factors taken into consideration are as follows;</p> <ol style="list-style-type: none"> 1.The history of roof leaks in this area. (Leaks can lead to corrosion of the reinforcement in the panels, which can lead to deflection of the panels). Note there was no obvious significant deflection of the panels at HMP Glenochil.) 2.The installation of a pitched roof on top of the RAAC panels in 2016. (Additional loading could be of concern, fixing holes along the length of the corridor etc... 3. Mitigation/comfort can also be taken given the length of time since this pitched over roof has been present (since 2016), the nature of the construction of the over-roof system, there is no significant deflection visible in the panels; the supports for the roof could in-fact help with the support of the RAAC panels because the structure spans perpendicular to the span of the panels. <p>Doc 7</p> <p>Structural Engineer’s Report</p> <p>Commissioned from [REDACTED] Following site visits on 1st and 8th December, to survey the RAAC panels for the following conditions in-line with the scope and recommended survey approach in accordance with the IStructE guidance:</p> <ul style="list-style-type: none"> • Confirm existence and extent of RAAC* • Measurement of deflections • Recording of cracks & defects • Recording evidence of water leaks

	<ul style="list-style-type: none"> • Hammer tap testing for signs of debonding concrete • Recording of cut panels after manufacture. • Recording of any alterations or penetrations after manufacture. <p>*Some areas were inaccessible due to the presence of asbestos and these will need to be assessed once asbestos has been removed.</p> <p>The findings of the report were received by the SPS on 22 December 2023. This report provided an assessment of the RAAC panels as Red – Critical Risk, Red – High Risk, Amber – Medium Risk and Green – Low Risk, with recommendations made for each risk category.</p>
Manage the Materials.	<p>The following control measures will be implemented to monitor the RAAC panels.</p> <ol style="list-style-type: none"> 1. Carry out a fortnightly visual inspection of the entire RAAC panelled roof area to identify any obvious changes in condition. (Friday 27th October was first inspection and photo recording). 2. Specific ceiling tiles are to be lifted along the main corridor; this will allow a consistent basis/viewpoint for inspection of the underside of each portal frame bay of the RAAC panels. To allow full inspection in these areas. 3. The tiles to be lifted have a “dot” added to their corner to aid in identification. 4. Things to identify on the panels as risk factors are changes to the structure visible sagging, new staining new cracks. Location of changes to be noted. (Reference point being photos of 27th October). 5. Have the same staff inspect where possible to ensure a consistency of opinion. 6. The staff should record any significant defects/changes with photos and advise the Head of Asset Management, Area Maintenance Manager and Local HSFS Co-ordinator. 7. A photographic record and panel location to be kept on SharePoint of the inspections and any new defects. <p>Review and discussion with relevant stakeholders on the above and the updated in light of the</p>

	<p>structural engineer's forthcoming advice, recommendations and guidance.</p> <p>Doc 7 <u>Structural Engineer's Report</u> Commissioned from [REDACTED] Following site visits on 1st and 8th December, to survey the RAAC panels.</p> <p>The findings of the report were received by the SPS on 22 December 2023. This report provided an assessment of the RAAC panels as Red – Critical Risk, Red – High Risk, Amber – Medium Risk and Green – Low Risk, with recommendations made for each risk category.</p> <p>In line with the report's recommendation for red critical risk areas, Local Management took immediate action, to put in place an exclusion zone along the window side of the corridor, with temporary barriers to prevent any persons accessing this area. An email was issued to all staff including a notice to prisoners regarding the restrictions in place. 22/12/23.</p> <p>Permanent barriers were put in place for the exclusion zone on 10 January 2024.</p> <p>Areas of red critical risk, which could not be restricted access (access to the Link Corridor; the Gym and the Links Centre/Multifaith Room) to be checked twice weekly by local Estates. 22/12/23</p> <p>A further notice to staff was issued on 12 January 2024 to advise of the ongoing works within the corridor.</p> <p>Doc 8 <u>Temporary Propping Supports</u> Steel Acrow Props fitting of those areas identified as red critical risk commenced on 5 January 2024, in line with the design as agreed with the structural engineer.</p> <p>Doc 9 <u>Steel Support</u> The RAAC Panels will be further supported with the installation of steelwork in line with the design agreed with the structural engineer. Business case approved 22/02/24.</p>
Potential for collapse of RAAC panels	<p>At present there is no evidence of sagging or deflection in excess of 20mm which would require isolation of the area or indicates imminent collapse.</p>

Doc 7

Structural Engineer's Report from [REDACTED] following site visits on 1st and 8th December, to survey the RAAC panels for the following conditions in-line with the scope and recommended survey approach in accordance with the IStructE guidance:

- Confirm existence and extent of RAAC
- Measurement of deflections
- Recording of cracks & defects
- Recording evidence of water leaks
- Hammer tap testing for signs of debonding concrete
- Recording of cut panels after manufacture.
- Recording of any alterations or penetrations after manufacture.

The findings of the report were received by the SPS on **22 December 2023**. This report provided an assessment of the RAAC panels as Red – Critical Risk, Red – High Risk, Amber – Medium Risk and Green – Low Risk, with recommendations made for each risk category.

In line with the report's recommendation for red critical risk areas, Local Management took immediate action, to put in place an exclusion zone along the window side of the corridor, with temporary barriers to prevent any persons accessing this area. An email was issued to all staff including a notice to prisoners regarding the restrictions in place. **22/12/23**

Permanent barriers were put in place for the exclusion zone on **10 January 2024**.

Areas of red critical risk, which could not be restricted access (access to the Link Corridor; the Gym and the Links Centre/Multifaith Room) to be checked twice weekly by local Estates. **22/12/23**

A further notice to staff was issued on 12 January 2024 to advise of the ongoing works within the corridor.

Doc 8

Temporary Propping Supports

Steel Acrow Props of those areas identified as red critical risk commenced on 5 January 2024, in line with the design as agreed with the structural engineer.

	Doc 9 <u>Steel Support</u> The RAAC Panels will be further supported with the installation of steelwork in line with the design agreed with the structural engineer. Business case approved 22/02/24.
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People at Risk:
Prison Staff, Prisoners, Visitors, Contractors.

Initial assessment with existing controls in place: A <input type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/>	A Unacceptable (STOP)	B Further controls needed. (RE-ASSESS)	C Adequately controlled. (PROCEED)
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Further Information – The Structural Engineer's Report has made several recommendations for the red critical and high risk areas. Once recommendations are met, ongoing monitoring of RAAC panels will be required with consideration as to the lifespan and possible removal.
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Is a risk rating required?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	If 'YES', go to Part B (Appendix 3)
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Assessor(s) Name:			
Signed:			

Date of next Review: 07/03/24 (or if works develop sooner)
Reviews: Structural Engineer's Report received 22/12/23 – Information inserted including Structural Engineer's recommendation – initial action taken to put in place exclusion zones where possible on 22/12/23. Structural Engineer's Report recommendation – temporary propping work commenced on 15/01/24. Structural Engineer's Report recommendation – steelwork to commence. Business case approved. 22/02/24 _____(_____), _____(_____), _____ _____(_____), _____(_____)

STEP 2B - ASSESSMENT OF 'SIGNIFICANT' RISK

Establishment : HMP Glenochil	Workplace : Areas covered by RAAC.	Date :02/11/23
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Ass. No.	Task / Activity	Hazard	Existing Control Measures	People at Risk (*)	Rate (*)		Risk rate	Significant		Adeq. Cont.		Action to Reduce Risk
					L	S		Yes	No	Yes	No	
1	Assessment of RAAC within HMP Glenochil.	Records and photographic evidence of visual inspections on SharePoint to provide a reference point.	Email trail on notification of visual inspection and survey with photographic evidence and reference to IStructE and Scottish Government advice on defects and process.	All	1	6	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Structural Engineer appointment required to carry out full survey and report on all defects.
2	Structural engineer identified and initial inspection on 8 th November.	The SPS currently has an incomplete position on the assessment of RACC and its safety and integrity within HMP Glenochil.	Part survey and inspection completed by SPS staff to date. Awaiting structural engineers' inspection and survey of the RAAC panels.	All	2	6	12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Structural Engineer will provide full report of their inspection and survey of RAAC within HMP Glenochil.
3	Continued use of locations with RAAC panels above.	Potential for failure/ collapse of RAAC panels.	Monitoring, management of maintenance, possible remedial, strengthening work.	All	2	6	12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Discuss control measures and option to prevent failure / collapse.

4	Structural Engineer's Report from [REDACTED] received on 22/12/23	The report provided an assessment of the RAAC panels as Red – Critical Risk, Red – High Risk, Amber – Medium Risk and Green – Low Risk, with recommendations made for each risk category.	Local Management took immediate action on 22/12/23 to put in place an exclusion zone along the window side of the corridor, with temporary barriers to prevent any persons accessing this area. All staff and prisoners advised regarding the restrictions in place. Areas of red critical risk, which could not be restricted access (access to the Link Corridor; the Gym and the Links Centre/Multifaith Room) to be checked twice weekly by local Estates commencing 22/12/23. Steel Acrow Props of those areas identified as red critical risk commenced on 5 January 2024, in line with the design as agreed with the structural engineer. Contingency Plans in place should corridor require to be closed.	All	2	6	12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The RAAC Panels to be further supported with the installation of steelwork in line with the design agreed with the structural engineer.
								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

KEY: (*) 'People at Risk' – S (Staff at work) P (Prisoners at work) O (Others working nearby) V (Visitors *not* at work, e.g. public) 'Rate' - 'L' - Likelihood
C (Contractors at work) M (Mothers – expectant & nursing) Y (Young people) D (Disability considerations) 'S' - Severity

Assessor(s) :	Name : [REDACTED] Signed : [REDACTED]	Name : [REDACTED] Signed : [REDACTED]	Name : Signed :
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STEP 3 - THE HAZARD ACTION PLAN

For: HMP Glenochil (*Workplace / Establishment / Directorate etc.*)

Task / Activity / Hazard	Action to Reduce Risk	Person responsible	Date to be completed by :	Completed	
				Signed	Date
1. SPS Identification of RAAC within HMP Glenochil.	Email recording findings. Photographic evidence recorded.	[REDACTED]	30 th October 2023.	[REDACTED]	27-10-23
2. Contract a structural engineer to attend and carry out a full survey and inspection of the areas identified with RAAC. Engineer to provide a full report to the SPS on completion and will update RA.	Procurement process ongoing as of the 02/11/23 to secure the services of a structural engineer.	SPS Estates.	30 calendar days from the 2 nd November 2023.		01/12/23
3. Potential for failure/collapse of RAAC panels.	Provide risk rating and determine monitoring requirements, management of maintenance (PPM), possible remedial or strengthening work.	SPS Estates, and Structural Engineer	30 calendar days from the 2 nd November 2023.		22/12/23
4. Implement recommended remedial action as suggested by the Structural Engineer's Report received 22/12/23	Category Red risks may include:				
	An exclusion zones and signage in the areas identified as red critical risk.	SPS Estates/Local Management	Immediate		22/12/23
	Provision of propping or secondary support structures to support the cut or damaged panels or one designed to support the panels should they fail.	SPS Estates	Work to commence within one calendar month		05/01/24
	Addition of enhanced end bearing eg. Steel angles fixed to the existing beam supports to increase the bearing length of the RAAC panels.	SPS Estates	31/03/24		

	Removal of individual panels and replacement with alternative lightweight solution/Removal of entire RAAC system and replacement with an alternative lightweight solution.	SPS Estates	Under consideration		
	Those panels identified as medium (amber) risks: To be regularly inspected eg. Annually to monitor ongoing deterioration and any change in condition with continued surveys with plans to future remedial and /or replacement.	SPS Estates	01/12/24		
	Those panels identified as low (green) risks: To be inspected occasionally eg. Every 3 years to monitor ongoing deterioration and any change in condition with continued surveys with plans to future remedial and /or replacement.	SPS Estates	01/12/26		
	If there are any sudden changes in the condition of the panels eg. Audible cracking sounds, increased water ingress or notable deflections then the area should be closed off immediately.	SPS Estates/Local Management	As required.		

Action Plan prepared by: [REDACTED]

Position: [REDACTED]

Date: 02.11.2023

Governor's / Senior Manager's Name:

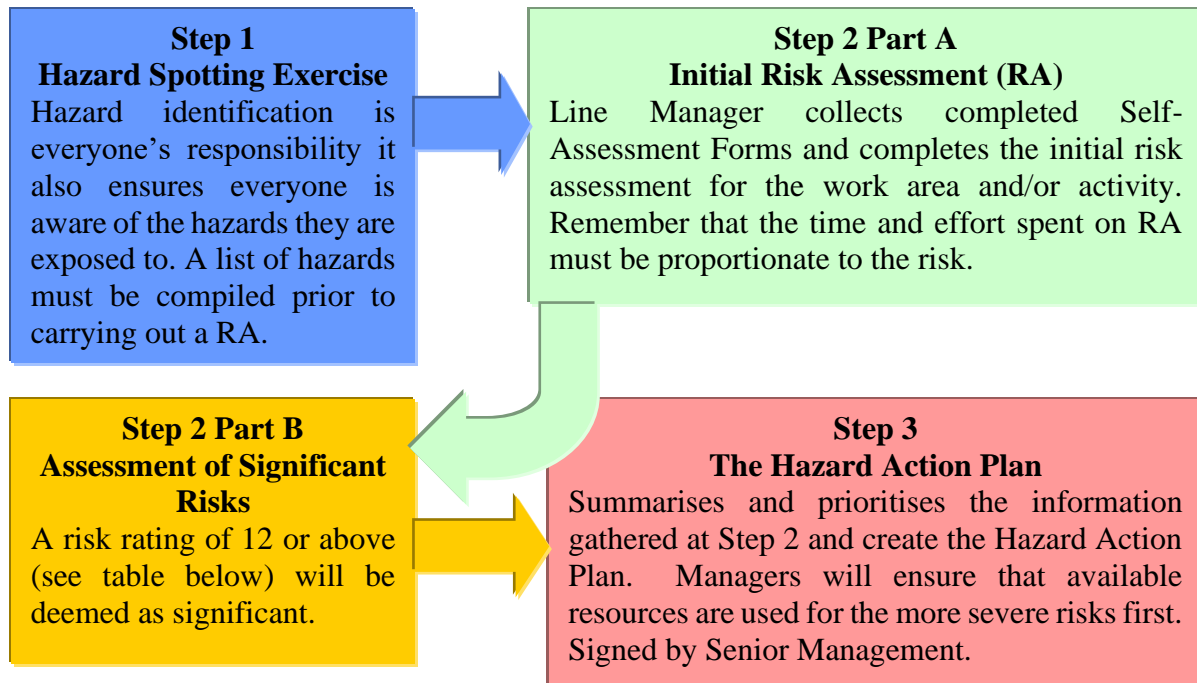
Signed:

Date:

AIDE MEMOIR

RISK ASSESSMENT

The following key steps are taken from Circular 32A/06 Risk Assessment (Revised 2006):



Risk Value	Likelihood	Value	Severity
Certain	[Common occurrence]	10	Multiple fatalities
Likely	[Frequent occurrence]	8	Death of 1 person
Probable		6	Major Injuries to many persons
Possible		4	Major Injury to 1 person
Unlikely	[Remote but possible]	2	Minor Injury (First Aid only)
Extremely unlikely	[Improbable]	1	Trivial Injury / Plant damage

Risk Rating

Risk Rating	Risk Assessment	Time Period for Action
100	UNACCEPTABLE ACTIVITY	
80 / 64 / 60	EXTREMELY HIGH RISK	STOP IMMEDIATELY
48 / 40 / 36	VERY HIGH RISK	Action within 1 DAY
32 / 24 / 20	HIGH RISK	Action within 1 WEEK
16 / 12	SIGNIFICANT RISK	Action within 1 month
10 / 8 / 6	LOW RISK	Action within 3 months
4 / 2	Very Low Risk	Action within 1 year
1	Acceptable Risk	No Action Necessary