Hazards Risks and Opportunities

Couple of takeaways

- Managing our health, safety, wellbeing and environmental hazards, risks and opportunities needs to be incorporated into the process of everything we do.
- By first identifying hazards and assessing risk, appropriate controls from the Hierarchy of Controls can be properly implemented to help reduce exposure to that risk and to minimise harm.
- Identifying and assessing opportunities helps us improve our safety and wellbeing and environmental management systems by examining which opportunities should be pursued and with what level of priority.

What is this procedure for?

This procedure describes how hazards, risk and opportunities are identified, assessed and have appropriate actions decided to address them.

The Hydro Group needs to have an effective process for conducting risk and opportunity assessments, so it can manage and improve the health, safety and environment management systems and ensure its legal compliance. Changes in the internal and external environment present new hazards, risks and opportunities that must be understood and adequately addressed. This procedure applies to the whole HT Group and their activities.

How do we manage hazards, risks and opportunities?

1) Identify hazards and opportunities on an ongoing basis via:

- Hazard studies or using the methods listed in Table 1
- Worksite inspections, checks, audits, safety walks, safety interactions
- Consultation with workers, contractors, subject matter experts and others where a shared duty exists with shared responsibilities
- Changes in the organisation's internal (e.g. leadership and culture) and external operating environment (e.g. legal and stakeholder requirements)
- Maintenance planning and scheduled works planning
- Project planning and the consideration of life cycle perspectives of equipment, products and services.
- Changes, including planned or new activities or developments, plant, equipment, new Safety Data Sheets (SDS), etc.

2) To assess the risk or opportunity of an activity, review each step and consider:

- All conditions (e.g. normal or abnormal), past relevant incidents and reasonably foreseeable emergency situations
- The needs and expectations of stakeholders, including workers, the community and other interested parties
- The physical work environment, area and any upstream or downstream impacts
- How the activity is performed or its product/service effects the environment or community
- Any equipment, materials, substances or sources of energy involved
- Mental and physical capacity of those performing the work (e.g. psychosocial and human factors, time pressures, workload).
- Any proposed or actual changes in process, design, activities or knowledge.

3) In accordance with the IBRM Risk Standard and (for Opportunities, as applicable) the Opportunity Assessment Guidelines:

- Identify the Inherent Risk of the identified hazard (i.e. the risk of the hazard occurring without any controls)
- Assess the inherent potential of the opportunity (i.e. the potential benefit of the opportunity being successful without any controls)
- Apply controls to address the Inherent Risk of a hazard by implementing (as far as practicable) control measures as described in the Hierarchy of Control
- Calculate the Residual Risk/Residual Opportunity
- Take further action to reduce the Residual Risk to an acceptable level (if required) or realise the opportunity
- Monitor the control measures, reviewing them if they are found ineffective, when a new/changed hazard is identified or an incident occurs.

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Table 1: Types of Risk and Opportunity Assessments			
Risk or Opportunity Assessment and Description	**Conducted**	**Guidance**	**Template or Tool**
GRC Strategic HSE Risk Register developed in consultation with business units.	12 months	N/A	GRC Strategic Risk Register
HSE Operational Risk Register (Including Environmental Aspects & Impacts Register) - Each business unit develops and reviews the risk register using the strategic and site hazard risk registers as a guide. Register may include both risks and opportunities. **Significant environmental hazards** (i.e. Environmental Residual Risks with a score of "High" or above (yellow and red risk levels) as well as risks that have consequences that are "Extreme", or "Catastrophic" are considered 'Significant' and require close monitoring, prioritised resourcing and potentially the development of additional controls.)	12 months	N/A	WHS Operational Risk Register HT Group Environmental and Social Risk Register
Site Hazard Register – Hydro Tasmania operational areas (assets and facilities) develop site specific hazard registers and review them annually with representation from affected workers and/or Health, Safety Representatives. Register may include both risks and opportunities. Reviews of environmental and safety risks are conducted annually at Hydro Tasmania production and maintenance locations in consultation with Leaders/Production Managers, workers, WHS and Environment Team members. They also need to be reviewed when a new hazard is identified, an incident or change in legislation prompts a review and before introducing new plant, substances or types of work. This includes at the conclusion of an outage or major project. The Pre-purchase evaluation standard can assist. Leaders/Production Manager are responsible for the review, maintenance and endorsement of their site's Site Hazard Register. A SAP maintenance plan work order triggers the annual review. Site Leaders need to ensure new hazards are added to the site registers when they are identified. Workers, or representation of workers at that site, participate in the review of registers and all workers refer to them when planning maintenance work or project work. WHS Team members lead the annual review discussion and publish registers.	12 months	N/A	Site Hazard Register
Hazard and Operability Study is a process for identifying and managing risk associated with development, design, construction and the implementation of new/modification of existing equipment.	Various project phases as per procedure.	Hazard and Operability Study Procedure.	Hazard and Operability tools and checklists

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Contractor Management Processes – The process of engaging a contractor for a scope of work involves identifying and informing the contractor of the known risks, opportunities and controls for the work. Consultation for unknown or specialist risks would occur as part of the Hazard Study process	When engaging a contractor for any work.	Contractor Management Procedure	Contractor Management Forms – Job HSE Requirements, HSE pre-start compliance, questionnaire
Pre-Purchase Evaluations are to be carried out prior to the purchase of an item to assist in the identification of any risks or hazards related to that item and to assist with the decision to purchase the item or look for an alternative.	Prior to purchasing any item that has the potential to introduce a risk or hazard to the workplace.	Pre-Purchase Evaluation Standard	Pre-purchase evaluation criteria and pre-purchase evaluation form
Take 5 - In the moment risk assessment for low risk activities.	Prior to starting, when conditions change and before the end of the task.	Take 5 Work Instruction	Take 5
Safe Work Method Statement (SWMS) are task-based risk assessments for high risk construction work and other tasks assessed with a residual risk score of moderate or above. Generic SWMS are developed for high risk construction work and other critical risk work as determined by WHS team members specialising in systems management.	Prior to work starting, when conditions change and as specified in the SWMS.	SWMS Work Instruction	SWMS Template and SWMS Register
Workplace Inspections are conducted across the business using checklists to assist in the identification of hazardous conditions. Workplace inspections may be used by anyone at any time to complete a check of safety standards for a work activity or site. They may be used as part of a safety interaction or other proactive safety check. Safety leads are encouraged to perform a weekly workplace inspection on an activity of their choosing.	As required based on work activities.	N/A	Workplace Inspections
SAP Hazard, Incident and Near Miss Reporting is a process for recording hazards, incidents and near misses and assign actions to address them. - Hazards entered into SAP should be those identified as either solved or requiring a rectification. These would generally not be latent hazards captured through a hazard study or hazard register as these have separate processes for managing.	When hazards, incidents or near misses are identified during work activities.	Incident Management App – Log an Incident, Hazard or Near Miss	HYDRO-905-353
Variance Requests are a process for identifying, assessing and approving changes to the HSE system documentation or processes which deviate from standardised and approved work methods. Identified changes may arise from opportunities, hazards or risks.	When a change is identified to an HSE procedure or where a work method deviates from standard procedures and processes.	Management of Change procedure and Document	Systems Change Request Form

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		Management procedure	
Continuous Improvement (CI) Boards are a white board-based LEAN initiative for field teams to identify hazards and opportunities in their local area and assign persons responsible for following up and addressing.	As opportunities are identified for additions. Reviewed process varies across different areas and groups.	N/A	N/A
Safety Interactions are proactive conversations to share or apply the findings and learnings from incidents, near misses or hazards or to raise an opportunity. These conversations topics are captured within SAP to assist us in identifying trends related to the topics being discussed.	As opportunities for an interaction are identified.	Communication, Consultation and Collaboration procedure	SAP input
WHS Committees and Groups - A number of committee and groups exist across the Hydro Tasmania group from executive and leadership level groups through to those involving various work groups. Such groups would include work team pre-start and toolbox talks and other specific committees. All such groups provide an opportunity to raise hazards and opportunities and direct these through appropriate channels for assessing and addressing.	Dependent on group charter – Minimum or quarterly where established.	Communication, Consultation and Collaboration procedure	N/A
WHS Strategy and Team Workshops – The WHS Strategy and Team workshops review current trends, data and business feedback from a variety of sources to assist in developing strategic initiatives that are aligned with business objectives. Strategic initiatives represent both opportunities and addressing known hazards and risks.	Strategy workshops generally conducted annually. Other WHS team workshops may be conducted as risks and opportunities are identified.	Planning and Objectives procedure	N/A
Safety Training and Workshops – Feedback may be received through informal and formal channels via WHS initiated training and workshops which may then be utilised to address any opportunities raised.	As per training schedule or as other opportunities are identified.	WHS Training, Awareness and Competency procedure	N/A
Site Visits – Site visits conducted by the WHS team and others provide an opportunity for field teams to provide feedback directly to the safety team for consideration. This feedback may represent opportunities or other hazards identified in their work and should then progress through a more formal channel (e.g. variance request, hazard reporting) to capture the initiative.	As required based on work activities.	N/A	N/A
Audits – Internal and external audits are conducted across the Hydro Tasmania group to assist in identifying both systematic and operational opportunities for improvement and non-conforming aspects (hazards).	As per annual audit program	Internal Auditing and Continuous	N/A

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		Improvement procedure	
Safety Forum attendance (e.g. AEC, Tas Safety Forum) – Safety forums attended by the WHS Team and others provide exposure to industry peer initiatives and learnings across a wide variety of topics related to Workplace Health and Safety. These hazards and opportunities can then be considered through internal forums for action.	Varies, depending on forum.	N/A	N/A
Industry and Regulator Communications – Alerts, notifications and other proactive information presented through Safety Industry and Regulator communications may be used as a source of information for new or emerging hazards and risks and opportunities for new and emerging controls. Such communications may feed into other appropriate channels where necessary and appropriate.	Monitored through various avenues	Communication, Consultation and Collaboration procedure	N/A
Environmental Impact Assessment (EIA) is an environmental risk assessment performed when an activity or project has the potential for moderate or above environmental impact (residual risk). **Significant environmental hazards** (i.e. Environmental Residual Risks with a score of "High" or above (yellow and red risk levels) as well as risks that have consequences that are "Extreme", or "Catastrophic" are considered 'Significant' and require close monitoring, prioritised resourcing and potentially the development of additional controls.)	As required based on work activity and level of risk.	N/A	Environmental Impact Assessment (EIA) Form
Environmental Management Plans (EMP) are required where the EIA indicates the need for management to ensure legal compliance and/or to mitigate other significant environmental hazards or if the controls cannot lower the residual risk to below high. In some cases, an EMP may be required if a compliance obligation or contractor methodology requires one to be prepared. EMPs are prepared by a subject matter expert.	As required based on work activity and level of risk.	N/A	N/A