## Contents

## 1  Introduction

SRWRA is committed to an integrated approach to risk management; finding innovative ways to deliver our services without compromising quality or creating risks beyond a level we are willing to accept.

SRWRA's Vision states:

*"We are leaders in delivering innovative and sustainable waste management solutions for the benefit of our southern Adelaide communities and the environment"*

SRWRA recognises that driving positive risk management practices is fundamental to how the organisation is managed at all levels and enables continuous improvement within the organisation.

## 2  Purpose

This Risk Management Framework (the Framework) aligns with key principles found in SRWRA's Risk Management Policy and describes our ongoing commitment to improving risk awareness.

This Framework aims to:

a)  Convey our approach and attitude to risk management along with the Risk Management Policy;

b)  Establish roles and responsibilities for managing risk

c)  Set the scope and application of risk management

d)  Document the Board's risk appetite

e)  Documents a step-by-step process for understanding, escalating and managing risks

f)  Communicate the benefits of risk awareness

g)  Integrate risk management within our reporting and review cycle

## 3  Risk Management Principles

Value is created and protected for SRWRA by strong risk management principles. We strive to convey our commitment by the periodic review of risks, guided by this Framework.

The Australian standard for Risk Management Guidelines (AS ISO 31000:2018) describes risk as:

"…the effect of uncertainty (either positive, negative or both) on objectives…"

It is based on the following principles, which underpin this Framework and guide how risk is managed by SRWRA to create and protect value:

| | |
|---|---|
| **Integrated** | An integral part of all SRWRA processes for all staff |
| **Structured and consistent** | Set out a comprehensive approach to risk management |
| **Customised** | Choices are customised to SRWRA values and vision |
| **Transparent and Inclusive** | Strives to include knowledge and input from all stakeholders |
| **Dynamic** | Responds to changes in SRWRA's operating environment, risks and opportunities |
| **Best available information** | Choices are based on well considered information in light of strategic expectations, SRWRA's risk appetite and limitations |
| **Human and cultural factors** | Fosters behaviours to build a culture embracing risk management to influence objectives |
| **Continual improvement** | Learning and experience drives continuous improvement |

## 4  Risk Management Framework

SRWRA acknowledges the success of risk management is dependent on the effectiveness of the Framework to provide the appropriate arrangements that will drive risk awareness through the organisation. The Risk Management Framework engages Risk Management Principles and together with the Risk Management Process aims to deliver value for SRWRA's stakeholders.

SRWRA is committed to the allocation of appropriate resources and training for staff and stakeholders to have appropriate skills and knowledge to deal with risk, including upholding accountability with respect to risk management obligations.
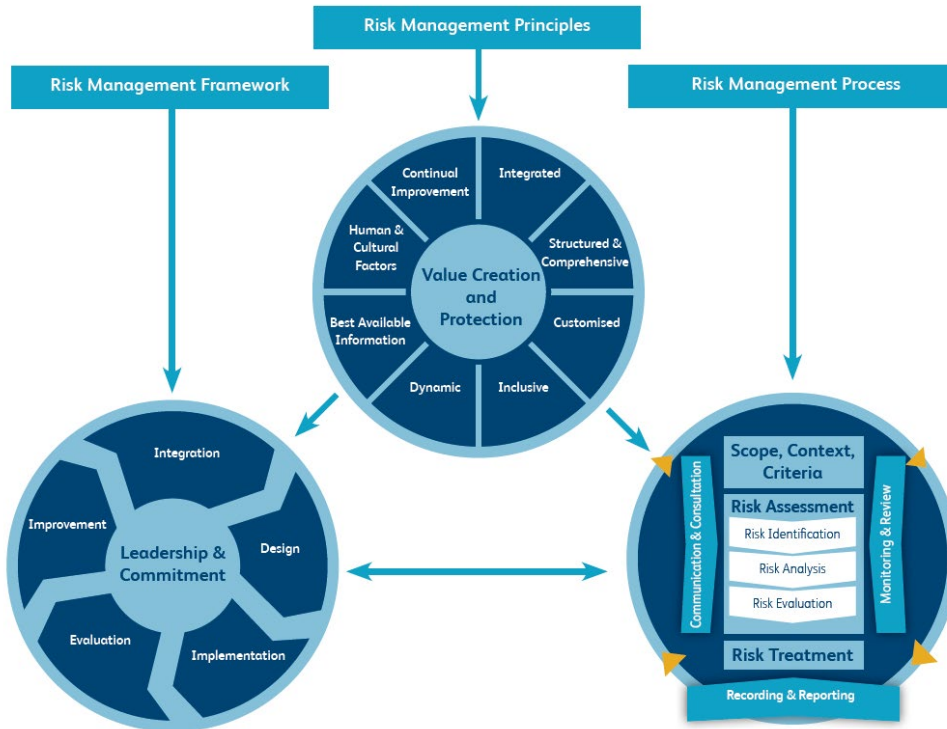
*Figure 1: Principles, Framework and Risk Management Process from ISO31000:2018*

## 4.1   Integration

Our Framework includes methods and processes to embed risk management into every aspect of SRWRA's service delivery to achieve objectives. Our Enterprise Risk Management philosophy encompasses strategic, operational and project risk management considerations for staff and stakeholders.

**Strategic / Business Planning**

SRWRA's Strategic Plan describes the primary operational and financial performance expectations. It guides SRWRA's decisions about the services, assets, business partnerships and projects. Risk management is integrated into strategic planning by management's identification of key risks and possible controls associated with strategies in the plan. The Board and Audit Committee reviews the appropriateness of the proposed strategies and the associated analyses. The Risk Register is then used to record and report on those risks associated with strategies in the Board-approved Strategic Plan.

Similarly, management and staff are expected to document how they apply this risk management framework in managing risks associated with

1. Service Delivery

2. Environmental Protection and Product Quality

3. Workplace Health, Safety and Security

4. Financial Transactions

5. Project Management, Procurement and Contractor Management

6. Emergency Management

7. Governance

A note on the Local Government sector.

SRWRA is part of the Local Government sector in South Australia and is a member of Local Government Risk Services (LGRS). The LGRS cover insurable risks by self-managed Schemes. The Schemes are:

a) Local Government Association Mutual Liability Scheme (LGAMLS) for the purposes of Civil Liability coverage & claims management;

b) Local Government Association Workers Compensation Scheme (LGAWCS) for the purposes of workers compensation coverage & claims management; and

c) Local Government Association Asset Mutual Fund (LGAAMF) for the purposes of asset and fleet coverage and claims management.

As a member of the above, SRWRA works to ensure that it has developed, endorsed and implemented acceptable risk management protocols for compliance with the Scheme.

Additionally, SRWRA engages an independent auditor to undertake an audit of internal controls as required by Section 125 of the Local Government Act (SA) 1999 and Part 6, Regulation 19 of the Local Government (Financial Management Regulations) 2011.

## 4.2  Design

The Risk Management Process is consistent with AS ISO 31000:2018 and is designed to ensure that risk management decisions are based on a robust approach to analysis, assessments are conducted in a consistent manner and a common language is used and understood across SRWRA.

SRWRA is committed to delivering the Strategic Plan in a sustainable manner for service delivery, operational excellence, strong governance and risk management. The identification, assessment and management of risks are central to the design, implementation, evaluation and improvement of the risk management process.

## 4.3   Implementation – Risk Management Process

The risk management process consists of steps as outlined below.

- Establish scope, context and criteria
- Risk Assessment as
    - o   Risk Identification
    - o   Risk Analysis
    - o   Risk Evaluation
- Risk Treatment
- Communication and Consultation
- Monitor and Review

### 4.3.1  Establish Scope, Context and Criteria

Establishment of the context is required to define the basic parameters for risks to be identified, examined and managed, thereby setting the scope for the risk management process.

External context may include; changes in government policies and legislation, changes in social, economic and industrial environments, changes in public opinion.

Internal context may include SRWRA's strategies, plans, organisational capabilities, risk appetite, operational constraints and budgets.

### 4.3.2  Risk Assessment - Identification

The aim of risk identification is to develop an inclusive list of reasonably foreseeable events that may occur which are likely to have an impact on achievement of objectives.

SRWRA identifies, assesses and treats risk in the following risk types:

| Strategic | Risks associated with high-level strategic objectives that are articulated in Strategic, Business, Emergency and Asset Management Plans. Strategic risks may affect the achievement of corporate objectives. They are key issues for the Board and Executive Management Team and impact the whole organisation rather than a business unit. These risks can originate from within the organisation or externally. |
|---|---|
| **Emerging Risks** | Risks that are newly developing or changing which are difficult to assess or quantify and which may have a major impact on SRWRA. They are marked by a high degree of uncertainty. |

| **Operational** | Risks associated with business unit functions and daily operations to deliver core services. For example cost overruns, supply chain/logistic issues, employee issues, fraud, WHS, non-compliance to policies and procedures. |
| --- | --- |
| **Project** | Risks associated with Project Management that will affect for example, milestones, outcomes, cost, timeliness, or reputation, connected to delivering a specific project. |

Risk identification naturally flows on from the context discussion and is a process of formally documenting the effects of uncertainty on objectives. An effective approach is to engage as many stakeholders as possible in a structured identification process.

Risks ratings are assessed as:

**Inherent** being the level of risk without controls in place

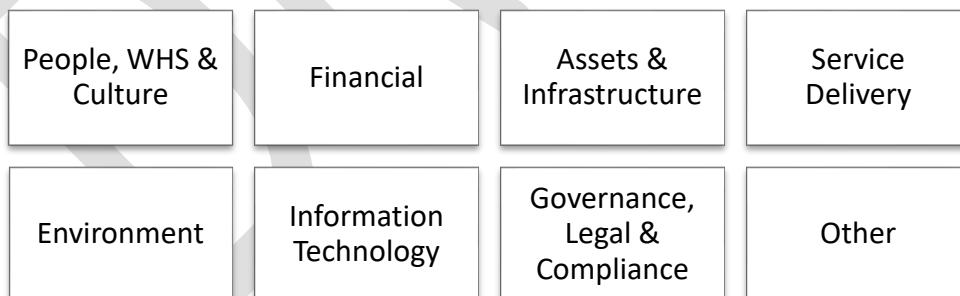**Current** being the level of risk with current controls in place

**Target** being the maximum desired level of risk

**Forecast** being the level of risk once the specified treatment plan has been implemented

During the identification process, there are several questions that may be asked to capture the information required:

a)      What might happen / what could go wrong?

b)      What can we benefit from?

c)      What is the cause?

d)      How does this affect the objective?

After a risk is identified, it may be categorised and captured in the Risk Register in accordance with the following categories:

| People, WHS & Culture | Financial | Assets & Infrastructure | Service Delivery |
| --- | --- | --- | --- |
| Environment | Information Technology | Governance, Legal & Compliance | Other |

### 4.3.3   Risk Assessment – Analysis

The initial risk analysis involves an assessment of the risk likelihood (the chance of something happening) and risk consequence (the outcome or impact of an event) without controls in place (Inherent Risk). Once likelihood and consequence have been assessed for a particular risk, the overall risk can be calculated using the risk matrix.

Risk analysis then considers the controls or mitigating activities already in place and additionally needed to adequately reduce the level of risk to the Target rating.

SRWRA's risk likelihood table, risk consequence table and risk matrix are in Appendices A, B and C.

### 4.3.4  Risk Assessment – Appetite & Evaluation

SRWRA's Board and management have carefully considered SRWRA's strategic goals and the attendant financial and non-financial risks.  SRWRA has set a "Target Risk Rating" for each Strategic Risk, and where necessary will reduce its exposure to that level through an appropriate treatment plan.

As a matter of principle, SRWRA will tolerate risks, with either inherent or residual risk ratings, with a rating of moderate or below unless:

1.      the action is required to reduce the residual risk rating to the set "Target Risk Rating"; or
2.      the benefit achieved from treating the risk exceeds the cost of resource allocation; or
3.      there is a legal or government requirement; or
4.      there is a specific CEO or Board direction, or
5.      it is in the public interest.

Therefore, any findings of an investigation, review, audit or similar examination that are within the above tolerance limits will not be given priority actioning.  The decision on whether or not actions will be implemented will be documented either in the relevant report or management's response to it and submitted to the Audit & Risk Committee and/or the Board for endorsement.

**Where actioning is not prioritised, it is incumbent upon management to check that the risk rating remains within tolerance limits with the passage of time.**

The Board's risk appetite is also reflected in the Risk Classification Tables in Appendix A, B and C.

The following table depicts SRWRA's current risk appetite:

| Risk Level | | Action Required | Risk Appetite |
|---|---|---|---|
| E: | Extreme Risk | Immediate action required. | Not acceptable |
| H: | High Risk | Senior management attention needed. | Not acceptable |
| M: | Moderate Risk | Management responsibility must be specified, but actioning will not be given priority unless the risk falls outside the tolerance limits at points 1 - 5 above. | Acceptable |
| L: | Low Risk | Manage by routine procedures, but actioning will not be given priority unless the risk falls outside the tolerance limits at points 1 - 5 above. | Acceptable |

### 4.3.5  Risk Treatment

It is expected that the risk owner will take steps to share or mitigate the risk, however the CEO must approve decisions to eliminate or accept situations where current **operational** risks ratings are worse than target. The Board must approve decisions to eliminate or accept situations where current **strategic** risk ratings are worse than target.

| Eliminate | Remove an asset or discontinue an activity or service completely so as to eliminate the risk altogether |
|---|---|
| Share | Allocate risk to a third party, such as through appropriate contactor management or purchase of insurance |
| Mitigate | Implement a type of treatment control to reduce or remove the risk. This may include but is not limited to options such as substitution (swapping), isolation (barricade), engineering (modify by design) or administration (policy/process) |
| Accept | Risks can be accepted for a number of reasons including:<br><br>– no extra treatments being available;<br><br>– meets the stated target risk rating for the type of risk;<br><br>– informed decision has been made about that risk; and<br><br>– the cost of risk treatment significantly outweighs the potential risk exposure. |

## 4.3.6  Control Assessment

Once controls are in place they must be rated by the control owner in the risk register.  This will be a combination of Design Adequacy and Operating Effectiveness, as per the following tables.  This assists in identifying improvements to existing controls, subject to the set Risk Appetite.

Control owners retains responsibility for ensuring identified controls are adequate and any identified treatment plans are actioned within timeframes.

| Design adequacy | |
|---|---|
| **Adequate** | The control is designed in a manner that it can give reasonable assurance that the risk will be mitigated. In other words, existing systems and procedures cover known circumstances and provide reasonable assurance for majority of risks. |
| **Partially adequate** | The control is designed in a way that will partially mitigate the risk and designed in a way to partially meet the design objectives. |
| **Inadequate** | The design of the control is not sufficient to give any assurance that the risk will be mitigated. There may be no systems and procedures in place, or existing systems and procedures are obsolete and require review. |
| **Operating effectiveness** | |
| **Effective** | The control operates in a manner that is effective in terms of being consistent, complete, reliable and timely. |
| **Partially effective** | The control **partially** operates in a manner that is effective in terms of being consistent, complete, reliable and timely. |
| **Ineffective** | The control **does not** operate in a manner that is effective in terms of being consistent, complete, reliable and timely. |

| | Effective | Partially effective | Ineffective |
|---|---|---|---|
| **Adequate** | Effective | Partially Effective | Ineffective |
| **Partially adequate** | Partially Effective | Partially Effective | Ineffective |
| **Inadequate** | Ineffective | Ineffective | Ineffective |

### 4.3.7  Communication and Consultation

Communication and consultation processes are critical in ensuring the Risk Management Principles are met. These include:

- Risk management awareness sessions tailored to different levels of SRWRA to develop understanding of risk management methodology and the value of risk management.

- Ensuring risk identification, analysis and evaluation processes incorporate a broad range of stakeholder input to provide the most holistic assessment process.

- Transparent reporting processes are implemented which drive accountability and inform management identifying opportunities, learnings from incidents and best practice.

- Facilitate engagement of stakeholders allowing them to understand and appreciate the benefits of controls and the need to endorse and support a treatment plan.

### 4.3.8  Monitor and Review

The following roles and responsibilities ensure a rigorous and transparent approach to managing risk.

| Roles | Responsibilities |
|---|---|
| Board | • Set the organisation's risk appetite and policy for managing risk;<br><br>• Give adequate consideration to risks when setting objectives and making decisions;<br><br>• Foster a culture that is consistent with the organisation's appetite for risk;<br><br>• Ensure the organisation has the structures and processes in place to support decision making and management of risk;<br><br>• Set an appropriate governance structure for risk and risk management including an Audit Committee and delegations;<br><br>• Review and endorse the Risk Management Framework<br><br>• Require the CEO to demonstrate that the framework for managing risk is effective and appropriate; and<br><br>• Require the CEO to provide information to allow the Board to understand the risks that may have material impacts on achievement of the organisation's objectives.<br><br>• Consider recommendations from the Audit Committee relating to strategic risks or any other risk matter |
| Audit Committee | • Review and endorse the criteria contained within the Risk Management Framework<br><br>• Review reports from Executive Management Team and auditors to ascertain the adequacy of controls that have been implemented<br><br>• Monitor strategic risks on a quarterly basis |

| Roles | Responsibilities |
| --- | --- |
| Chief Executive Officer (CEO) | • Promote a strong risk management culture by providing firm and visible commitment to risk management including ensuring appropriate accountability for the management of risk<br><br>• Develop and implement a framework that delivers a consistent approach to risk management by allocating resources and assigning authority, responsibility & accountability at appropriate levels within the organisation<br><br>• Allocate and uphold accountability for managing risk<br><br>• Ensure Executive Management Team have the necessary knowledge and skills to effectively fulfil their risk management responsibilities, including the identification of emerging risks<br><br>• Regularly review strategic and operational risks and maintain an understanding of the environment in which the organisation operates, the risks it faces and the effectiveness of its controls<br><br>• Ensure compliance with legislative and contractual obligations and policy requirements<br><br>• Provide reliable information about risks, controls and their effectiveness to the Board<br><br>• Escalate all strategic risks that exceed the organisation's risk appetite to the Audit Committee or Board, as required |
| Executive Management Team | • Commitment to, and promotion of, the risk management policy and framework<br><br>• Monitor the organisation's overall risk profile and mitigation strategies<br><br>• Ensure that risk management is embedded into all functions and activities, including decision making<br><br>• Ensure that risks that cannot be treated immediately are recorded on the risk register and that there is ongoing and regular review of the risk register, (including follow up and close out of overdue risk treatments)<br><br>• Incorporate risk treatments into business unit plans<br><br>• Ensure that staff, contractors, volunteers and other relevant stakeholders have the appropriate skills to be actively involved in managing risk<br><br>• Provide incentives and performance management arrangements that support the desired approach to managing risk<br><br>• Promote a proactive risk culture in accordance with business management initiatives<br><br>• Collectively review strategic risks and consider emerging risks, (prior to Audit |

| Roles | Responsibilities |
| --- | --- |
| | Committee) |
| | • Ensure compliance with legislative and contractual obligations and policy requirements |
| | • Initiate an analysis and learning of lessons from events (including near-misses), changes, trends, successes and failures. |
| Risk Manager | • Provide guidance and assistance to Executive Management Team and staff in relation to the application of this framework |
| | • Ensure relevant risk information is recorded in the Risk Register and reported and escalated to the Executive Management Team or cascaded to staff, as relevant |
| | • Maintain the Risk Management Policy and Framework to ensure its currency and relevance |
| | • Maintain the Risk Register and reporting timeframes as required |
| Staff & Contractors | • Understand the risk management processes that apply to their area of work |
| | • Identify, evaluate, report and manage, (or escalate,) risks relating to daily activities and projects |

## 4.4    Evaluation and Reporting

The risk management process and its outcomes are documented and reported in order to communicate risk management activities and outcomes, provide information for decision making, opportunities for continuous improvement and assist interaction with stakeholders.

| Who | What | When |
|---|---|---|
| Board and Audit Committee | Summary reports for risks with a current rating of high and extreme<br><br>Emerging risks, extreme and high risks<br><br>Summary of risks reviewed | Each meeting or more frequently depending on expectations |
| Executive Management Team | Review and update risk register<br><br>Internal audit or controls review | Quarterly |

## 4.5    Improvement

SRWRA will update this risk management framework within 3 years from endorsement, with a view to continually improve the suitability and effectiveness of its risk management process.

Risk management awareness training will be provided to SRWRA staff and relevant stakeholders to improve understanding of enterprise risk management. Training is captured on the training needs analysis to ensure effective implementation of this Framework.

Supply of supporting tools will be made available to all staff as required to deliver improvement objectives.

## 5   Definitions

| | |
|---|---|
| **Assurance** | A process that provides a level of confidence that objectives will be achieved within an acceptable level of risk |
| **Consequence** | The outcome of an event expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain. There may be a range of possible outcomes associated with an event. |
| **Control** | An action that modifies risks and increases the likelihood that objectives and goals of an organisation will be achieved. |
| **Control Owner** | Staff member responsible for oversight of the control to make sure it is and remains effective, measurement or directing the measurement of the effectiveness of that control, updating and reviewing that particular control over time, informing the risk owner, CEO and Senior Management when very important control s are starting to become less effective. |
| **Enterprise Risk Management** | The process that is applied in strategy setting and decision making throughout the organisation to identify, evaluate and manage potential risks that are likely to impact on achievement of objectives, set risk appetite and tolerance and manage risk within those parameters, and to provide reasonable assurance regarding the achievement of the organisation's objectives. |
| **Event** | Occurrence of a particular set of circumstances |
| **Exposure/Rating** | The risk exposure (also referred to as risk rating) is a qualitative value of the sum of the consequence of an event multiplied by the likelihood of that event occurring |
| **External Context** | External environment in which the organisation seeks to achieve its objectives |
| **Frequency** | A measure of the rate of occurrence of an event expressed as the number of occurrences of their event in a given time. |
| **Internal Audit** | An independent, objective assurance activity that uses a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes. |
| **Internal Context** | Internal environment in which the organisation seeks to achieve its objectives |
| **Likelihood** | Chance of something happening |
| **Monitor** | To check, supervise, observe critically or record the progress of an activity, action or system on a regular basis in order to identify change. |

| | |
|---|---|
| ***Risk Analysis*** | A systematic use of available information to determine how often specified events may occur and the magnitude of their consequences. |
| ***Risk Appetite*** | Is the amount of risk an organisation is prepared to accept in pursuit of its objectives |
| ***Risk Assessment*** | An overall process of risk identification, risk analysis and risk evaluation |
| ***Risk Culture*** | Risk culture refers to the behaviours that lead to how every person thinks about and manages risks, |
| ***Risk Evaluation*** | The process used to determine risk management priorities by comparing the level of risk against predetermined standards, target risk levels or other criteria. |
| ***Risk Management*** | Coordinated activities to direct and control an organisation with regard to risk. |
| ***Risk Management Framework*** | Set of components that provide the foundations and organisational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organisation. |
| ***Risk Owner*** | Staff member with the accountability and authority to manage a risk |
| ***Risk Tolerance*** | The acceptable variation in outcomes related to specific performance measures linked to objectives the organisation seeks to achieve |
| ***Risk*** | The effect of uncertainty on objectives |
| ***Staff*** | Includes all SRWRA personnel, temporary staff, contractors, subcontractors, business partners and personnel affiliated with third parties who have access to SRWRA's data, facilities, networks, systems or applications are responsible for compliance with the Risk Management Policy |
| ***Stakeholder*** | Person or organisation that can affect, be affected by, or perceive themselves to be affected by, a decision or activity |

## Review History

| Version No: | Issue Date: | Description of Change |
|---|---|---|
| 1.0 | November 2018 | New Document |
| 2.0 | September 2022 | Updated to reflect enhancements in the risk register and utilising LGA Risk Management Templates |

| Relevant Legislation | Local Government Act 1999 |
|---|---|
| | Local Government (Financial Management Regulations) 2011 |
| | Work Health and Safety Act 2012 |
| | Emergency Management Act 2004 |
| Related Documents | AS ISO 31000:2018 - Risk Management Guidelines |
| | SA HB:436.1:2020 Risk Management Guidelines – companion to AS ISO 31000:2018, Part 1: Boards and executives |
| | SRWRA Risk Management Policy |
| | SRWRA Risk Register |
| | Annual Business Plan |

## 6   Appendices

# Risk Management Framework

## Appendix A: Consequence Table

| RANK | People, WHS & Culture | Environmental | Financial - | Service Delivery | Projects | Reputation | Legal/ Regulatory/ Policy |
|---|---|---|---|---|---|---|---|
| **Insignificant** | Near miss. No or minor injuries not requiring first aid treatment. Annual staff turnover of <10% | Minor instance of environmental (e.g. soil, vegetation, coastal) damage. Can be reversed immediately | Minor expenditure or loss <$50k pa. Minor failure of infrastructure – no inconvenience to stakeholders | Insignificant interruption to a service - no impact to customers /business | Nil impact on achievment of key project objectives Project duration extended up to 10% of original time frame, <2.5% of project cost variance | Little community interest, low profile, no media coverage | Business processes and procedures not well understood with minor impact from non-compliance. No noticeable statutory or regulatory impact |
| **Minor** | First aid treatment, same day return to work. Negligible impact on morale Annual staff turnover of <20% | Minor impact to environment, e.g. on-site chemical release, spill or sand/soil movement that can be immediately contained. Can be reversed in the short term | Medium expenditure or loss $50k to $100k pa. Minor failure that cannot be rectified immediately – minor inconvenience to stakeholders | Minor interruption to a service with minimal impact to customers/business | Some impact on isolated key project objectives. Additional minor effort required to ensure all objectives are met. Project duration extended by 11-20% of original project timeframe, 2.5% - 5% of project cost variance | Low impact, some passing interest, low media profile | Business processes and procedures not sufficiently defined or followed leading to non-compliance and threatening performance. Minor/temporary non-compliance with statutory requirements |
| **Moderate** | Medical treatment injury. Lost time injury <5 days Short Term effect on morale and business Annual staff turnover of >20% of entire workforce  or 30% of a work group. Loss of member of Executive Management Team | Moderate impact to environment. Localised damage or chemical release that has potential to spread but can be contained or reversed with intensive efforts or outside assistance | High expenditure or loss >$100k and <$250k pa. Significant failure of infrastructure that will require work-arounds - moderate inconvenience to stakeholders | Moderate Interruption to service delivery. Customer impact up to 48 hrs. Partial BCP action may be needed | Impacts numerous key project objectives. Considerable effort required including some change in project scope to achieve required outcomes. Project duration extended by 21-35% of original project timeframe 5% - 15% of project cost variance | Moderate impact, moderate public interest, public embarrassment, moderate media profile | Key business processes and procedures not operating leading to serious non-compliance and impacting on performance. Short-term non-compliance with moderate statutory requirements |
| **Major** | Extensive injury or hospitalisation, serious lost time injury >5 days, temporary disablement. Significant impact on morale and business Annual staff turnover of 30% - <75% Loss of >1 members of Executive Management Team | Off-site chemical release, severe loss of environmental amenity or danger of continuing environmental damage. | Major expenditure or loss >$250k and <$500k pa. Major failure of infrastructure that severely limits functionality – significant inconvenience to stakeholders | Major interruption to service delivery or production capability, Customer impact > 7 days. Component of BCP action may be needed. | Significant portion of key project  objectives impacted. Major changes to project scope and work necessary to achieve required outcomes. Project duration extended by 36-50% of original project timeframe, 15% - 25% of project cost variance | Sustained public interest, high negative media profile, Premier/Cabinet publicly involved, third party action | Key business controls breakdown leading to significant non-compliance significantly impacting on performance Significant non-compliance with essential statutory requirements |
| **Catastrophic** | Workplace fatality, permanent disablement Long term effect on morale and performance of business Annual staff turnover of > 75% Loss of entire/majority of Executive Management Team | Toxic off-site chemical release with detrimental effect, major loss of environmental amenity or irrecoverable environmental damage | Catastrophic expenditure or loss >$500k pa. Total failure of infrastructure | Major interruption to delivery of all or most services for more than 14 days. Full BCP action required. | Significant portion of key project  objectives impacted. Significant changes to project scope and work necessary to achieve required outcomes. Project duration extended by >50% of original project timeframe, >25% of project cost variance | Widespread public agitation, Government censure, high multiple impacts, widespread negative media profile | Key business controls absent leading to material non-compliance threatening survival of the organisation. Long term or indefinite non-compliance with essential statutory requirements and may result in criminal charges |

**Risk Management Framework**

## Appendix B: Likelihood Table

| Likelihood | Percentage of occuring | Explanation – Operations | Explanation – Projects/ Business Case | Probability |
|---|---|---|---|---|
| **Almost Certain** | **90% chance** | It is **expected to occur** in most circumstances, >1 event per year | Could be expected to occur more than once during the study or project delivery | Expected to occur in most circumstances |
| **Likely** | **50%-90% chance** | **Will probably occur** in most circumstances, within a 1 – 5 year period | Could easily be incurred and has generally occurred in similar studies or projects. | Probably will occur |
| **Possible** | **25%-50% chance** | **Might occur at some time,** within a 5 - 10 year period. | Incurred in a minority of similar studies or projects | Moderate probability of an incident |
| **Unlikely** | **5%-25% chance** | **Could occur at some time,** within a 10 – 20 year period. | Known to happen, but only rarely. | Low probability of an incident |
| **Rare** | **<5% chance** | **May occur only in exceptional circumstances,** more than 20 year timeframe. | Has not occurred in similar studies or projects. Conceivable but in extreme circumstances. | Extremely low probability. Will only occur in exceptional circumstances |

# Risk Management Framework

## Appendix C: Risk matrix

| Consequence / Likelihood | Insignificant | Minor | Moderate | Major | Catastrophic |
|---|---|---|---|---|---|
| Certain to occur | Medium | High | High | Extreme | Extreme |
| Very likely | Low | Medium | High | Extreme | Extreme |
| Possible | Low | Medium | Medium | High | High |
| Unlikely | Low | Low | Medium | High | High |
| Rare | Low | Low | Medium | Medium | High |