

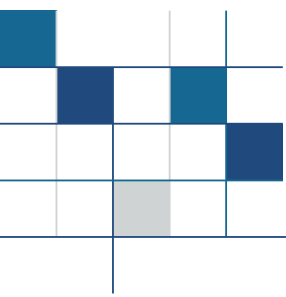


Guideline

Operational risk assessment for assurance activities

Department of Water and Environmental Regulation

March 2025



Department of Water and Environmental Regulation
Prime House, 8 Davidson Terrace
Joondalup Western Australia 6027
Locked Bag 10 Joondalup DC WA 6919

Phone: 08 6364 7000

Fax: 08 6364 7001

National Relay Service 13 36 77

wa.gov.au/dwer

© Government of Western Australia

March 2025

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. Apart from any use as permitted under the *Copyright Act 1968*, all other rights are reserved. Requests and inquiries concerning reproduction and rights should be addressed to the Department of Water and Environmental Regulation.

Disclaimer

This document has been published by the Department of Water and Environmental Regulation. Any representation, statement, opinion or advice expressed or implied in this publication is made in good faith and on the basis that the Department of Water and Environmental Regulation and its employees are not liable for any damage or loss whatsoever which may occur as a result of action taken or not taken, as the case may be in respect of any representation, statement, opinion or advice referred to herein. Professional advice should be obtained before applying the information contained in this document to particular circumstances.

This publication is available at our website wa.gov.au/dwer or for those with special needs it can be made available in alternative formats such as audio, large print, or Braille.

Contents

1	Objective	4
2	Background.....	4
3	Legislation and other guideline	5
4	Scope.....	5
5	Risk approach.....	6
5.1	Responsibilities	6
5.2	Overview of the risk assessment process.....	6
5.3	Establish context of the risk	7
5.1	Identify risks	7
5.4	Risk analysis	8
5.4.1	Assessing consequence	8
5.4.2	Assessing likelihood	10
5.5	Evaluate the risk.....	10
5.2	Determining action	11
5.3	Operational risk considerations of regulatory instruments and decisions post-assessment	11
5.6	Reviewing risk	12
6	Implementation	12
7	Review	12

Tables

Table 1	Risk criteria – consequence	9
Table 2	Risk criteria – likelihood	10
Table 3	Risk rating matrix	10
Table 4	Risk acceptability and treatment	11

Figures

Figure 1	Risk assessment for assurance	5
Figure 2	AS ISO 31000:2018 Risk Management Process Diagram.....	7

1 Objective

The Department of Water and Environmental Regulation (the department) adopts an Enterprise Risk Management Framework, that defines the coordinated and systematic processes, which assist the department to understand and manage risk.

As the state's primary environmental and water resource regulator, the department commits to delivering risk-based regulation under its [Regulatory approach](#), specifically to:

- make regulatory decisions proportionate to the level of risk posed to public health, the environment and water resources with consideration of cumulative impacts
- ensure department resources are targeted to the greatest risks to public health, the environment and water resources.

This guideline describes how the department considers risk in the delivery of its assurance activities, to ensure our regulatory approach and decision making is consistent and transparent.

2 Background

The Assurance Directorate activities form a critical part of the department's regulatory cycle, as we aim to verify and provide our stakeholders with confidence that our legislation is achieving the anticipated environmental and water outcomes for Western Australia.

The Directorate undertakes a range of activities to achieve this outcome as outlined in the Assurance Directorate Operating framework:



The Assurance Directorate uses risk assessment to inform:

- the nature and priority of our regulatory response and intervention in relation to incidents and complaints, and reports to Environment Watch
- the scope, frequency and type of compliance monitoring activities and campaigns which informs the development of our Annual Assurance Program, including how we categorise instruments (post assessment) issued by the department across its multiple regulatory deliveries
- the categorisation and management of breaches of the legislation and instruments we administer and their associated level of impact
- intervention and enforcement responses in line with our [Compliance and Enforcement Policy](#)
- whether to issue controlled waste licences and any controls imposed on them
- whether to support intrastate movements of controlled waste under the National Environmental Protection Measures (NEPM)
- Site classification under the *Contaminated Sites Act 2003*.



Figure 1 Risk assessment for assurance

As depicted in Figure 1, we have designed our risk assessment approach to ensure we thoroughly evaluate risks and determine our course of action in real time, based on the most accurate and up-to-date information available. This approach allows us to proactively manage potential threats and make informed decisions to safeguard our objectives and operations.

3 Legislation and other guideline

This Guideline relates to assurance activities undertaken to promote, monitor and enforce all [legislation](#) administered by the department.

You should read this guideline together with the department's *Enterprise Risk Management Framework*.

4 Scope

Risks can be strategic, operational and project based:

Strategic risk – risks associated with the strategic purpose and objectives of the department. Also includes interdepartmental and whole-of-government risks

Operational risks – social (public interest, public health and amenity), environmental and commercial/economic (impact to third-party property or business) risk

Project risks – those associated with the planning and delivery of projects undertaken in Assurance and related to specific project objectives.

This guideline relates to **operational risks associated with assurance activities** only. Strategic and Project risks will be identified, assessed and managed in line with the department's Enterprise Risk Management Framework.

5 Risk approach

5.1 Responsibilities

All staff within the Assurance Directorate play an active role in identifying, assessing, and managing risk as part of their daily duties. To ensure a consistent and effective approach, risk must be considered and communicated clearly at every level of the Directorate.

- **Leadership responsibilities:** Directorate leadership is accountable for embedding this guideline into operational practice. This includes ensuring that all officers are properly trained in the risk assessment process and that relevant procedures, manuals, and work instructions reflect the principles outlined in the guideline.
- **Officer responsibilities:** Each officer is responsible for applying the risk assessment methodology in the execution of their role. This ensures that risk is managed consistently and decisions are informed by a structured, transparent process.

5.2 Overview of the risk assessment process

Figure 2 sets out the overarching approach to risk assessment in the Assurance context.

The process involves:

- establishing the context of the risk
- identifying the risk
- analysing the risk
- evaluating the risk
- determining whether and if so, any action or regulatory intervention is required.

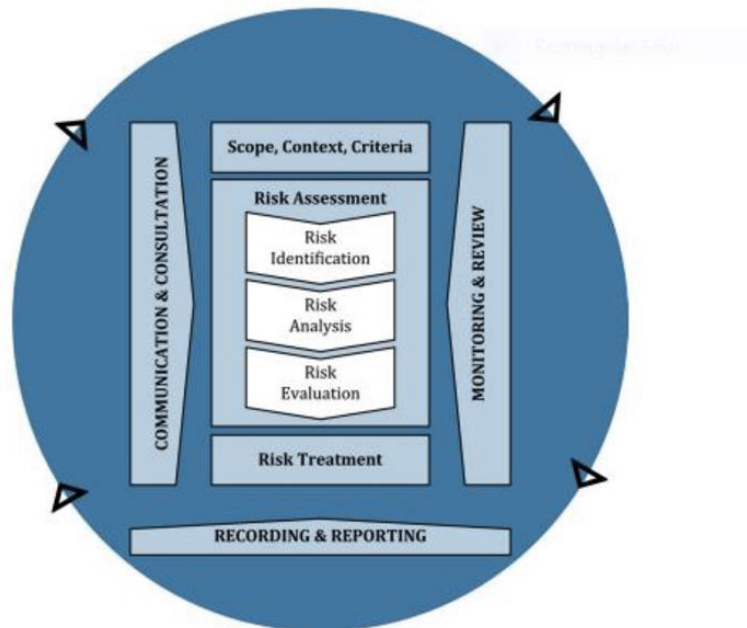


Figure 2 AS ISO 31000:2018 Risk Management Process Diagram

5.3 Establish context of the risk

To establish the context of the risk, the department may consider:

- the legislative context e.g. *Environmental Protection Act 1986* (EP Act), *Rights in Water and Irrigation Act 1914*, *Contaminated Sites Act 2003*
- relevant environmental standards and policies
- location and environmental/water resource setting
- operator approvals and their risk rating if applicable
- operator history including compliance with approvals administered by the department
- level of contentiousness in the community/media
- government interest and priority.

Assurance activities require consideration of risk and action in real time, with decisions made on best available information at the time.

5.1 Identify risks

In the Assurance context, there are multiple mechanisms for identifying risks:

- Self-reported non-compliance or otherwise identified non-compliance or risk of non-compliance with statutory requirements (legislation, policy and approvals)
- Information collected through inspections, audits and investigations
- Complaints, reports, incidents, notifications
- Referrals from other departments
- Department monitoring results – air noise, soil, water, waste etc.
- Environmental scanning
- Intelligence
- Statutory reporting and other independent audit/investigations submissions
- Information from industry engagement

- Workshops
- Lessons learnt from previous assurance activities (inherent risks)

5.4 Risk analysis

We will analyse identified risks by assessing the consequence and likelihood of the risk.

5.4.1 Assessing consequence

In assessing the consequence of an identified risk, we may consider:

- scale of actual or potential pollution or environmental harm
- actual or potential public health impacts
- actual or potential amenity impacts and their duration
- public concern
- impacts to the department and our stakeholders such as such as reputational impacts, and stakeholder relationships.

In determining consequence, we may:

- rate the consequence of a risk using the consequence criteria set out in Table 1: Risk criteria – consequence or specific criteria for consequences to the environment or public health (Specific Consequence Criteria)
- assess consequence at the receptor or receptors most affected and may consider the nature, value and sensitivity of that receptor or receptors
- evaluate the most severe consequence considering the current controls (if any) in place.

To determine Specific Consequence Criteria, we may:

- a) apply the Prescribed Standards and approved policies within legislation we administer
- b) consider the relevant published documents set out in Appendix 1
- c) consider information from the applicant, including any Specific Consequence Criteria derived from baseline data or reference sites.

Table 1 Risk criteria – consequence

Consequence			
	Social	Environment/Water	Stakeholders and reputation
Catastrophic	• Loss of life • Adverse health effects: high level or ongoing medical treatment • Relevant Specific Consequence Criteria are significantly exceeded • Local scale impacts: permanent loss of amenity	• Onsite impacts: catastrophic • Offsite impacts local scale: high level or above • Offsite impacts wider scale: mid-level or above • Mid to long-term or permanent impact to an area of high conservation value or special significance[^] • Relevant Specific Consequence Criteria are significantly exceeded	• Significant adverse community impact and condemnation • Consistent ongoing community loss of confidence and trust in organisation's capabilities and intentions • High widespread media • Total loss of credibility with all stakeholders, catastrophic breakdown of the relationship with a key stakeholder
Major	• Adverse health effects: mid-level or frequent treatment • Relevant Specific Consequence Criteria are exceeded • Local scale impacts: high level impact to amenity	• Onsite impacts: high level • Offsite impacts local scale: mid-level • Offsite impacts wider scale: low level • Short-term impact to an area of high conservation value or special significance[^] • Relevant Specific Consequence Criteria are exceeded	• Considerable and prolonged community impact and dissatisfaction publicly expressed • Criticism and loss of confidence and trust by stakeholders in departmental processes and capabilities • Department's performance and/or integrity in question • Significant media attention • Ministerial intervention/parliamentary enquiries • Damage done to most existing stakeholder relationships or a key stakeholder relationship
Moderate	• Adverse health effects: low level or occasional medical treatment • Relevant Specific Consequence Criteria* are at risk of not being met • Local scale impacts: mid-level impact to amenity	• Onsite impacts: mid-level • Offsite impacts local scale: low level • Offsite impacts wider scale: minimal • Relevant Specific Consequence Criteria are at risk of not being met	• Community impacts and concerns publicly expressed • Reduced confidence expressed by community and stakeholders • Weakened relationship with a significant number of stakeholders or a key stakeholder requiring specific measures to rectify
Minor	• Relevant Specific Consequence Criteria* (for public health) are likely to be met • Local scale impacts: low level impact to amenity	• Onsite impacts: low level • Offsite impacts local scale: minimal • Offsite impacts wider scale: not detectable • Relevant Specific Consequence Criteria likely to be met	• Local community impacts or issues-based concerns • Damage to a stakeholder relationship, able to be rectified in the short term
Insignificant	• Local scale: minimal impacts to amenity • Specific Consequence Criteria* (for public health) criteria met	• Onsite impact: minimal • Relevant Specific Consequence Criteria met	• Insignificant weakening of a single stakeholder relationship/morale • Isolated individual issues-based complaint • No media coverage

'Onsite' means the regulated premises boundary or a cadastral boundary where a risk may occur.

[^] For areas of high conservation value or special significance, we may use the *Guidance Statement: Environmental siting*.

* In applying public health criteria, we may use the Department of Health's *Health risk assessment (scoping) guidelines*.

5.4.2 Assessing likelihood

In a reactive Assurance context, likelihood is often straightforward to assess as the risk has or is occurring.

In assessing the likelihood of a risk occurring, we may consider:

- whether the risk has or is occurring
- whether the risk consequence is escalating or de-escalating
- available information from monitoring data or other intelligence
- the duration of non-compliance
- the preventability of non-compliance and/or impact
- mitigating factors such as attempted response and remedy
- previous compliance history
- deliberativeness
- expert opinion and published research
- predictive modelling that uses detailed mathematical models (e.g. groundwater, air dispersion, surface water and noise models).

We will rate the likelihood of an identified risk occurring using the likelihood criteria in Table 2 Risk criteria – Likelihood.

Table 2 Risk criteria – likelihood

Likelihood	Description	Probability
Almost certain	The risk has occurred or is occurring or is expected to occur in most circumstances	>95% or more than once per year
Likely	The risk will probably occur in most circumstances	75–95% at least once per year
Possible	The risk could occur at some time	25–75% at least once every 3 years
Unlikely	The risk will probably occur/ not occur in most circumstances	5–25% at least once in 10 years
Rare	The risk may only occur in exceptional circumstances	<5% less than once in 20 years

5.5 Evaluate the risk

The department may evaluate Assurance activity risks and determine a risk rating using Table 3 Risk rating matrix.

Table 3 Risk rating matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

5.2 Determining action

The department may use the risk rating and relevant legislative and policy settings to determine:

- a) whether the risk is acceptable and tolerable, or unacceptable and not tolerable
- b) the appropriate treatment and degree of regulatory intervention required.

The department will refer to the Compliance and Enforcement Policy to ensure actions taken are transparent and accountable. Actions are to focus first on remedy/impact mitigation and then consider sanction.

In accordance with Table 4 Risk acceptability and treatment, the appropriate level of intervention is set.

Table 4 Risk acceptability and treatment

Risk rating	Acceptability and treatment
Extreme	Unacceptable risk and immediate regulatory intervention will be required to address the risk.
High	Risk may be tolerable but regulatory intervention may be required to reduce risk.
Medium	Risk is tolerable. Regulatory intervention may be required in some instances.
Low	Risk is acceptable. Regulatory intervention is generally not required.

5.3 Operational risk considerations of regulatory instruments and decisions post-assessment

A fundamental function of the Assurance Directorate is to proactively monitor instruments issued by the department, to ensure compliance and to ensure the instrument is achieving the required environmental and water resource outcome.

The categorisation and prioritisation of instruments issued by the department is based on risk, which is fundamental to the development of the department's Annual Assurance Program.

Instruments are issued under a wide range of legislation administered by the department under several different regulatory frameworks. All instruments from an Assurance perspective need to be risk assessed consistently to enable effective prioritisation.

Prioritisation of regulatory workload based on risk is also fundamental to effective regulatory delivery. This can be applied to all regulatory deliveries within the Assurance Directorate.

The Assurance Directorate considers risk through two lenses in this context:

- the inherent risk associated with the instrument/regulatory activity (complexity – factors, categories, volumes, scale etc.) to inform the consequence considerations
- the operational risk of the instrument; compliance history, complaints, incidents, community (political instruments) to inform the likelihood considerations.

Using the above information, instruments are then assigned a priority rating and associated compliance monitoring efforts are scaled appropriately.

More information is provided in the associated Manual and Work Instruction.

5.6 Reviewing risk

We acknowledge that risk assessments are snapshots in time, and new information may emerge that enhances our understanding.

We will continuously monitor and review risks to detect changes over time and adjust our approach as necessary.

6 Implementation

The department will use this risk assessment approach in undertaking its assurance activities from March 2025.

7 Review

We will review this Guideline at the earliest practical opportunity following its fifth anniversary.