CHAPTER

13

Airport Environment Strategy

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Airport Environment Strategy

13.1 Environmental Management at Brisbane Airport

Brisbane Airport Corporation (BAC) is dedicated to making Brisbane Airport a thriving hub for aviation, industry and business whilst ensuring strong stewardship of the physical environment. Long-term environmental sustainability is a fundamental principle of BAC's operating philosophy and intrinsically linked to the successful attainment of its economic, operational and social objectives.

The Airport Environment Strategy (AES) details how Brisbane Airport contributes towards environmental values within the broader community. The airport maintains an Environmental Management System (EMS) certified to ISO14001:2015. The EMS provides a framework for continuous improvement of environmental management processes ensuring BAC continues to provide environmental value to the community.

The 2026 AES has been developed to ensure compliance with relevant regulatory requirements within the *Airports Act 1996* (the Act) and associated regulations.

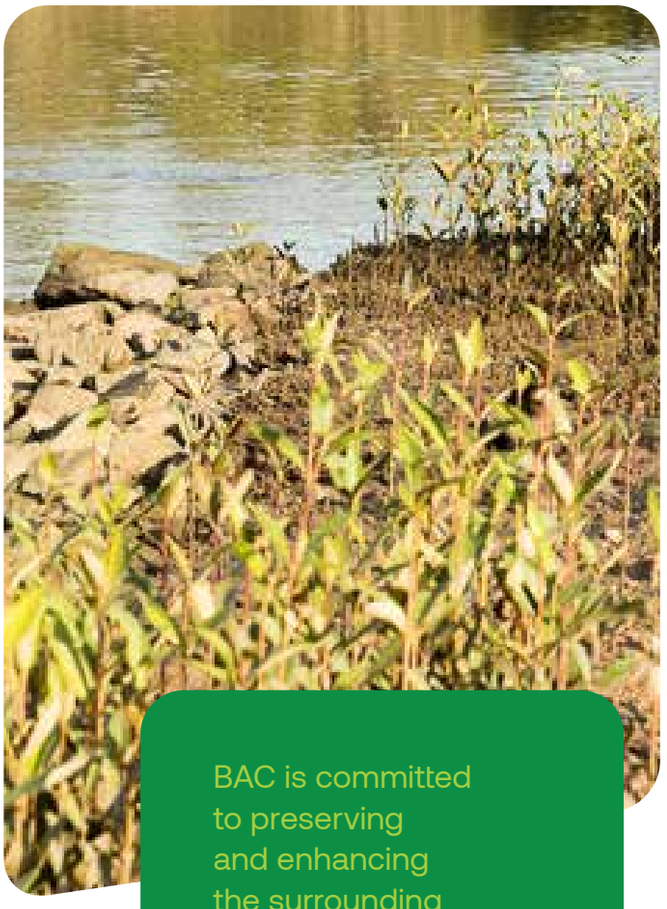
The AES includes an assessment of, and plans for, managing environmental issues at Brisbane Airport. The AES also includes:

- objectives for environmental management across the airport
- areas of environmental significance at the airport
- possible sources of environmental impact associated with airport operations
- environmental management framework including monitoring activities, and
- actions implemented to prevent, control and/or reduce the environmental impacts associated with airport operations.

The AES sets out the five-year strategic direction for environmental compliance including potential actions to be undertaken, where reasonable and practicable, to achieve overall environmental objectives. Table 13.1 below outlines indicative timeframes for commencement of said actions.

TABLE 13.1: TIMEFRAMES FOR ACTION PLANS

TIMEFRAME	DEFINITION
SUSTAINED	Rolling, regular review, update and implementation
INTERIM	0 – 5 years after the implementation of the AES
EXTENDED	5+ years after the implementation of the AES



BAC is committed to preserving and enhancing the surrounding environment.

Stakeholder Consultation

As part of the master planning process, BAC has engaged in direct consultation with the below stakeholders in relation to the development of the AES, including

- the Airport Environment Officer (AEO) and the Commonwealth Department of Infrastructure, Transport, Regional Development, Sport and the Arts (the Department)
- Queensland Government Department of Environment, Tourism, Science and Innovation
- Airport tenants and contractors, and
- Community feedback relating to existing airport operations.

The 2026 AES will also be presented in parallel with the 2026 Master Plan for a formal public comment period commencing in the mid-2025.

Location

Brisbane Airport is located within the Moreton Bay Catchment, approximately 15 kilometres north-east of Brisbane's central business district. Spanning 2,700 hectares, Brisbane Airport operates 24-hours a day and currently supports over 400 businesses in both aviation and non-aviation industries. The airport is largely surrounded by industrialised areas, including the Port of Brisbane and Australia Trade Coast, however, some smaller pockets of residential communities are located west of the airport.

Brisbane Airport is located on a reclaimed portion of the Brisbane River delta and is bounded by the mouth of the Brisbane River to the east, Kedron Brook Floodway and Boondall Wetlands to the west, Moreton Bay to the north and the M1 Pacific Motorway to the south. Kedron Brook, Boondall Wetlands and Moreton Bay are considered sensitive environments, parts of which are Ramsar-designated wetlands of international significance. Furthermore, areas of cultural significance for First Nations people also exist within and surrounding Brisbane Airport.

Environmentally Significant Areas

Brisbane Airport has completed extensive biodiversity and heritage investigations over the last 20 years. Based on these investigations and feedback from stakeholders, the following areas have been identified as being Environmentally

Significant Areas (ESAs) for the purposes of the Airports Act:

- Jackson's Creek ESA
- Jubilee Creek/Serpentine Inlet ESA
- Kedron Brook ESA
- Pinkenba ESA

These areas have been identified to protect and manage cultural and historical heritage sites, swamp oak forests, mangrove forest and various bird species. Further detail is provided in Section 7.1 and Section 7.2 of this AES.

Evolving Regulations and Expectations

As part of its EMS, BAC maintains a register of relevant State and Commonwealth environmental and heritage acts, regulations, policies and guidelines with which it must comply. Many of these documents are subject to ongoing review and amendment (e.g. the sunsetting of the *Airports (Environmental Protection) Regulations* (AEPR) in 2026, the publication of the third version of the *PFAS National Environmental Management Plan* (PFAS NEMP) in March 2025 and the ongoing drafting of the Water Quality Guidelines).

Changes to the regulatory environment are to be expected, given the evolutionary nature of scientific investigations and findings, as well as the increase in engagement from the community and shareholders around environmental performance. BAC actively engages with the wider airport community and stakeholders including employees, operators and shareholders to communicate how activities should align with evolving regulations and industry standards.

Corporate Sustainability

Brisbane Airport recognises the challenges aviation faces with decarbonisation and climate adaptation and has subsequently formed a dedicated plan to consider and respond to these opportunities as they arise across all aspects of business management.

The scope of this AES, while complementary to Brisbane Airport's broader sustainability objectives, focusses on environmental management rather than the broader corporate sustainability program of decarbonisation and adaptation planning.

BAC reports on progress against sustainably targets in the Brisbane Airport Corporation Annual Report.

13.2 Achievements since the 2020 Airport Environment Strategy

Since approval of Brisbane Airport's 2020 AES, BAC has implemented a range of actions, focusing on the management and monitoring of Brisbane Airport's environment. These achievements have been outlined below in Table 13.1.

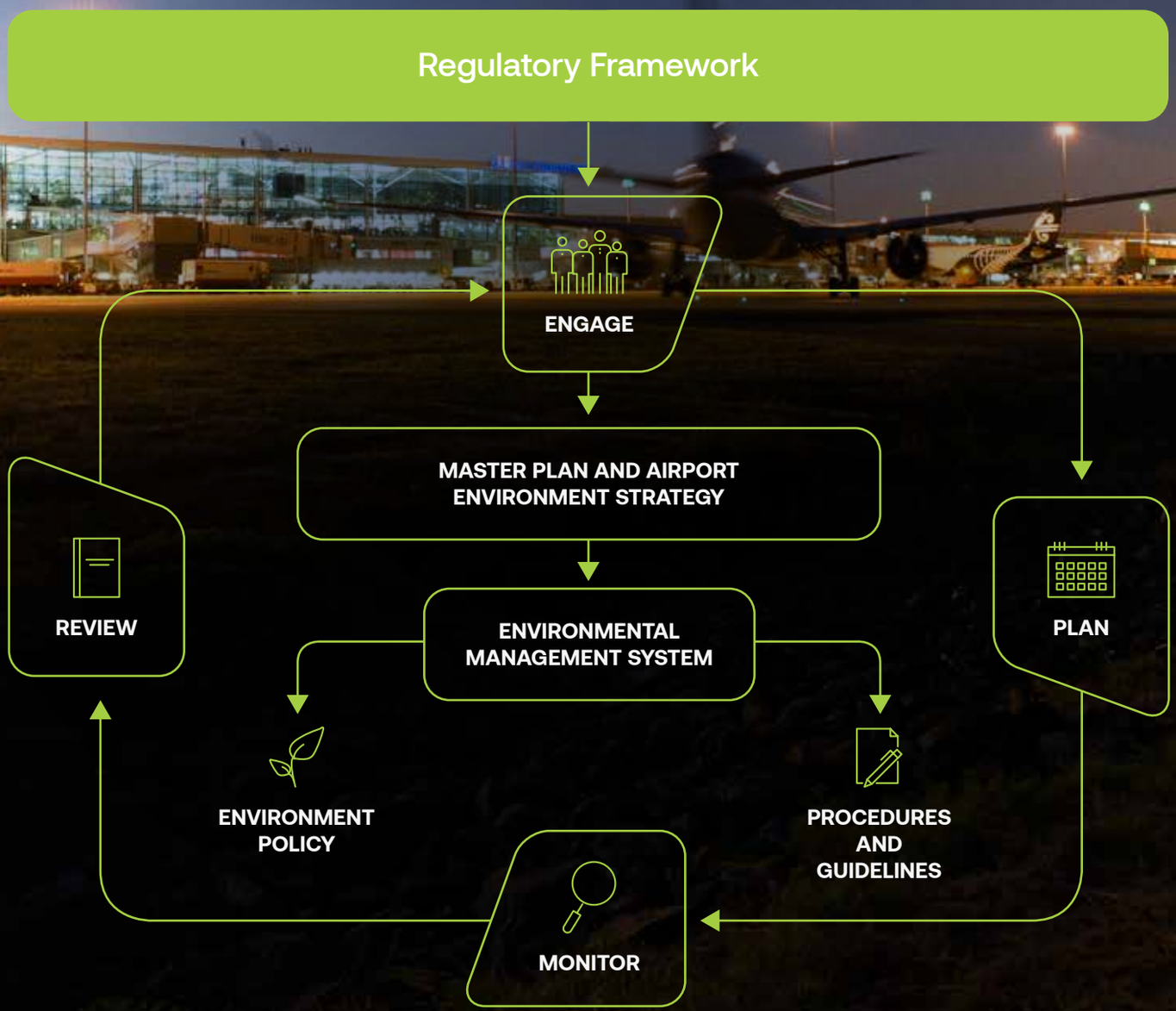
TABLE 13.2: ACHIEVEMENTS SINCE THE COMMENCEMENT OF THE 2020 AES

FOCUS AREA	ACHIEVEMENTS DELIVERED IN THE 2020 AES PERIOD
GENERAL ACHIEVEMENTS	• Certification of BAC's EMS to the ISO14001:2015 standard and continued certification • Development and implementation of a Site-wide Environmental Management Plan (Site-wide EMP) to manage low-risk development and construction activities • Development and implementation of an airport-wide PFAS Management Framework, to manage PFAS impacted material, which received auditor endorsement in 2024.
BIODIVERSITY	• In 2024, BAC undertook a Terrestrial Fauna Benchmarking Study across the airport to assess biodiversity trends • In 2025, BAC updated the Biodiversity Management Commitment (BMC), formally known as the Biodiversity Management Strategy (BMS).
HERITAGE	• BAC has updated the Brisbane Airport Heritage Management Plan (HMP) and 2024-2026 Innovate Reconciliation Action Plan (RAP). These plans were developed in consultation with First Nations communities • BAC has continued to have ongoing engagement with First Nations communities during the commissioning and installation of the artwork Land, Sea and Sky by First Nations artist in residence Delvene Cockatoo-Collins and the development of a yarning circle, which serves as a space for cultural gathering.
SOIL MANAGEMENT	• A review and update of the Contaminated Site Register (CSR) was conducted in both 2020 and 2025 • As part of the PFAS Management Framework, the PFAS Soil Management Plan (PFAS SMP) was developed and implemented across Brisbane Airport.
SURFACE WATER AND GROUNDWATER QUALITY	• In 2024, BAC developed the Water Quality Monitoring Program (WQMP). The WQMP is designed to understand and monitor water quality at Brisbane Airport • As part of the PFAS Management Framework, the PFAS Water Management Plan (PFAS WMP) was developed and implemented across Brisbane Airport • BAC also undertook a groundwater well audit in 2025.
GROUND-BASED NOISE AND VIBRATION	• No complaints were received by the airport from local communities or residents relating to ground-based noise from the airport.
AIR QUALITY	• Airshed modelling was completed for Brisbane Airport in 2024, providing an improved understanding of local air quality at the airport • Odour dispersion modelling was carried out for three development projects and following modelling, no issues were raised.
HAZARDOUS MATERIALS AND INCIDENT RESPONSE	• In 2024, a spill training kit was developed and provided to all airport operators, ensuring the correct usage and subsequent waste handling of spills.

13.3 Environmental Management Framework

Brisbane Airport has an Environmental Management Framework designed to ensure the ongoing management and monitoring of environmental issues and risks at the airport. The regulatory framework that forms the basis of the Environmental Management Framework at the Brisbane Airport include those detailed below in Figure 13-1. The AES is informed by this regulatory framework and operates as part of the statutory mechanism for BAC to manage environmental risks at the airport. A risk-based environmental management approach has been adopted by BAC. The ISO 14001:2015 certified EMS outlines BAC's environmental objectives, actions and processes to monitor, manage and respond to potential environmental issues in alignment with BAC's Risk Management Framework.

FIGURE 13.1: BRISBANE AIRPORT ENVIRONMENTAL MANAGEMENT FRAMEWORK



Airport Environment Strategy

Responsibilities for Environmental Management at BAC

A range of internal stakeholders are responsible for the environmental management of Brisbane Airport. BAC collaborates with all stakeholders to ensure the continual improvement of environmental management at the airport. These roles and responsibilities have been described in Table 13.3.

Environment Policy

BAC's Environment Policy sets the direction for the EMS to deliver continuous environmental improvement across Brisbane Airport. The policy which applies to all BAC personnel, states that BAC:

- Develops and operates Brisbane Airport in an environmentally responsible manner
- Complies with applicable environmental laws, policies and other legal requirements which apply to its operations and strives to exceed these requirements
- Focuses on continual improvement in environmental performance
- Takes a risk-based approach to managing environmental risks and minimising adverse impacts on the environment caused by its operations, and
- Fosters an environmentally responsible culture amongst BAC Personnel.

Environmental Management System

The EMS is a framework that enables BAC to achieve its environmental goals through consistent review, evaluation and improvement of its environmental performance. The scope of the EMS includes the management of operations, developments and tenants/operators. The EMS does not include sustainability requirements as these are managed through the Sustainability Framework, which is summarised in Chapter Four of the 2026 Master Plan.

The EMS follows the Plan-Do-Check-Act model to provide a risk-based iterative process to achieve continual improvement of environmental performance with a focus on reducing significant risk. BAC's EMS is certified to ISO 14001:2015 and audited annually.

The EMS comprises five key areas that ensure a continuous improvement approach to environmental performance, including:

- Planning
- Implementation
- Monitoring
- Reporting, and
- Review.

TABLE 13.3: ENVIRONMENTAL MANAGEMENT ROLES AND RESPONSIBILITIES

ROLE	RESPONSIBILITY
BAC BOARD OF DIRECTORS AND EXECUTIVE LEADERSHIP TEAM	• Oversees and holds responsibility for the overall environmental performance of the airport • Demonstrate a commitment to developing and promoting an environmentally responsible culture within BAC • Board of Directors act as the approvers of the Environment Policy • Executive Leadership Team hold a responsibility for supporting and promoting the EMS across the airport.
BAC ENVIRONMENT STAFF	• Overall responsibility for the implementation of the EMS, this AES and compliance with regulatory requirements • Ongoing communication with and reporting to the AEO • Undertake regular monitoring and review of monitoring across the airport environment.
AIRPORT TENANTS AND OPERATORS	• Prepare and implement an Operational Environmental Management Plan (OEMP) when required • Comply with all relevant environmental legislation alongside all BAC documentation which may include guidelines, plans, policies and procedures • Participate in environmental training as required • Undertake environmental audits and inspections as required • Have a responsibility to minimise and/or not cause adverse impacts to the airport environment, including: – A general duty to avoid polluting, to take all reasonable and practicable measures to prevent pollution or minimise where prevention is unavoidable – A general duty to take all reasonable and practicable measures to ensure there are no adverse consequences of tenant activities on the local environment, including biodiversity and heritage – A general duty to prevent offensive noise occurring and take all reasonable and practicable measures to prevent the generation of offensive noise or minimise where prevention is not avoidable • Report, investigate and if required rectify incidents or non-conformances.
AIRPORT ENVIRONMENT OFFICER (AEO)	• Appointed by the Department • Oversees the airport's compliance with environmental legislative requirements and responsibilities detailed in the Act and AEPR • Conduct site inspections and participate in regular internal meetings with BAC.
DEVELOPMENT CONTRACTORS	• Prepare and follow Construction Environmental Management Plans (CEMPs) when required. • Comply with all relevant environmental legislation alongside required BAC documentation which may include guidelines, plans, policies and procedures • Participate in environmental training as required • Undertake environmental compliance inspections as required, depending on CEMP requirements • Have a responsibility to minimise and/or not cause adverse impacts to the airport environment, including: – A general duty to avoid polluting, to take all reasonable and practicable measures to prevent pollution or minimise where prevention is unavoidable – A general duty to take all reasonable and practicable measures to ensure there are no adverse consequences of activities on the local environment, including both biodiversity and heritage – A general duty to prevent offensive noise occurring and take all reasonable and practicable measures to prevent the generation of offensive noise or minimise where prevention is not avoidable.

Airport Environment Strategy

Implementation and Monitoring

Brisbane Airport maintains a program of compliance monitoring to collect, record and report on the effectiveness of the EMS and the airport's management of significant environmental impacts. Environmental monitoring is a key component of the EMS to evaluate compliance, identify potential risks and opportunities, understand environmental performance, and encourage continual improvement. Table 13.4 provides a summary of the monitoring undertaken across Brisbane Airport's operational activities. The results of the monitoring data are provided to the Commonwealth airport environmental regulator for review annually.

TABLE 13.4: ENVIRONMENTAL ASPECTS, IMPACTS AND MONITORING

ENVIRONMENTAL ASPECT	POTENTIAL IMPACTS	FURTHER CONTROLS	MONITORING ACTIVITY	FREQUENCY
ENVIRONMENTAL MANAGEMENT	• Loss of EMS certification • Breach of the Act and AEPR obligations • Reputational damage	• Implementation of BAC's EMS, including annual audits and recertification	Annual Environment Report	Annually
			Internal reporting	Monthly
			EMS ISO 14001:2015 External Audit	Annually
			EMS ISO 14001:2015 Recertification	Three yearly
BIODIVERSITY	• Nuisance or harm to environmentally sensitive areas from pollution • Reduced or displaced fauna diversity and abundance • Loss of significant flora species	• BMC • Weed and pest management procedures • Site Specific CEMPs (where relevant, practicable and required) • Airport Operator specific OEMPs (where relevant, practicable and required) • Biodiversity control plans as part of the Site-Wide EMP	Estuarine monitoring	Annually
			Lewin's rail monitoring (call back)	Annually
			Shorebird monitoring	Annually
			Vegetation monitoring	Annually and as required by approved plans
HERITAGE	• A loss of cultural and/or historic heritage values and a relationship breakdown with First Nation communities and other heritage stakeholders may result from improper heritage management • A lack of consultation with First Nations parties, may result in heritage values not being understood or interpreted	• HMP • Stops Works Procedure within the Site-Wide EMP • Site Specific CEMPs (where relevant, practicable and required)	Heritage monitoring	As required by approved plans

ENVIRONMENTAL ASPECT	POTENTIAL IMPACTS	FURTHER CONTROLS	MONITORING ACTIVITY	FREQUENCY
WATER QUALITY	• Reduction of water quality and/or pollution may be created from stormwater runoff • Mobilisation and migration of contamination in groundwater may result in pollution or a reduction in water quality • Acidification from acid sulfate soils (ASS) may result in contamination mobilisation or impacts on water quality	• WQMP • PFAS WMP	Surface water monitoring	Quarterly or as required by approved plans
		• Site Specific CEMPs (where relevant, practicable and required) • Airport Operator specific OEMPs (where relevant, practicable and required) • Water quality control plans as part of the Site-Wide EMP	Groundwater monitoring	Quarterly or as required by approved plans
SOIL QUALITY	• Mobilisation and migration of contamination may result in pollution • Acidification from ASS may result in land use issues or pollution • Improper importation or exportation of soil may result in pollution and/or biosecurity risks	• PFAS SMP • CSR • Soil and groundwater contamination control plans as part of the Site-Wide EMP • Site Specific CEMPs (where relevant, practicable and required) • Airport Operator specific OEMPs (where relevant, practicable and required) • Erosion and Sediment Control Guidelines • Drain Maintenance Asset Management Plan	Contaminated site management	As required by approved plans
			ASS management	As required by approved plans
GROUND-BASED NOISE	• Ground-based noise may cause environmental nuisance and detrimental impacts to BAC's relationship with the local community	• Airside Operations manual • Site Specific CEMPs (where relevant, practicable and required) • Airport Operator specific OEMPs (where relevant, practicable and required) • Ground-based noise and vibration control plans as part of the Site-Wide EMP	Engine ground running noise monitoring	As required

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ENVIRONMENTAL ASPECT	POTENTIAL IMPACTS	FURTHER CONTROLS	MONITORING ACTIVITY	FREQUENCY
LOCAL AIR QUALITY	• Noxious or offensive odour emissions create environmental nuisance and detrimental impacts to BAC's relationship with the local community • Emissions may cause pollution and breach AEPR	• Site Specific CEMPs (where relevant, practicable and required) • Airport Operator specific OEMPs (where relevant, practicable and required) • Air quality control plans as part of the Site-Wide EMP • National Greenhouse and Energy Report (NGER) Act • National Pollutant Inventory (NPI)	Air quality monitoring	As required
			Odour monitoring	As required
HAZARDOUS CHEMICALS	• Pollution from leaks, spills and associated stormwater run-off • Pollution resulting from leaks and spills associated with inadequate fuel tank facilities	• Site Specific CEMPs (where relevant, practicable and required) • Airport Operator specific OEMPs (where relevant, practicable and required) • Storage, handling and use of hazardous substances control plans as part of the Site-Wide EMP	Removal of regulated waste	As required
			Underground storage tank integrity testing	Annually
			Inspections of hazardous materials storage areas	Regular and ongoing

Reporting and Reviewing

A comprehensive set of reporting processes are in place to monitor BAC's progress in achieving environmental objectives, ensuring compliance with regulatory requirements and encouraging continuous improvement.

BAC is required to submit an Annual Environment Report to the Department which provides an account of BAC's environmental management performance with reference to:

- Environmental monitoring
- Pollution incidents and associated remediation
- Information relating to environmental performance of other airport users, and
- Performance against objectives outlined in the AES.

As part of promoting an environmentally responsible culture, BAC undertakes regular reviews of the EMS to deliver continual improvement of environmental performance. In reviewing the EMS, BAC considers the effectiveness of the EMS and identifies opportunities for improvements. BAC also regularly review environmental objectives, targets and actions as well as the Environment Policy.

As part of promoting an environmentally responsible culture, BAC undertakes regular reviews of the EMS to deliver continual improvement of environmental performance.

13.4 Development Activities

DEVELOPMENT OBJECTIVES

To ensure development projects at the airport are undertaken in an environmentally responsible manner in accordance with the BAC EMS.

Overview

Development at Brisbane Airport is subject to extensive planning and environmental assessments that ensure that the BAC Master Plan and legislative requirements are complied with prior to approval. A rigorous development approval process has been established to ensure BAC compliance with regulatory obligations. The thoroughness of the approval will depend on the type of works being undertaken, as specified in the Airports (Building Control) Regulations 1996 (ABCR) and AEPR. This ensures that future developments are planned, built and managed in an environmentally responsible manner, minimising environmental impacts.

Risk Rating

BAC has established environmental risk categories for development works to assess their potential environmental and compliance risks. The assignment of risk categories is based on several factors, including:

- Scope and complexity of the works
- Duration of works
- Location
- Type of material to be excavated, and
- Level of contamination which may be derived from an environmental investigation or historical records.

The risk categories include:

- High Risk: Development projects located in high-risk areas, with the potential to cause environmental harm if not effectively managed
- Medium Risk: Development projects with the potential to cause material environmental harm if not managed
- Low Risk: Development projects with potential to cause nuisance environmental harm
- Very Low Risk: No foreseeable risk of environmental harm.

BAC assigns risk categories to development projects to determine the required environmental management controls prior to building approval submission. Table 13.5 below outlines the risk categories and their requirements.

TABLE 13.5: ENVIRONMENTAL RISK RATINGS FOR DEVELOPMENT WORKS

DEVELOPMENT RISK CATEGORY	REQUIREMENTS
HIGH	• Comprehensive environmental investigations may be required to assess risks • Development of detailed management plans consistent with relevant guidelines and BAC's EMS framework.
MEDIUM	• Environmental investigation may be required based on the scope of works • Preparation of management plans that align with relevant guidelines and BAC's EMS framework.
LOW	• Works are typically managed through BAC's EMS framework with minimal additional requirements • Some management plans and procedures may be required.
VERY LOW RISK	• Works are fully covered by BAC's EMS framework, managements plans and procedures, requiring no further action.

Development and Construction Contractor Obligations

Development and construction contractors engaged by Brisbane Airport are responsible for conducting their activities in an environmentally responsible manner and in accordance with BAC's EMS Framework, the AES and relevant legislation and guidelines. Contractors may be required to engage a Suitably Qualified Person (SQP) during the development application process, to provide advice, conduct investigations or prepare management documentation where necessary, as requested by the BAC Environment Team.

Tenants operating on airport are required to undertake the same processes for any development works.

PFAS Management Plan

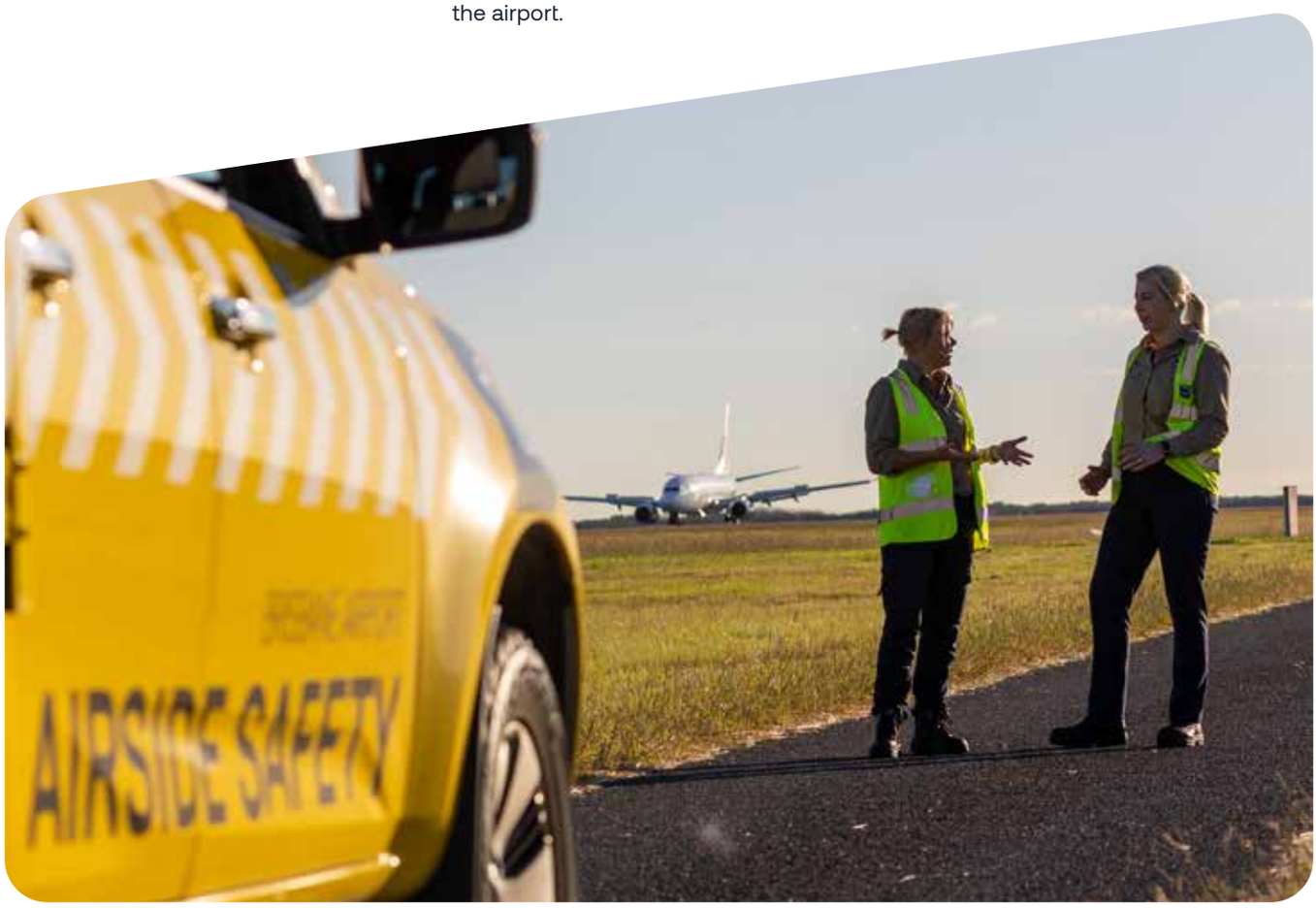
As part of Brisbane Airport's ongoing environmental management efforts, including the management of per- and poly-fluoroalkyl substances (PFAS), BAC has developed a comprehensive airport-wide PFAS Management Framework and respective PFAS Management Plans. The PFAS Management Plan was developed to align with best practice guidance for the assessment and management of contaminated land and water across the airport and it employs a consistent, risk-based approach to managing PFAS-impacted materials at Brisbane Airport.

Key components of the PFAS MP includes the PFAS Water Management Plan (PFAS WMP) and the PFAS Soil Management Plan (PFAS SMP) which provide guidance for managing PFAS impacted soil and water across the airport.

The PFAS WMP and SMP aim to maintain and protect soil and water quality where practicable within the airport site and maintain compliance with relevant regulatory requirements. The PFAS WMP and SMP apply to contractors undertaking activities at the airport with the potential to encounter PFAS impacted soil and/or water. BAC has established, and are continually refining, procedures and plans to align with relevant government guidelines and industry standards.

Assessment Process

Under the requirements of the AEPR and ABCR, development work conducted on airport land may be required to go through the Building Approval (BA) process. To support this, BAC has a dedicated Approvals Team to oversee and facilitate the BA process.



Action Plan

The following actions are proposed, where relevant and practicable, in achieving the development objectives in the AES:

ACTION	TIMEFRAME
Produce environmental management documentation in line with BAC's EMS Project Risk profile.	Sustained
Ensure implementation of BACs airport approved environmental guidelines and in line with the project risk assessment.	Sustained
Ensure ecological assessments are undertaken, where required, and in line with the project risk assessment.	Sustained
Implement BAC's Unexpected Finds Protocols (UFP) where relevant.	Sustained
Ensure that the BAC PFAS Management Plan is correctly referenced and implemented on projects, and in line with the project risk assessment.	Sustained
Monitor and mitigate ground-based noise and vibration impacts from development projects in accordance with BAC's EMS Framework, BAC's approved environmental guidelines and project risk assessment.	Sustained
Implement air quality mitigation measures during the construction of development projects in accordance with BAC's EMS Framework and project risk assessment.	Sustained
Manage environmental incidents during development in line with BAC's EMS Framework.	Sustained

Airport operators have an environmental responsibility to minimise and/or not cause adverse impacts to the airport environment.

13.5 Airport Operations

As a hub of trade and commerce, Brisbane Airport supports a range of tenants, operators, third parties and operational contractors (airport operators), spanning freight, aircraft handling, research, manufacturing, property and infrastructure development, education, training, recreation, tourism, accommodation, leisure and retail, each with a unique set of environmental risks.

Airport operators have an environmental responsibility to minimise and/or not cause adverse impacts to the airport environment. Activities undertaken by airport operators should be conducted in an environmentally responsible manner and align with the BAC Environmental Management Framework, complying with the EMS and AES. Airport operators must implement measures to prevent, control or reduce environmental risk and the potential impacts from their activities, in accordance with legislation and BAC requirements.

There are environmental obligations for airport operators during all phases of the tenancy or works lifecycle.
The phases include:

- Operation
- Expansions, changes to site activities, significant maintenance
- Incidents
- Decommissioning, demolition or vacating

BAC provides direction to and monitors how airport operators manage their environmental responsibilities whilst undertaking operations and activities at the airport.

Any construction that is required to be carried out by airport operators is covered below under Section 13.4 of the AES.

Risk Rating

BAC has established environmental risk rating profiles for airport operators to assess their potential environmental risk and to define the requirements for inspection regimes, frequency of audits and reporting to BAC. The risk ratings have been defined below:

- High Risk: Airport operators with the potential to cause serious environmental harm
- Medium Risk: Airport operators with the potential to cause material environmental harm
- Low Risk: Airport operators with potential to cause nuisance environmental harm
- Very Low Risk: No foreseeable risk of environmental harm.

Airport operators with an environmental risk rating of High and Medium are required to prepare an OEMP, low environmental risk airport operators may be required to prepare an OEMP. The OEMP must be prepared prior to commencement of the use of airport premises or any works. It is required to identify environmental risks of the site and subsequent controls that will enable the mitigation of the risk throughout the life of the tenancy/ operations. Incident response is required to be built into every tenant or operator's OEMP, including a training schedule, emergency contacts and appropriate response procedures for the related risk level. In the event of an incident BAC should be notified as soon as reasonably possible and an incident report provided, which includes any actions to remediate or to reduce likelihood of another incident.

Airport operators are required to complete the online Operator Annual Return, the information that is required to be submitted for the Operator Annual Return will differ is based on their risk category. The information that is requested could include but is not limited to, an Annual Environment Report, audits, monitoring results, maintenance records and regulated waste certificates.

The requirements for tenants have been provided in Table 13.6.

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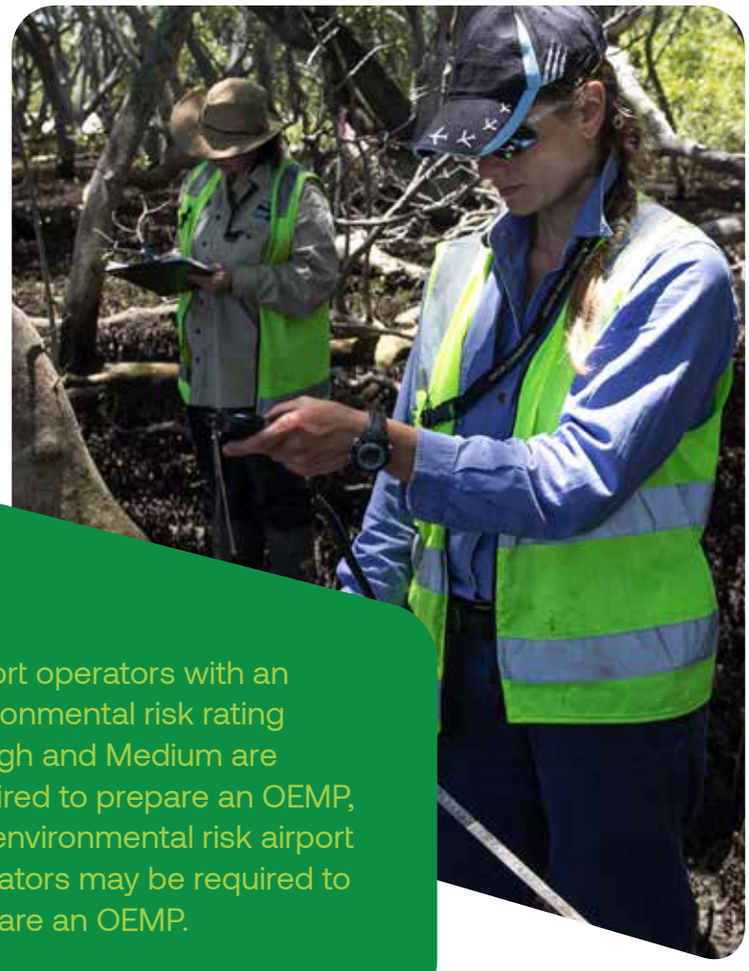
TABLE 13.6: ASSESSMENT REQUIREMENTS FOR TENANTS AT BAC

TENANT RISK CATEGORY	REQUIREMENTS
HIGH	• OEMP in alignment with Section 4 of ISO14001:2015 • Operator Annual Return (including any environmental monitoring which occurred in past financial year) • Annual External audit (carried out by an independent third party)
MEDIUM	• OEMP in alignment with Section 4 of ISO14001:2015 • Operator Annual Return (including any environmental monitoring which occurred in past FY) • Annual Internal audit (carried out by an SQP)
LOW	• OEMP in alignment with Section 4 of ISO14001:2015 if requested or triggered. • Operator Annual Return (including any environmental monitoring which occurred in past FY) • Audit – if requested or triggered.
VERY LOW	• Operator Annual Return • OEMP and audit is not required

BAC also undertakes scheduled and unscheduled tenant inspections based on audit findings, or if triggered from an incident or other event that has potential to cause harm to the environment. The inspections performed do not form the basis of an internal or external audit but are intended to assist airport tenants with their obligations under the relevant environmental legislation and as per the requirements of their lease. If a non-conformance is identified as a breach of the tenant's lease, they may be issued with a notice to remedy the nonconformance by the Brisbane Airport Property Manager. Depending on the nature and severity of the non-conformance, it may be necessary to seek legal advice. Certain incidents and non-conformances may require notification to the Department.



Airport operators with an environmental risk rating of High and Medium are required to prepare an OEMP, low environmental risk airport operators may be required to prepare an OEMP.

13.6 Operational Focus Areas

The following sections detail the Operational Focus Areas, addressing ground-based environmental aspects, impacts and action plans associated with the operation of Brisbane Airport.

Biodiversity

Heritage

Surface Water and Groundwater Quality

Soil Management

Ground-based noise and vibration

Air quality

Hazardous Materials and Incident Response

Airport Environment Strategy

13.7 Biodiversity

BIODIVERSITY OBJECTIVES

To conserve the unique biodiversity of Brisbane Airport through the management of natural areas on the airport, with a focus on enhancing ESAs.




Overview

As Brisbane Airport grows to meet the needs of future generations BAC aim to conserve the unique biodiversity. The airport is home to, or is likely to support, threatened species, threatened ecological communities, and migratory species that make up local biodiversity. Many of these ecological values are also supported offsite in the neighbouring Boondall and Moreton Bay wetlands, identified as wetlands of international importance under the Ramsar Convention.

BAC has a designated Biodiversity Zone that occupies over 10% (285 ha) of the airport's total area. This zone is made up of vegetation communities and wildlife habitats that include:

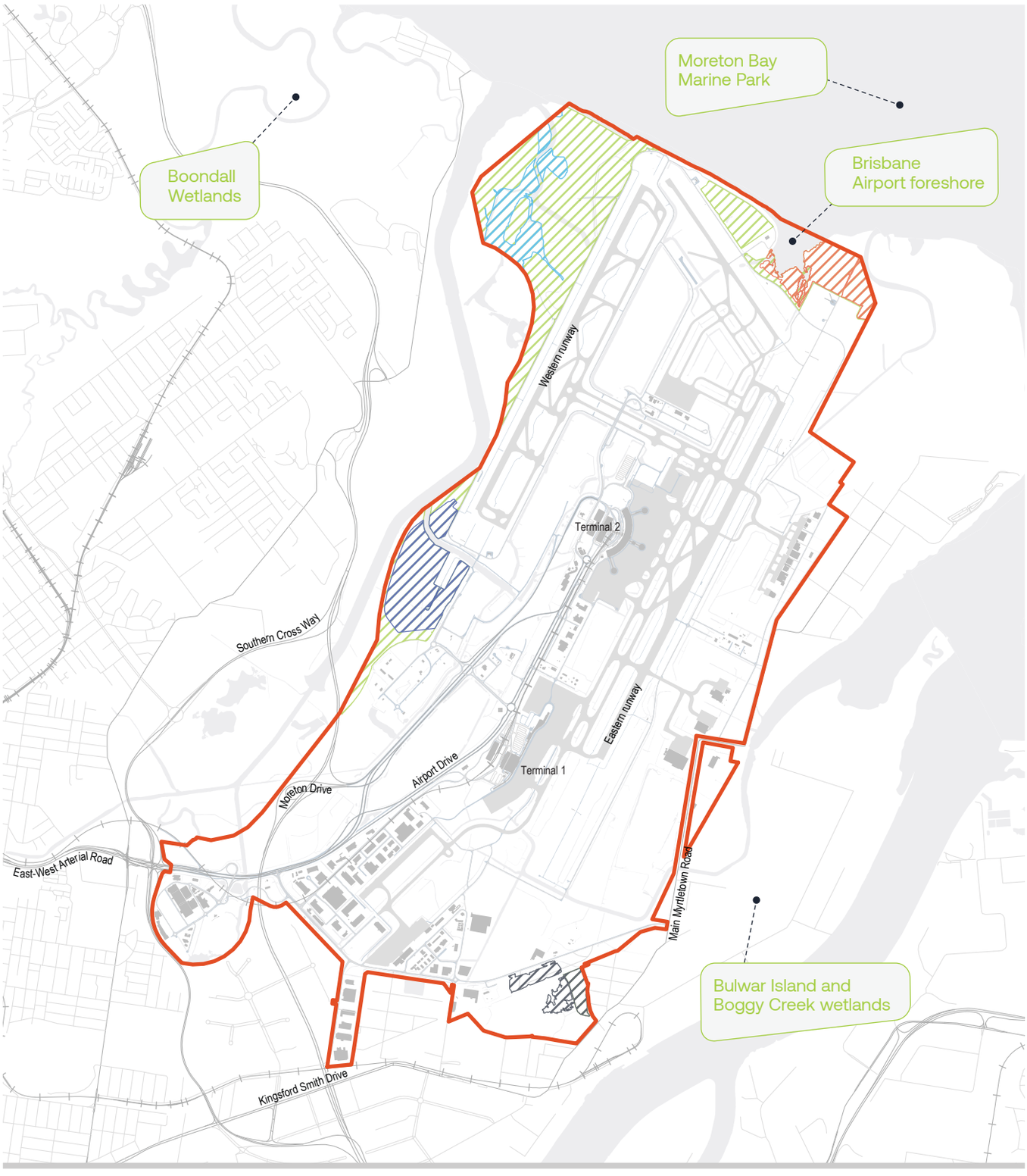
- Remnant and regrowth mangrove and saltmarsh communities within Jubilee/ Serpentine Creek and Jackson Creek, and adjacent to the Pinkenba residential community
- Intertidal sand flats which provide feeding grounds for migratory shorebirds and other wetland birds
- Tall grasslands and sedgelands, home to nesting and ground dwelling bird species; and
- Casuarina plantations that provide shelter to small forest bird species unlikely to present a hazard to aircraft safety.

Within the Biodiversity Zone, four areas have been afforded a higher level of protection through the AEPR by designating them as Environmentally Significant Areas (ESAs). These four ESAs are known as:

- Jackson's Creek ESA
- Jubilee Creek/Serpentine Inlet ESA
- Kedron Brook ESA
- Pinkenba ESA

Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES) have been assessed for the Biodiversity Management Commitment (BMC) and were considered during the development of the ESAs. The ESAs will grow and change with the requirements under various legislations/regulations and aim to support conservation of endangered flora and fauna. A map of the current ESAs located within Brisbane Airport has been provided in the following Figure 13.2.

FIGURE 13.2: BIODIVERSITY AREAS AT BRISBANE AIRPORT



Flora

Brisbane Airport comprises of land which has largely been modified through clearing, however, areas of both naturally occurring species and planted species of varying conservation values, exist within the boundaries of the airport. Recent assessments indicates that no threatened flora species are known to or likely to occur at the airport, in accordance with the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). However, areas of ecological communities have been identified as Threatened Ecological Communities (TEC) as per the EPBC Act. Vegetation communities across the Biodiversity Zone and ESAs are described as follows and depicted in in Figure 13.3.

Mangroves

Mangroves across the airport are predominantly re-growth that has regenerated since the original Brisbane Airport development in the 1980s, apart from some remnant mangrove communities at the former mouth of Serpentine Creek and Jubilee Creek. Most mangrove communities within the Biodiversity Zone are dominated by Grey Mangrove (Avicennia marina), except for an area of mixed mangroves that also includes Orange Mangrove (Bruguiera gymnorrhiza) and Yellow Mangrove (Ceriops tagal) located at the mouth of Jubilee Creek.

Saltmarsh

Multiple patches of Subtropical and Temperate Coastal Saltmarsh have been identified across low-lying portions of the airport. This includes areas of remnant vegetation, open non-remnant areas, and areas which were subjected to historical clearing and revegetated with Swamp Oak (Casuarina glauca).

Saltmarsh patches are generally dominated by a dense groundcover of Salt Couch (Sporobolus virginicus), with only small areas of bare saltpan and scattered Swamp Oak or Grey Mangrove (Avicennia marina) as a sparse tree layer.

Swamp Oak (Casuarina Glauca)

Swamp Oak has been planted across the airport, chosen for its relatively poor fauna habitat potential to mitigate against bird airstrike risk and ability to exist within saline soils. A plantation and a naturally occurring ecological community within Brisbane Airport meet the key diagnostic criteria for recognition as the Swamp Oak TEC as set out in the EPBC Act (i.e. tree canopy dominated by Swamp Oak with a total tree canopy crown cover greater than 10% and patch size and native understorey vegetation cover thresholds). These areas have been identified as part of the Pinkenba ESA.

All other portions of the Casuarina glauca tree plantation blocks had non-native species comprising more than 80% of total understorey vegetation cover and/or transformer weeds comprised of more than 50% of total understorey vegetation cover; therefore, these portions did not meet the condition criterion for recognition as the Swamp Oak TEC.

Phragmites wetlands/ unmanaged grasslands

Phragmites wetlands are located predominantly adjacent to the Kedron Brook Floodway and the ephemeral wetland is dominated by the Common Reed (Phragmites australis). Other species previously identified within these wetlands include Juncus continuus, Bunchy Sedge (Cyperus polystachyos) and Pennywort (Centella asiatica). The area has historically struggled with woody weed regrowth and infestations.

FIGURE 13.3: VEGETATION AT BRISBANE AIRPORT

Fauna

A diverse range of fauna species occur within or near Brisbane Airport, including species with varying conservation significance, some of which are described below. The Biodiversity Zone and ESAs are regularly monitored to assess their condition and inform management and mitigation processes.

The most recent monitoring survey recorded 156 species across the Biodiversity Zone and ESAs, comprising two amphibians, 13 reptiles, 122 birds and 19 mammals. This includes 19 migratory shorebird species which are listed as threatened species under the EPBC and/or *Nature Conservation Act 1992* (NC Act).

Migratory Shorebirds

The intertidal sandflats and mudflats fringing the Brisbane Airport foreshore, between the mouths of Kedron Brook to the north and the Serpentine Creek inlet to the south, cover a length of approximately 3 km. This area provides important foraging habitat for particularly large numbers of migratory shorebirds, resident shorebirds and other waterbirds and, as such, is an important part of the Moreton Bay Ramsar site.

Surveys are completed every eight months over this 3 km section of the Brisbane Airport foreshore between Serpentine Inlet and Kedron Brook. These surveys have been completed each year since 2010/11.

Wildlife hazard risk

Certain wildlife at the airport may pose a significant risk to aircraft safety. BAC is committed to ensuring the safety of aircraft and biodiversity across the airport. The Brisbane Airport Wildlife Hazard Management Plan defines the risk wildlife poses to air traffic and sets objectives, performance indicators and procedures for risk management.

Swamp Oak plantations are found across different areas of the airport. These plantations do not attract large numbers of species that are potentially hazardous to aircraft. Most of the birds present in these plantations are small and remain within this habitat; such that they present a low risk to aircraft safety.

Invasive Species

Invasive flora and fauna species are an issue that crosses many borders, and requires management on many sites across Australia, from commercial to residential. Brisbane Airport site has identified several invasive fauna and flora species, including but not limited to Red Imported Fire Ants (Solenopsis invicta), Red Fox (Vulpes vulpes), Lantana (Lantana camara) and Cat's Claw Creeper (Dolichandra unguis-cati).

Brisbane Airport collaborates with neighbouring stakeholders including relevant government departments, to manage the threat that these invasive species pose. The collaboration with other stakeholders also supports internally lead programs, which are outlined in documents such as the BMC and within BAC weed and pest management procedures.

Action Plan

The following actions are proposed, where reasonable and practicable, to encourage continuous improvement in the AES biodiversity objectives:

ACTION	TIMEFRAME
Review and implement the BMC, as required, including reviews of ESAs and the legislative status of biodiversity values across the airport.	Sustained
Monitor and manage weeds and invasive species across the airport.	Sustained
Ensure continued implementation of Wildlife Hazards Management Plan.	Sustained
Collaborate with relevant stakeholders to manage Fire Ants.	Sustained
Ensure continued biodiversity and ESA compliance monitoring is undertaken.	Sustained

13.8 Heritage

HERITAGE OBJECTIVES

To conserve the unique cultural and historic heritage values at Brisbane Airport.

BAC is committed to protecting the First Nations (Indigenous) and historic (non-Indigenous) heritage values of its estate.

Airport Environment Strategy

The airport site is culturally and spiritually significant to the Brisbane First Nations Peoples and areas of Aboriginal cultural heritage values exist across, and in proximity to the airport.

Overview

BAC is committed to protecting the cultural (Indigenous) and historic (non-Indigenous) heritage values of its estate. Brisbane Airport is located within a rich cultural landscape that has likely been occupied by First Nations people for more than 40,000 years.

The airport is culturally and spiritually significant to the Brisbane First Nations Peoples and areas of cultural heritage values exist across, and in proximity to the airport. Identified areas of known cultural and spiritual significance located on the Brisbane Airport site include dreaming tracks and dreaming sites, pathways, ceremonial grounds, burial sites, areas of temporary campsites, resource areas and artefacts which were uncovered and relocated on country.

Brisbane Airport also contains important historic heritage values related to the former Cribb Island residential community, Australian aviation history, and World War II (WWII). Known historic heritage values at Brisbane Airport include the former Cribb Island Complex and School, the Kingsford Smith Memorial building and Southern Cross aircraft, as well as a WWII memorial and former WWII related locations.

Figure 13.4 shows the identified cultural heritage and historic heritage areas of values.

The Brisbane Airport HMP is the key document governing the management of cultural and historic heritage values at Brisbane Airport. This document outlines the heritage management strategy for the airport. Heritage is also managed across the airport in accordance with the EMS and the Brisbane Airport Reconciliation Action Plan (RAP). In addition, BAC implements the requirements of the Southern Cross Aircraft Warehousing and Display Agreement with the Commonwealth Government by maintaining the Kingsford Smith Memorial building and protecting and maintaining the Southern Cross aircraft.

Action Plan

The following actions are proposed, where reasonable and practicable, to encourage continuous improvement the AES heritage objectives:

ACTION	TIMEFRAME
Ensure continued review and implementation of the Brisbane Airport HMP.	Sustained
Ensure heritage values are protected and communicated to airport personnel, the broader BAC community and public.	Sustained
Engage with First Nations and key heritage stakeholders, where relevant for heritage management.	Sustained
Undertake assessments of heritage value areas where additional management is required as part of the HMP.	Extended

FIGURE 13.4: HERITAGE AREAS

Heritage Sites

- Brisbane Airport boundary

Historical Heritage

- Historical Heritage Sites

Aboriginal Heritage

- Other Aboriginal Heritage Sites
- Aboriginal Pathway

Airport Environment Strategy

13.9 Surface Water and Groundwater Quality

SURFACE WATER AND GROUNDWATER QUALITY OBJECTIVES

Minimise the impact of airport operations on water quality in water bodies on or adjacent to Brisbane Airport.

Overview

Brisbane Airport is situated within in the lower Brisbane River and Kedron Brook catchments, which have been highly modified for urban and commercial developments, including heavy industry activities. These catchments flow into Moreton Bay, a Ramsar-listed wetland of international importance. BAC has developed a strategic approach to managing water-related environmental impacts at the airport. These impacts are monitored through an airport wide Water Quality Monitoring Program (WQMP). This program is also supported through monitoring undertaken by airport operators.

Surface Water/ Stormwater

Surface water quality at and surrounding Brisbane Airport is impacted by both anthropogenic and natural sources, including contamination resulting from historical on-site and off-site activities and historical clearing of large areas of riparian vegetation from waterways. Brisbane Airport is covered by an extensive stormwater drainage network, consisting primarily of large open swales, drains and settling ponds, as shown in Figure 13.5. BAC manages surface water and stormwater quality at the airport through the implementation of management practices such as gross pollutant traps, robust spill management procedures and airport operator reporting.

Groundwater

Brisbane Airport's hydrogeological setting is made up of unconsolidated sedimentary aquifers with groundwater occurring within the Upper Holocene and Anthropogenic deposits. Groundwater is generally shallow across the airport and the flow is complex, influenced by surface hydrology, seasonality and tides. Shallow groundwater interacts with waterways and drainage channels in some areas, both discharging and receiving water. Regional groundwater flow likely tends northeast and east towards Moreton Bay. Groundwater across the airport is managed to limit any discharge of groundwater into stormwater or tidal drains, limit any contamination of groundwater and manage existing contamination issues

Management of PFAS Impacted Water

The BAC PFAS WMP provides guidance for managing PFAS impacted water across the airport. The PFAS WMP aims to maintain and protect water quality within and around Brisbane Airport and maintain compliance with regulatory requirements. The BAC PFAS WMP applies to all airport operators undertaking activities at the airport with the potential to encounter PFAS impacted surface and groundwater that requires management.

Brisbane Airport is relatively flat with an average elevation of 2 metres (m) above sea level.

Water Quality Monitoring Program

The WQMP has been developed to meet overarching objectives for water quality management at Brisbane Airport. The WQMP provides the structure for routine, ongoing airport-wide water quality monitoring, and includes surface water, sediment and groundwater monitoring. It aligns with all relevant legislation and guidelines, minimising risks to the environmental values of water and achieving cost-effective, risk-based and sustainable outcomes. The WQMP adopts the principles of adaptive management as set out in the National Water Quality Management Strategy. Locations are flexible and are adapted depending on environmental changes, project and monitoring needs.

Monitoring of sediments, surface water and groundwater builds on baseline data and is used to inform water quality management strategies (i.e. determine the appropriate drainage maintenance, address data gaps, understand groundwater-surface water interactions). Water quality monitoring locations from the WQMP are presented in Figure 13.5.

Environmental Management by Airport Operators

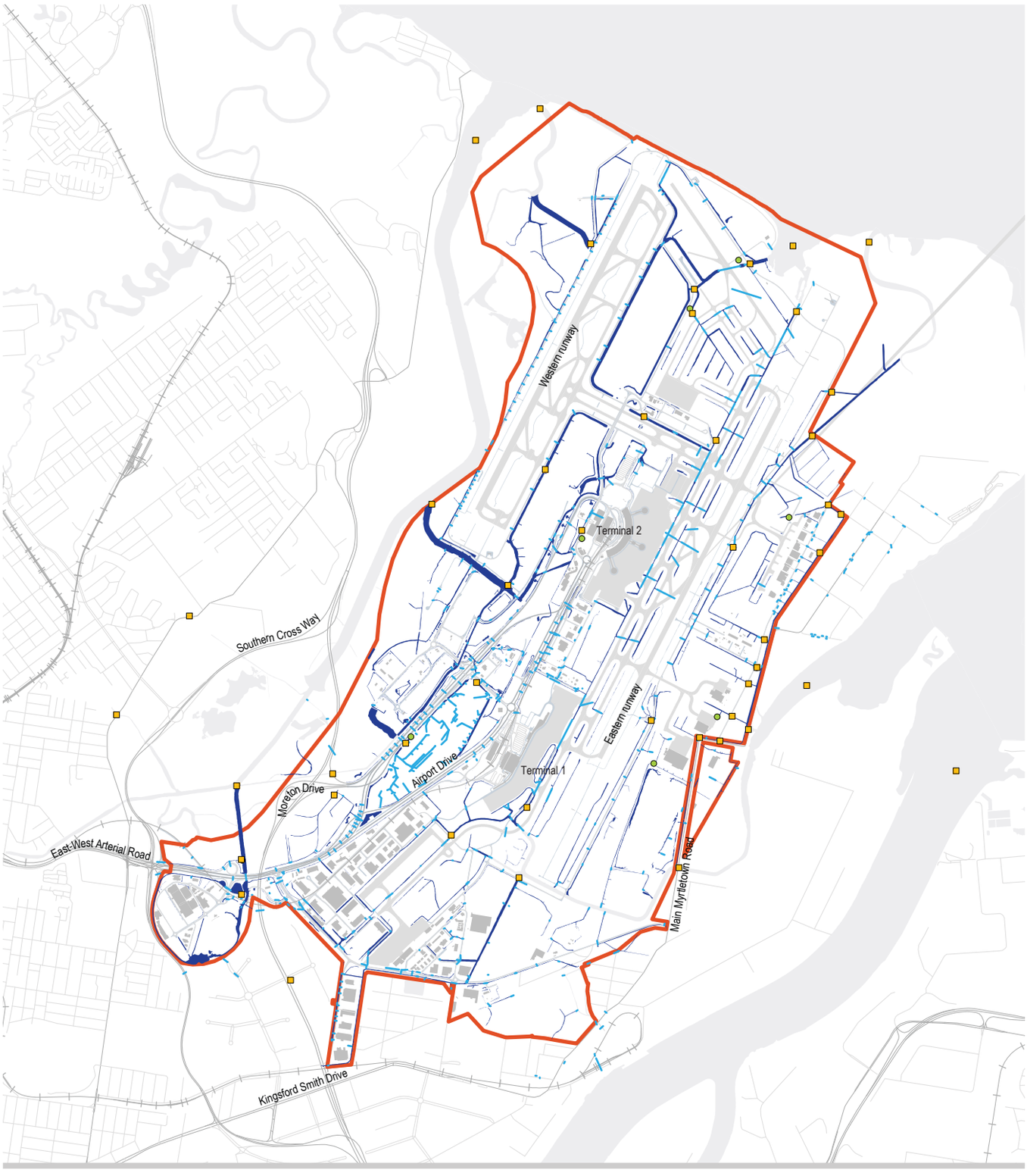
Airport operators may be required to undertake ongoing groundwater and/or surface water investigations and/or monitoring depending on their location, site activities, risk rating and/or site history, as required by BAC. Environmental investigations/monitoring should be undertaken by an SQP. Based on their risk rating, airport operators are required to develop and maintain an OEMP for their activities. The airport operator will document how their activities will be managed to ensure no adverse environmental outcomes. This information must be provided to BAC at their request or as part of the Operator Annual Return program.

Action Plan

The following actions are proposed, where reasonable and practicable, to encourage improvement in the AES surface and groundwater quality objectives:

ACTION	TIMEFRAME
Implement and update the PFAS WMP as required.	Sustained
Implement and update the WQMP as described in the plan.	Sustained
Implement the BAC Erosion and Sediment Control Guidelines, where BAC determine they are required.	Sustained
Identify and assess water quality impacts associated with Brisbane Airport activities observed in surrounding waterways (as reported in Annual Data Evaluation and Reports produced as per WQMP).	Extended
Implement the Operator Annual Return program including collection of relevant airport operator monitoring data.	Sustained

FIGURE13.5: WATER QUALITY MONITORING LOCATION



13.10 Soil Management

SOIL MANAGEMENT OBJECTIVES

Manage known and potentially contaminated sites in accordance with relevant legislation and guidelines.

Airport Environment Strategy

Overview

Brisbane Airport is situated on a former river delta which was filled and extensively modified through terrain flattening during development of the airport site in the 1980s. Before this development, the land comprising the airport was used for various activities, including agriculture and manufacturing, as well as the residential settlement of Cribb Island. Historical and current airport related activities that have impacted soil quality across the airport, have included fuel storage, fuel distribution and the use of PFAS firefighting equipment and foam. As a result of the inherited contamination legacy from historic and more recent land uses, over 90 sites are currently listed on BAC's Contaminated Site Register (CSR). A risk-based approach is implemented by BAC for the management of soil and CSR listed sites.

Contaminated Site Register

Brisbane Airport manages contaminated sites listed in the CSR through a tiered risk approach, which identifies known contaminated sites as being of either low, moderate or high risk, with consideration for both ecological and human health risks. The CSR also lists potentially contaminated sites based on their current use. BAC monitors for emerging contaminants and regularly reviews new legislation and guidelines, to update the CSR where required.

Management of PFAS Impacted Soil

Brisbane Airport has developed a PFAS SMP which provides clear guidance on the handling of PFAS-impacted soil and material across the airport. The PFAS SMP applies to all airport operators that are conducting activities at the airport that may involve PFAS-impacted soil requiring management.

Environmental Management by Airport Operators

Airport operators may be required to undertake soil investigations depending on their location, site activities, site history and/or risk rating. Environmental investigations should be undertaken by an SQP. Based on their risk rating, airport operators are required to develop and maintain an OEMP for their activities. The airport operator will document how their activities will be managed to ensure no adverse outcomes. This information must be provided to BAC upon request, or as part of the Operator Annual Return program.

Action Plan

The following actions are proposed, where reasonable and practicable, to encourage continuous improvement in the AES soil management objectives:

ACTION	TIMEFRAME
Regularly review and update BAC's CSR.	Sustained
Implement and update the PFAS SMP as required.	Sustained
Continued support of airport operators to the transition to fluorine-free firefighting foams.	Extended
Ensure airport operators undertake appropriate auditing and monitoring in line with the airport operator location, site activities, site history or risk rating.	Sustained
Ensure airport operators with current and/or historic use of PFAS, properly delineate, regularly monitor and effectively manage, potential or known contamination.	Sustained
Support the airport regulator to implement any environmental remediation orders.	Extended
Continue to advocate for airports to address PFAS contamination with those responsible for the contaminating activities.	Sustained

13.11 Ground-based Noise and Vibration

GROUND-BASED NOISE AND VIBRATION OBJECTIVES

Manage ground-based noise emissions and vibration to minimise impact on Brisbane Airport operators, the local community and the environment.

Overview

Ground-based noise impacts are the responsibility of the airport operator according to the Act and AEPR. Apart from ground-based engine running and idling on aprons, aircraft noise is excluded from the responsibilities of the airport operator. Noise generated by aircraft while flying, landing, taking off and taxiing is governed by the *Air Services Act 1995, Air Navigation Act 1920* and *Air Navigation (Aircraft Engine Emissions) Regulations 1995* and are the responsibility of Airservices Australia.

While most noise issues relate to noise generated by aircraft in the air, ground-based noise, if unmanaged, can potentially have an impact on the local community, airport operators and the environment. Examples of airport activities which contribute to the level of ground-based noise and vibration include:

- construction and demolition activities
- operation of plant and machinery
- operation of alarms or warning systems, and
- ground-based aircraft operations.

Noise generated from aircraft ground-running is managed in accordance with the Brisbane Airport Aerodrome Manual. Noise complaints associated with engine ground-running or other ground-based activities are investigated in a timely manner. The current management practices that BAC implement to manage ground-based noise and vibration:

- Timely investigation of any complaint associated with engine ground-running or other ground noise generating activities
- Monitor and mitigate noise and vibration impacts from operations, and
- Ensure airport operators and contractors minimise their ground-based noise and vibration related impacts on the environment and operate in accordance with management practices.

Environmental Management by Airport Operators

Airport operators may be required to undertake noise and vibration investigations and/or monitoring depending on their location, site activities, risk rating and/or site history, as required by BAC. Noise and vibration investigations and/or monitoring should be carried out by an SQP. Based on their risk rating, airport operators are required to develop and maintain an OEMP for their activities. The airport operator will document how their activities will be managed to ensure no adverse environmental outcomes. This information must be provided to BAC at their request or as part of the Operator Annual Return program.

Action Plan

The following actions are proposed, where reasonable and practicable, to encourage the continuous improvement in the AES noise and vibration objectives:

ACTION	TIMEFRAME
Monitor and mitigate noise and vibration impacts from airport operations where required.	Sustained
Investigate and action any complaints received associated with engine ground-running or other ground-based noise generating activities in a timely manner.	Sustained

13.12 Air Quality

AIR QUALITY OBJECTIVES

Manage air quality to minimise impact on Brisbane Airport operators, the local community and environment.

Brisbane Airport works with tenants and contractors to minimise their air quality impact on the environment.

Overview

Brisbane Airport is situated in an area dominated by industrial and commercial land uses, where numerous emission sources contribute to local air quality. Significant other contributors to air pollution in the vicinity of the airport include the Port of Brisbane, Ampol Lytton Refinery, Luggage Point wastewater treatment plant, Knauf Plasterboards and motor vehicle emissions from nearby major roads.

At Brisbane Airport activities that have the potential to generate air pollutant emissions include the following:

- Aircraft handling emissions (ground support equipment, airside traffic, refuelling and electricity generation)
- Power / heat generating plant and emergency power generators
- Industrial and commercial processes within the airport boundary
- Plant, equipment and vehicles
- Storage tanks for fuel and chemicals
- Aircraft and airfield maintenance (painting, engine testing, cleaning and fire training exercises)
- Landside traffic emissions (cars, trucks, buses).

Within the airport boundary, local air quality impacts associated with ground-based operations are regulated by the AEPR. Air quality associated with emissions from aircraft and other mobile airside sources is regulated under the *Air Navigation (Aircraft Engine Emissions) Regulations 1995*. Air quality outside the boundary of the airport is regulated under the *Environmental Protection (Air) Policy 2019 (EPP (Air)*).

Brisbane Airport works with airport operators to minimise their air quality impact on the environment and operate in accordance with current management practices and regulations.

Environmental Management by Airport Operators

Airport operators may be required to undertake air quality investigations and/or monitoring depending on their location, site activities, risk rating and/or site history, as required by BAC. Air quality investigations and/or monitoring should be carried out by an SQP. Based on their risk rating, airport operators are required to develop and maintain an OEMP for their activities. The airport operator will document how their activities will be managed to ensure no adverse environmental outcomes. This information must be provided to BAC at their request or as part of the Operator Annual Return program.

Action Plan

The following actions are proposed, where reasonable and practicable, to encourage continuous improvement in the AES air quality objectives:

ACTION	TIMEFRAME
Monitor and report under the NGER and NPI.	Sustained
Maintain records of ozone depleting substances in use.	Sustained
Promote and support airport operators in adopting low-emission technologies.	Extended
Maintain an air quality model.	Sustained

Airport Environment Strategy

13.13 Hazardous Materials and Incident Response

HAZARDOUS MATERIALS AND INCIDENT RESPONSE OBJECTIVES

Manage hazardous materials and incident response in accordance with BAC EMS to minimise risk and potential harm to the environment and the broader BAC community.

Overview

Hazardous substances include any substance, whether solid, liquid or gas, that can pose a significant risk to health, safety and the environment if not managed correctly. The operation of Brisbane Airport involves the storage and regular use of a range of hazardous materials including fuels, paints, oils, herbicides, solvent-based chemicals and building materials.

The incorrect storage, handling and use of hazardous materials has the potential to lead to health and/or physical hazards, including contamination of soil, groundwater, surface water and air quality. BAC manages hazardous materials in accordance with regulatory obligations to minimise the risks associated with the use of these products. BAC maintains a Hazardous Chemicals and Dangerous Goods Procedure to ensure the appropriate storage, handling and use of hazardous materials. BAC have implemented several management practices to manage the risk presented by hazardous materials on site.

Fuel and Chemical Storage

In the daily operation of the airport, pollution can be attributed to fuel, hazardous chemicals and oil leaks or spills. BAC has adopted a strategic approach to managing bulk fuel and chemical storage, including transitioning from Underground Storage Tanks (USTs) to Above Ground Storage Tanks (ASTs) where practicable. All BAC USTs and their associated infrastructure are monitored to ensure that any leaks or losses of stored fuels and chemicals are identified and attended to as quickly as possible, thereby limiting any risk to human health or the environment.

Training

BAC engages with airport staff and airport operators in the relevant training for preparedness to minimise environmental impacts. All staff involved in purchasing, using, handling and/or storing chemicals in the workplace shall be provided with training on the relevant legislation and BAC's governing requirements for these activities. This training is provided on an initial and refresher basis. Training can also be triggered if staff are expected to be exposed to a particular hazardous chemical, including any health monitoring requirements.

Environmental Management by Airport Operators

Given that use of hazardous materials and chemicals by airport operators can impact areas outside of their leased site or operational areas, BAC require airport operators to manage the risks associated with hazardous materials, as well as comply with the relevant guidelines and legislation. BAC conducts initial reviews of airport operators to ascertain if the quantities of hazardous chemicals stored by them has the potential to impact the environment. This initial review becomes part of their environmental risk and subsequent risk rating.

Airport operators are responsible for maintaining their own register of any hazardous chemicals stored and must ensure the register is up to date and correct. These hazardous chemicals are also known to become waste products (e.g. oil tins) at the end of their life. The airport operator is therefore expected to responsibly dispose of the waste at a licensed facility. Waste disposal certificates provided by the licenced facilities for regulated waste should be provided to BAC upon request or as part of the Operator Annual Return submission. It is the responsibility of the airport operator to notify BAC if there is a change to storage conditions and volumes of hazardous chemicals.

Airport operators may also be required to undertake environmental investigations and/or monitoring (i.e. soil, sediment, groundwater and/or surface water), associated with any leaks or spills of hazardous chemicals that occur within their operational scope or as a result from their site activities. Environmental investigations and monitoring should be carried out by an SQP. Based on their risk rating, airport operators are required to develop and maintain an OEMP for their activities. The airport operator will document how their activities will be managed to ensure no adverse environmental outcomes. This information must be provided to BAC upon request or as part of the Operator Annual Return program.

Hazardous substances include any substance, whether solid, liquid or gas, that can pose a significant risk to health, safety and the environment if not managed correctly.

Incident Response

Incident Management is the initial response to an event that threatens, the environment and/or the operation of the airport. The primary goal of incident management is to prevent escalation to an Emergency. It also involves documenting incidents, conducting thorough investigations and identifying appropriate remedial actions to prevent or reduce the likelihood of recurrence in the future.

Environmental incidents at Brisbane Airport are categorised into three levels of risk – low, medium and high. Definitions of each incident risk rating have been provided in Table 13.7.

The following measures are employed to reduce environmental risk and ensure minimal environmental impact should a spill or an incident occur:

- BAC's EMS provides guidance on the management of environment related incidents
- OEMP's are required to include incident response and reporting responsibilities
- Airport Operator's Licence (AOL) governs all airport operators involved in airside activities and provides requirements for environmental controls and incident response
- Spill and incident trainings are available and required to be completed by all airport operators working airside
- BAC provides spill kits at key areas across the airside precinct, and
- A centralised reporting system, which notifies relevant internal parties and provides a platform to track any required further actions.

Action Plan

The following actions are proposed, where reasonable and practicable, to encourage continuous improvement in the AES hazardous materials and incident response objectives:

ACTION	TIMEFRAME
Maintain and manage environmental incidents through the EMS and ensure actions are followed up.	Sustained
Undertake inspections of hazardous materials storage areas for airport operators to ensure timely and accurate updates to their register.	Sustained
Continue to ensure all applicable airport operators have undertaken training for environmental emergencies/ spill response.	Sustained
Update management practices, where appropriate, in accordance with relevant standards and guidelines.	Sustained
Phase out end of life USTs for Brisbane Airport and operators and encourage the installation of ASTs for any new storage tanks.	Extended

TABLE 13.7: INCIDENT RISK RATINGS ACROSS THE AIRPORT

INCIDENT RISK RATING	GENERAL DESCRIPTION
LOW	Incidents that do not impact environmental receptors.
MEDIUM	Incidents that have impacted an environmental receptor, but appropriate measures have been implemented to mitigate ongoing impacts, or the cause has been determined to be a natural process.
HIGH	Incidents that have large scale impact on an environmental receptor/s and pose a risk for offsite impacts.

BAC maintains a Hazardous Chemicals and Dangerous Goods Procedure to ensure the appropriate storage, handling and use of hazardous materials.