SOUTHERN PORTS
ALBANY BUNBURY ESPERANCE

Environmental Management Plan – Albany

DOCUMENT CONTROL

Revision Number	Description	Reviewed by	Approved by	Review Date	Issue Date
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03	EMP Restructure	Environment Manager, Environmental Team & Group HSE Manager	Chief Operating Officer	03/08/2023	22/07/2024

AUDIT

This Plan shall be reviewed or revised:

- where a Risk Assessment or Audit identifies a need to review
- when legislative changes impact this Plan
- following a significant incident involving this Plan
- at least every two years.

Contents

DOCUMENT CONTROL **2**
AUDIT **2**
TERMS AND DEFINITIONS **4**
1 SITE CONTEXT **5**
1.1 BACKGROUND 5
1.2 BIOPHSYICAL ENVIRONMENT 5
1.3 VISUAL AMENITY AND RECREATION 6
2 ENVIRONMENTAL MANAGEMENT OVERVIEW **6**
3 KEY ENVIRONMENTAL MONITORING / MANAGEMENT PROGRAMS **7**
3.1 Ambient Air Quality 7
3.1.1 Overview 7
3.1.2 Objective & Targets 8
3.1.3 Management Strategies 8
3.1.4 Monitoring 8
3.1.5 Reporting 9
3.1.6 Contingency Actions 9
3.2 Biodiversity and Habitats 10
3.2.1 Overview 10
3.2.2 Objective & Targets 10
3.2.3 Management Strategies 10
3.2.4 Monitoring 11
3.2.5 Reporting 11
3.2.6 Contingency Actions 12
3.3 Biosecurity 12
3.3.1 Overview 12
3.3.2 Objective & Targets 12
3.3.3 Management Strategies 13
3.3.4 Monitoring 13
3.3.5 Reporting 14
3.3.6 Contingency Actions 14
3.4 Energy, Water and Waste 15
3.4.1 Overview 15
3.4.2 Objective & Targets 15
3.4.3 Management Strategies 15
3.4.4 Monitoring 15
3.4.5 Reporting 16
3.4.6 Contingency Actions 16
3.5 Land, Surface, and Groundwater Quality 17
3.5.1 Overview 17
3.5.2 Objective & Targets 17
3.5.3 Management Strategies 17
3.5.4 Monitoring 17
3.5.5 Reporting 18
3.5.6 Contingency Actions 18
3.6 Marine, Estuarine and Freshwater Environment Quality 18
3.6.1 Overview 18
3.6.2 Objective & Targets 19
3.6.3 Management Strategies 19
3.6.4 Monitoring 19
3.6.5 Reporting 20
3.6.6 Contingency Actions 20
3.7 Noise 21
3.7.1 Overview 21
3.7.2 Objective & Targets 21
3.7.3 Management Strategies 21
3.7.4 Monitoring 21
3.7.5 Reporting 22
3.7.6 Contingency Actions 22

Figures

Figure 1.1: SPA-Alb land and seabed jurisdiction. 5

Tables

Table 1.1: Terms and Definitions 4
Table 2.1: Overview of SPA-Alb key environmental aspects, objectives and associated programs. 7

TERMS AND DEFINITIONS

Table 1.1: Terms and Definitions

Term	Definition
CSMF	Contaminated Sites Management Framework
DPIRD	Department of Primary Industries and Regional Development
DWER	Department of Water and Environmental Regulation
ELT	Executive Leadership Team
EMP	Environmental Management Plan
FPOE	First Point of Entry
LMS	Learning Management System
NEPM	National Environment Protection Measure
NGER	National Greenhouse Energy Reporting
PM_{10}	Particulate Matter with equivalent aerodynamic diameter of 10µm.
SPA-Alb	Southern Ports Authority, Port of Albany
SWASP	State Wide Array Surveillance Program
µg/m^3	Microgram per cubic meter

1 SITE CONTEXT

1.1 BACKGROUND

Albany Port was established in 1826 and was the first port established in Western Australia. The Port is located adjacent to the City of Albany on the northern shore of Princess Royal Harbour (PRH).

Southern Ports Authority Albany (SPA-Alb) is a Western Australian State Government trading enterprise that operates in accordance with the *Port Authorities Act 1999* (the Act). SPA-Alb has jurisdiction over approximately 90 hectares (ha) of land as well as all the waters and seabed of PRH (excluding the area around the Albany Waterfront Marina) and the majority of King George Sound (KGS) (Figure 1.1). SPA-Alb currently has four operating berths (Berth 1, 2, 3 and 6), with a fifth approved for development. Major commodities handled through SPA-Alb include bulk grain, woodchips, silica sand, fertiliser and petroleum products. Aside from the operational shipping aspects undertaken at SPA-Alb, supporting activities are also conducted including maintenance activities such as dredging, abrasive blasting and painting, road and drainage works, materials handling, oil and chemical storage and general office work.

Figure 1.1: SPA-Alb land and seabed jurisdiction.

1.2 BIOPHSYICAL ENVIRONMENT

SPA-Alb is located on the northern shore of Princess Royal Harbour (PRH) within King George Sound (KGS), 417 km south east of Perth. PRH is a 28.7km² marine inlet accessible by a narrow channel and made up of a single deep basin surrounded by shallow sand flats. No major rivers flow into PRH and despite marine influences PRH displays characteristics typical of an estuarine ecosystem. KGS covers an area of 110 km² and forms a large bay protected by Flinders Peninsula and Bald Head from the prevailing south-westerly swells. The sound contains four islands, including Michaelmas,

Breaksea, Mistaken and Seal Islands. Water depths in the Sound vary between 5-40 metres and temperatures fluctuate between 21°C in summer and 13°C in winter. The marine flora and fauna of the area are primarily temperate species, with a small proportion of endemics and tropical species.

SPA-Alb's turning basin and channel entrance (Ataturk Channel) is currently dredged to a depth of 12.2m Lowest Astronomical Tide (LAT). The sediment within the existing shipping channel consists of unconsolidated material of approximately 8-10 m depth into the seabed with a particle size distribution consisting predominantly of fine to medium grained silica sand and some fine silt.

1.3 VISUAL AMENITY AND RECREATION

The landscape of the immediate port area is dominated by stockpiles, storage facilities and other associated infrastructure. In addition, SPA-Alb has a number of vacant lots adjacent to the water which are to be used for future trade development. The waters surrounding SPA-Alb are popular recreational areas for tourists and residents of Albany, especially for recreational fishing. Neighbouring SPA-Alb is the Marina, Albany's major boat-launching and marine tourism area. Fishing, boating, sailing, diving, swimming, surfing and whale watching are some of the many recreational activities carried out in waters vested in SPA-Alb.

Southern Ports, Port of Albany

2 ENVIRONMENTAL MANAGEMENT OVERVIEW

SPA-Alb is committed to operating in an environmentally responsible manner in line with SPA's overarching Environmental Management System (EMS). This plan has been structured to ensure comprehensive management of the significant environmental aspects associated with SPA-Alb. An environmental objective has been set for each major environmental aspect outlined in Table 2.1.

The key environmental management and monitoring programs are described further in Section 2 of this document, including any specific targets, reporting requirements and contingency measures in place.

Table 2.1 Overview of SPA-Alb key environmental aspects, objectives and associated programs.

Table 2.1: Overview of SPA-Alb key environmental aspects, objectives and associated programs.

ASPECT	OBJECTIVE	CURRENT PROGRAM/STRATEGY
Ambient Air Quality (including odour)	Minimise impacts on the community from site sourced air emissions and ensure emissions are within legislative criteria.	Air Quality Monitoring and Reporting Development approval process and guidelines
Biodiversity and Habitats	Minimise impacts to flora and fauna and seek opportunities to enhance native species.	Weed Management Plan Feral animal control Development approval process and guidelines
Biosecurity	Ensure biosecurity risks are managed in line with regulatory requirements, including minimising the likelihood of introduced species and pests establishing in the region.	State-Wide Array Surveillance Program (SWASP) – Marine Biosecurity Sentinel Beehive Program Biosecurity Awareness & Preparedness (First Point of Entry)
Energy, Water and Waste	Continually improve energy, water efficiency and reduce the volume of wastes generated by SPA-Alb, promote recycling initiatives.	Sustainability Committee NGERS reporting General waste management & recycling
Land, Surface and Groundwater Quality	Effectively manage port-controlled land, prevent pollution, and ensure environmental impacts of contamination are minimised.	Contaminated Sites Management Framework (CSMF) Development approval process and guidelines
Marine, Estuarine and Freshwater Environment Quality	Effectively manage port-controlled waters and seabed and minimise impacts of contamination to the marine environment from port services and activities.	Marine Water and Sediment Sampling Programs Development approval process and guidelines
Noise	Minimise impacts to the community from site sourced noise emissions.	Noise Monitoring Development approval process and guidelines

3 KEY ENVIRONMENTAL MONITORING / MANAGEMENT PROGRAMS

3.1 Ambient Air Quality

3.1.1 Overview

SPA-Alb is a bulk commodity port, handling products such as grain, woodchips, silica sand and fertiliser. Potential air quality impacts include dust from product storage, loading activities including material stockpiles, conveyor system and ship loaders as well as vehicle traffic and general day-to-day port operations.

SPA-Alb endeavours to comply with the *National Environment Protection Measure* for *Ambient Air Quality* (NEPM) standards. The NEPM sets the standard for maximum PM_{10}

concentrations of 50 µg/m³ average over a 24-hour period with a maximum of five allowable exceedances per year.

3.1.2 Objective & Targets

SPA-Alb's overall objective in relation to ambient air quality is to *minimise impacts on the community from site sourced air emissions and ensure emissions are within legislative criteria*.

SPA-Alb has the following targets in relation to ambient air quality:

- No more than 5 exceedances per year of 24-hour PM_{10} average ≥50 µg/m³.
- No substantiated air quality community complaints as a result of port-controlled activities.

3.1.3 Management Strategies

SPA-Alb plans to mitigate where practicable port associated air quality impacts via:

- Consideration to air quality impacts in planning and port development proposals, utilising the hierarchy of controls with a particular focus on engineering i.e. enclosed conveyor belts, transfer stations, road sealing, dust extraction units.
- Applying dust management controls where practicable to do so with existing operations i.e. water sprayers.
- Monitoring dust emissions (PM_{10}) and taking action in response to monitoring results and/or worker or community concerns.
- Implementing SPA-Alb's development approval process and guidelines.

3.1.4 Monitoring

SPA-Alb monitors ambient air quality concentrations via its permanent Beta Attenuation dust Monitor (BAM) located adjacent to Bolt Terrace. The BAM is operated and maintained by experienced third party consultants. The BAM operates 24 hours a day, 365 days a year* to continually monitor the PM_{10} concentration of dust at 5-minute intervals. SPA-Alb also has the capability to undertake targeted campaign dust monitoring utilising its DustTrak™ 8533 Portable Dust Monitor. **Exceptions include maintenance events and monitor faults.*

SPA-Alb dust monitoring station

3.1.5 Reporting

Monitoring data is managed through the software platform AIRODIS with weekly reports sent via email to the Environment Team. AIRODIS also notifies the Environment Team of any exceedances to the 24-hour NEPM and of any equipment malfunctions. Monthly dust monitoring reports are generated by the Environment Team and elevated to senior management via exception or exceedance.

Any dust exceedance, dust-related incident or community concern/complaint bought to the attention of the Environment Team are investigated and lodged in SPA-Alb's reporting system INX. INX enables SPA-Alb to record, risk rate, assign and track actions related to the event ensuring they are adequately documented and investigated.

3.1.6 Contingency Actions

The following contingency actions are implemented in relation to ambient air quality:

Trigger	Action	Responsibility
Visible port-related dust emission.	Report high or abnormally dusty conditions to Supervisor/Environment Team	All.
Community complaint / incident relating to dust emission – single event	Lodgement in INX Investigation required Report to Senior Management	Environment Team
Community complaint / incident relating to dust emission – multiple events	Lodgement in INX Detailed investigation required – iCAM. Report to Senior Management/ELT	Environment Team

Dust concentrations above 24 hr NEPM (50 ug/m³) – single event	Investigation required. Report to Senior Management/ELT	Environment Team
More than 5 exceedances of NEPM per year	Investigation required. Reporting to Senior Management/ELT and in Annual Report	Environment Manager

3.2 Biodiversity and Habitats

3.2.1 Overview

SPA-Alb is responsible for managing both its terrestrial and marine environment, including the flora and fauna of the port area. The marine habitat of SPA-Alb includes native seagrass meadows (*P.sinuosa, P.australis and P.amphibolis*) and two major reef systems (Gio Batta Patch and Michaelmas Reef) which support an array of invertebrates and fish species. The Port waters are also home to a variety of species such as humpback whales, southern right whales, bottle-nose dolphins, seals, little penguins and other coastal avifauna.

SPA-Alb's terrestrial environment is highly fragmented and heavily infested with weed species such as Sydney Golden Wattle, Taylorina, Gorse and Pampas Grass. However, small pockets of native vegetation do occur in the northern section of the Port, providing refuge for small populations of native mammals, marsupials and birds.

The main potential impacts from SPA-Alb in relation to biodiversity and habitats include:

- Unintentional introduction of weeds and other exotic species.
- Disturbance of natural habitats through development and other port-related activities.
- Provision of food sources that attract/support feral animal populations (i.e. grain and pigeons).

3.2.2 Objective & Targets

SPA-Alb's overall objective in relation to habitats is to *minimise impacts to biodiversity and habitats and seek opportunities to enhance native species*.

SPA-Alb has the following targets in relation to biodiversity and habitats:

- Undertake integrated weed management a minimum of 6 times per annum.
- Albany Harbours Sustainability Group to meet a minimum of 4 times per annum.
- No commercial vessel strikes with marine mammals, specifically whales.
- Support a minimum of 1 research initiative that positively contributes to biodiversity and habitats within SPA-Alb.

3.2.3 Management Strategies

SPA-Alb plans to mitigate where practicable port associated impacts to biodiversity and habitats by:

- Engaging specialist contractors to implement its Weed Management Plan and ensure weed populations remain stable, or if possible, are lowered.
- Undertaking targeted campaigns such as the Brunswick Road Bush Regeneration Project.
- Ensuring port internal grounds are maintained and managed via mowing, gardening and general housekeeping.

- Undertaking feral animal control, specifically targeting pigeon, rodent and rabbit species.
- Implementing a 10-knot speed restriction on all commercial ships within port limits during whale migration season (May to October).
- Undertaking regular Environment Inspections of the port maritime secure zone.
- Implementing SPA-Alb's development approval process and guidelines.

Brunswick Road Bush Regeneration Project

3.2.4 Monitoring

Specialist contractors monitor weed infestations in target areas including Brunswick Road east and the Pilot Cottage precinct. In addition to regular weed management, specific projects relating to biodiversity and habitats are also undertaken on an *ad hoc* basis. An example of such, is the Brunswick Road Bush Regeneration project, which combines weed management and revegetation to increase the environmental value of the area.

Environment Inspections are also used to monitor and identify any weed species or feral animals present in large abundance. For example, increased rabbit numbers during peak breeding seasons. If the need for further action is identified, additional resources are engaged and deployed.

Monitoring for marine mammals such as whales and dolphins is typically undertaken by SPA-Alb's Marine Team. Monitoring is undertaken via visual inspection during shipping activities. If cetaceans are observed within key shipping areas during pilotage evasive action is taken where safe.

Research initiatives supported by SPA-Alb assist in monitoring the health of biodiversity and habitats within the Port environment. Research initiatives include studies or reports provided by third parties (such as universities) that positively contribute knowledge to a particular subject matter. Examples of research initiatives previously and currently supported include fish diversity and abundance surveys as well as a pigeon population census.

3.2.5 Reporting

Progress of weed management is generally reported verbally to SPA-Alb. Observations are then used to determine the scope of works for the next scheduled site visit. Progress

of specific projects, such as the Brunswick Road Bush Regeneration are provided in written reports.

Any actions identified during Environment Inspections relating to weed or feral animals are lodged in SPA-Alb's reporting program INX. Events relating to biodiversity and habitats, such as injuries or deaths to flora and fauna are also reported in INX.

Outcomes of any research initiatives supported are generally provided in either a written (report) or verbal (oral) format.

3.2.6 Contingency Actions

The following contingency actions are implemented in relation to biodiversity and habitats:

Trigger	Action	Responsibility
Substantial increase in weed or feral animal species on port-controlled land	Report in INX. Notify Environment Team. Undertake targeted campaigns (i.e. calicivirus release).	All
Injured or sick seabird found within port jurisdiction	Notify Supervisor / Environment Team. Contact WA Seabird Rescue Albany. Report in INX.	All / Environment Team
Injured or sick other wildlife found within port jurisdiction	Notify Supervisor / Environment Team. Contact Department of Biodiversity Conservation and Attractions (DBCA) Wildcare Helpline 9474 9055	All / Environment Team
SPA vessel striking a marine mammal and causing injury and/or fatality	Report in INX. Detailed investigation required – iCAM. Report to DBCA	Harbour Master/Duty Pilot Environment Team

3.3 Biosecurity

3.3.1 Overview

SPA-Alb is responsible for implementing biosecurity risk management practices to assist in protecting Australia's biosecurity and reducing potential pest and disease incursions. SPA-Alb has been determined as a First Point of Entry (FPOE) under the *Biosecurity Act 2015* and has such committed to maintaining biosecurity awareness and preparedness to comply with regulatory requirements.

SPA-Alb is also committed to several early detection programs, both land and water-based which form part of a collaborative effort between port authorities and the State Government. The main potential impacts from SPA-Alb in relation to biosecurity include:

Potential introduction of marine pest species via antifouling or ballast water.

Potential introduction of diseases/pests via products, shipping from international sources.

3.3.2 Objective & Targets

SPA-Alb's overall objective in relation to biosecurity is to *ensure biosecurity risks are managed in line with regulatory requirements, including minimising the likelihood of introduced species and pests establishing in the region*.

SPA-Alb has the following targets in relation to biosecurity:

No new incursions of introduced marine pests.

No new incursions of bee related diseases/pests.

No non-compliances with Commonwealth biosecurity requirements under the *Biosecurity Act 2015*.

3.3.3 Management Strategies

SPA-Alb plans to mitigate where practicable Port associated biosecurity risks via:

Implementation of State-Wide Array Surveillance Program (SWASP) for marine biosecurity;

Facilitation of the Sentinel Beehive Surveillance Program;

First Point of Entry (FPOE) biosecurity awareness and preparedness.

Implementing SPA-Alb's development approval process and guidelines.

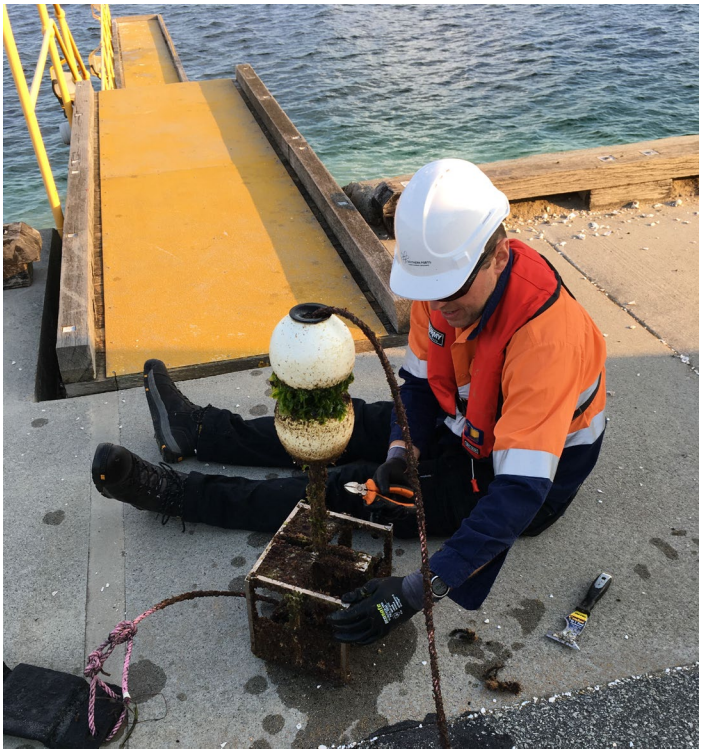
3.3.4 Monitoring

SPA-Alb works collaboratively with the Department of Primary Industries and Regional Development (DPIRD) Aquatic Pest Biosecurity section to implement the SWASP program for marine biosecurity. Samples are collected via settlement arrays located next to Berths 1, 3 and 6. Each settlement array contains eight plates that collect marine growth for 2-3 months twice per year (summer and winter). DNA sequencing is then utilised to determine the presence or absence of introduced marine pests. Shoreline assessments are also undertaken at Shoal Bay and Vancouver Peninsula.

SPA-Alb provides monitoring sites for DPIRD's Sentinel Beehive Surveillance Program which provides an early warning system to detect new bee pests and diseases such as varroa mite. Six sentinel beehives have been established at various locations on Port Land and are monitored and sampled by volunteer beekeepers. The joint surveillance effort forms part of an expanded National Bee Pest Surveillance Program.

SPA-Alb monitors its compliance with the Commonwealth First Point of Entry (FPOE) biosecurity requirements via undertaking weekly environment inspections using iAuditor. Environment staff monitor for elements such as pooling water (vector control), pests and weeds and biosecurity waste storage.

In addition, SPA-Alb ensures its staff are trained in biosecurity awareness via the Seaports Biosecurity Awareness e-Learning Package. Staff compliance with this learning module is monitored through SPA's Learning Management System (LMS).



SWASP Program, settlement array sampling for marine pests.

3.3.5 Reporting

DPIRD provides SPA-Alb with SWASP reports for both the Summer and Winter periods, detailing if any new pests have been detected, the species-specific analysis of each sample and the taxonomic diversity. The findings of these reports are summarised and reported internally to senior management.

SPA-Alb receives reports on DPIRD's Sentinel Beehive Surveillance Program by exception only. That is, SPA-Alb will only receive a report from DPIRD if a known bee-related pest or disease has been confirmed at one of the Port's sentinel beehive locations.

Weekly Environment Inspections are lodged directly into the reporting system INX upon completion. INX enables SPA-Alb to record, assign and track any actions ensuring they are adequately documented and investigated.

3.3.6 Contingency Actions

The following contingency actions are implemented in relation to biosecurity:

Trigger	Action	Responsibility
Suspected marine pest detected	Report via FISHWATCH or via email to DPIRD Biosecurity within 24 hours	All
Confirmed marine pest detected via SWASP program	Follow and Implement Requirements under direction from DPIRD	DPIRD/SPA
Unusual bee or hive observations, including new hive establishment in Port bounds	Report to DPIRD Pest and Disease Information Service (PaDIS).	Environment Team
All other suspected biosecurity risks and/or potential incidents.	Follow and Implement Albany Biosecurity Response Procedure (BIRP).	All

3.4 Energy, Water and Waste

3.4.1 Overview

Energy and water use has the potential to impact local and regional environments. Energy usage at SPA-Alb includes the consumption of fossil fuels such as petroleum products and the use of electricity. The major water resource utilised at SPA-Alb is potable water, which is heavily used by ships and for equipment, vehicle and berth cleaning.

In addition to using energy and water, SPA-Alb activities generate a variety of different waste types including scrap metal, hazardous waste such as batteries, and liquid waste such as paint. To minimise the impacts on the environment, waste will be managed appropriately in accordance with legislative and local council requirements. The two key types of waste generated by the Port include:

Solid inert waste – office waste, wood, steel, cardboard etc.

Liquid waste – oils, paints, thinners, various chemicals etc.

3.4.2 Objective & Targets

SPA-Alb's overall objective in relation to energy, water and waste is to *continually improve energy, water efficiency and reduce the volume of wastes generated by SPA-Alb, promote recycling initiatives*.

SPA-Alb has the following targets in relation to energy, water and waste:

Albany Sustainability Committee to meet a minimum of four times per annum;

Remain below the National Greenhouse and Energy Reporting (NGER) threshold.

No reportable environmental incidents relating to waste, in particular that of a hazardous nature (i.e. oily waste).

3.4.3 Management Strategies

SPA-Alb plans to minimise port-related energy, water and waste impacts via:

Monitoring energy consumption to ensure it remains below the NGER facility threshold and does not trigger formal reporting to the Clean Energy Regulator.

Actively seeking opportunities for waste minimisation and management via the Albany Sustainability Committee.

Undertaking regular environment and workplace inspections to ensure waste is appropriately stored and disposed of.

3.4.4 Monitoring

SPA-Alb monitors both its water and energy consumption by collating data on potable water, diesel fuel, unleaded fuel, electricity, and LPG usage. Data is collated via SPA's data management system Envirosys via a range of streams, including billing and invoices, fuel cards and internal meter reads.

SPA-Alb monitors waste compliance via its agreements with licenced waste contractors, retention of waste disposal receipts and by undertaking regular environment and workplace inspections. The inspections are undertaken to ensure waste is stored appropriately, disposed of in accordance with regulations and removed in a timely manner.

SPA-Alb recycling station in the maritime secure zone (MSZ).

3.4.5 Reporting

SPA-Alb uses the NGER threshold calculator to aggregate and report on its energy usage. Fuel, electricity and LPG data is extracted from Envirosys, entered into the NGER tool and converted/calculated into CO_2 equivalent emissions. Reporting covers emissions for the previous financial year (1 July to 30th June) and determination of whether full reporting is required is set for 31st of August each year. To date, SPA-Alb has not triggered formal reporting.

SPA also reports on its energy and water usage and expenditure each financial year via the Australian Bureau of Statistics (ABS) Environmental Indicators /Energy and Water Survey.

Environment Inspections are lodged directly into the reporting system INX upon completion. INX enables SPA-Alb to record, assign and track any actions ensuring they are adequately documented and investigated.

3.4.6 Contingency Actions

The following contingency actions are implemented in relation to energy, water and waste:

Trigger	Action	Responsibility
Contamination of recycling waste streams	Report to supervisor. Lodge in INX. Remove and segregate contamination products if safe to do so. Communicate with Port users.	All
Accidental minor spillage of waste product	Report to supervisor. Implement appropriate cleaning/remedial action. Lodge in INX.	All.
Accidental major spillage of waste product.	Report to Environment Manager and /or Harbour Master. Implement remedial action as per advice. Report to regulator (if applicable). Lodge in INX.	All.
Calculated CO_2 equivalent exceeds NGER threshold	Formal reporting to Clean Energy Regulator.	Environment Manager

3.5 Land, Surface, and Groundwater Quality

3.5.1 Overview

It is important to maintain and effectively manage SPA-Alb controlled land as to not restrict current and future land use and development requirements. Some of the activities undertaken at SPA-Alb have the potential to impact on the land (soil and groundwater) if not managed appropriately. The main potential impacts from SPA-Alb in relation to land, surface and groundwater quality include:

Bulk storage and usage of products such as diesel fuel.

Surface and stormwater runoff from SPA-Alb land and upstream residential and commercial catchments (SPA-Alb is the receptor for part of the City's catchment).

Management of historical/legacy items such as asbestos-containing materials (ACM) in soil.

3.5.2 Objective & Targets

SPA-Alb's overall objective in relation to land, surface and groundwater quality is to *effectively manage port-controlled land, prevent pollution, and ensure environmental impacts of contamination are minimised*.

SPA-Alb has the following targets in relation to land, surface and groundwater quality:

No pollution incidents or events that require reporting or cause environmental damage as a result of SPA-Alb controlled operations.

Minimise spillage and contaminants from entering the soil and groundwater from SPA-Alb controlled operations.

Manage soil and groundwater that is determined to be contaminated and requiring remediation in accordance with the *Contaminated Sites Act 2003*.

3.5.3 Management Strategies

SPA-Alb plans to minimise port-related land, surface and groundwater quality via:

Maintaining a register of SPA-Alb owned/operated sites that are listed under the *Contaminated Sites Act 2003.*

Implementing the SPA-Alb Contaminated Sites Management Framework (CSMF) (2022).

Implementing SPA-Alb's development approval process and guidelines.

Undertaking regular environment and workplace inspections.

3.5.4 Monitoring

The status of SPA-Alb's contaminated sites is monitored via an active register. The register details the current classification and any requirements for action such as preliminary/detailed site investigations and remediation. Land that is known to have legacy contamination is typically monitored via soil bores and groundwater monitoring wells as and when required under the *Contaminated Sites Act 2003.*

In 2022 SPA-Alb also undertook a whole-of-port preliminary site investigation (PSI) which resulted in the development of a Contaminated Sites Management Framework (CSMF). The CSMF identified 32 areas of potential environmental concern (APECs) across 41 domains which now forms the pathway for future management. SPA-Alb continues to work through the priority actions identified in the CSMF with the assistance of specialist contaminated sites consultants.

Environment and site inspections are utilised to monitor SPA-Alb controlled activities and report on any pollution, spillage, or storm and wash water runoff that could cause harm to surrounding land, including soil and groundwater.

Historical land use around the deep water jetty including freezer works circa 1940.

3.5.5 Reporting

SPA-Alb reports on the status of potential and known contaminated sites as per the reporting requirements of the *Contaminated Sites Act 2003*. This includes provision of any monitoring and investigation reports to DWER as well as reporting under the disclosure of contingent liabilities each financial year.

Any incidents, including minor and major accidental spillages on port-controlled land must be reported immediately to the Site Supervisor and Environment Manager. The incident is then lodged directly into the reporting system INX which enables SPA-Alb to record, assign and track any actions ensuring they are adequately documented and investigated.

3.5.6 Contingency Actions

The following contingency actions are implemented in relation to land, surface and groundwater:

Trigger	Action	Responsibility
Spillage on port-controlled land or from SPA-Alb controlled operations.	Report to Supervisor. Report to Environment Manager for actioning. Lodge in INX.	All
Suspected or known contaminated site occurs on SPA-Alb land.	Complete and submit Form 1 to DWER Contaminated Sites Branch.	Environment Manager

3.6 Marine, Estuarine and Freshwater Environment Quality

3.6.1 Overview

SPA-Alb covers the water and seabed of the majority of King George Sound (KGS) and Princess Royal Harbour (PRH). It is important to maintain and effectively manage the marine environment of SPA-Alb as to not restrict current and future use and development requirements. Some of the activities undertaken at SPA-Alb have the potential to impact on the marine environment if not managed appropriately. The main potential impacts from SPA-Alb in relation to marine, estuarine and freshwater environment quality include:

Uncontrolled release of bulk product such as diesel fuel or fertiliser within SPA-Alb marine waters and environment.

Maintenance/ capital dredging campaigns and related construction and development projects.

Surface and stormwater runoff from SPA-Alb land and upstream residential and commercial catchments.

3.6.2 Objective & Targets

SPA-Alb's overall objective in relation to marine, estuarine and freshwater environment quality is to *effectively manage port-controlled waters and seabed and minimise impacts of contamination to the marine environment from port services and activities.*

SPA-Alb has the following targets in relation to marine, estuarine and freshwater environment quality:

No significant increase in background water or sediment metal/nutrient concentrations in Princess Royal Harbour due to SPA-Alb controlled operations.

No pollution incidents or events that require reporting or cause environmental damage as a result of SPA-Alb controlled operations.

Minimise spillage, storm and wash water runoff into the marine environment from SPA-Alb controlled operations.

3.6.3 Management Strategies

SPA-Alb plans to minimise port-related marine, estuarine and freshwater environment quality impacts via:

Routinely monitoring the water and sediment quality of Princess Royal Harbour.

Undertaking environmental impact assessments (EIAs), baseline surveys and investigations as required for projects/dredging campaigns.

Implementing SPA-Alb's development approval process and guidelines.

Undertaking regular environment and workplace inspections.

3.6.4 Monitoring

The marine water and sediment quality of Princess Royal Harbour is monitored as per the Department of Water and Environment's (DWER) collaborative sampling program. Water quality is monitored quarterly while sediment quality is monitored biennially for heavy metal and nutrient concentrations. To date, this monitoring has not shown bulk loading activities or water run-off into the harbour to have had a deleterious effect on water or sediment quality.

Further marine-related monitoring is undertaken in both Princess Royal Harbour and King George Sound on an ad hoc basis. Examples include water and sediment quality sampling and benthic habitat surveys as part of both maintenance dredging and proposed capital dredging campaigns (SDJV / Albany Port Expansion Project).

Environment and site inspections are utilised to monitor SPA-Alb controlled activities and report on any pollution, spillage, or storm and wash water runoff that could cause harm to the marine environment.

Seagrass survey in Princess Royal Harbour. Source: BMT Oceanica

3.6.5 Reporting

SPA-Alb receives results from the Princess Royal Harbour water and sediment quality monitoring directly from the laboratory. In addition, the program coordinator DWER, collates the data and provides a written running summary. Exceedances of water and sediment guidelines (ANZECC 2018) are further reported internally to SPA management.

Results of any environmental impact assessments (EIAs), water and sediment quality monitoring and benthic surveys undertaken as part of dredging or project campaigns must be reported to the relevant regulator. For State referrals and approvals, this includes the Office of the Environmental Protection Authority (OEPA) and for Commonwealth includes the Department of Climate Change, Energy, the Environment and Water (DCCEEW). Any current sea dumping permits are also reported on annually under the London Protocol to the DCCEEW.

Any incidents, including minor and major accidental spillages into the marine environment on port-controlled land must be reported immediately to the Harbour Master and Environment Manager respectively. The incident is then lodged directly into the reporting system INX which enables SPA-Alb to record, assign and track any actions ensuring they are adequately documented and investigated.

3.6.6 Contingency Actions

The following contingency actions are implemented in relation to marine, estuarine and freshwater environment quality:

Trigger	Action	Responsibility
Exceedance of background water/sediment quality concentrations	Report to SPA Management. Investigate potential causes and undertake additional monitoring (if required).	Environment Team DWER
Spillage into the marine environment on port-controlled land or from SPA-Alb controlled operations.	Report to supervisor. Report to Harbour Master and / or Environment Manager for actioning. Lodge in INX.	All

3.7 Noise

3.7.1 Overview

Port associated noise sources can include heavy machinery, construction activities, road and rail traffic as well as port user storage and handling facilities. Environmental noise is managed through the *Environmental Protection (Noise) Regulations 1997* which specific maximum allowable noise levels for sensitive, commercial, and industrial premises. Past noise modelling has indicated that Port noise is substantially buffered, largely due to the low topography of the Port site and shielding from the CBH grain storage facilities. However, noise emissions do still occur, and the major sources can include:

Noise from heavy machinery and construction activities.

Noise from road and rail traffic.

Noise from storage and handling facilities

3.7.2 Objective & Targets

SPA-Alb's overall objective in relation to noise is to *minimise impacts to the community from SPA-Alb site sourced noise emissions*.

SPA-Alb has the following targets in relation to noise:

No substantiated noise complaints from SPA-Alb controlled operations.

3.7.3 Management Strategies

SPA-Alb plans to minimise port-related noise impacts via:

Applying noise management controls on SPA-Alb controlled operations where practicable.

Investigating the source(s) of community or port-user noise-related concerns or complaints.

Undertaking targeted noise surveys and assessments as required i.e. development proposals.

Maintaining the establishment of buffer areas to discourage inappropriate development.

Implementing SPA-Alb's development approval process and guidelines.

Undertaking regular environment and workplace inspections.

3.7.4 Monitoring

Monitoring of environmental noise may be undertaken on an *ad-hoc* basis in response to any community or port user concerns or complaints. In general, a hand-held Sound Level Meter (SLM) and environmental noise complaint recorder are utilised to investigate and monitor port-related noise emissions.

If required, specialist consultants may also be engaged to undertake detailed or targeted noise assessments. Monitoring methodologies used for these assessments may vary but will typically also involve the use of SLMs.

A noise data logger deployed on Port land by CBH.

3.7.5 Reporting

Environmental noise-related concerns, complaints and incidents are reported internally through SPA's reporting system INX. INX enables SPA-Alb to record, assign and track any actions ensuring they are adequately documented and investigated.

Written reports are provided to SPA-Alb by specialist consultants on any targeted or detailed noise assessments undertaken.

3.7.6 Contingency Actions

The following contingency actions are implemented in relation to noise:

Trigger	Action	Responsibility
Substantiated noise complaint or repeated noise complaints from community / port user	Record in INX. Investigate source, undertake monitoring and determine remedial action (if required).	Environment Team
Proposed residential / accommodation developments within/near port-controlled land	Consult with developer / local council. Undertake targeted noise assessments as required.	Commercial Team Environment Team