

ENVIRONMENTAL STRATEGY

2013 - 2018

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FOREWORD

For many years, environmental management programs have been in place at Essendon Airport.

These programs have been designed to manage the Airport's 305 hectare site whilst also minimising the Airport's impact on the surrounding environment.

The development of this 5 year Environment Strategy, in accordance with the Commonwealth *Airports Act 1996*, is further evidence of this continued commitment. It updates and replaces the existing Environment Strategy which was approved on 7 December 2010 and is the first Environment Strategy to be included in the Master Plan, in accordance with recent amendments to the *Airports Act 1996*.

This Environment Strategy contains objectives and initiatives to protect the Airport's environment and builds upon the Airport's existing environment management framework.

Essendon Airport Pty Ltd is pleased to present this document as its Environment Strategy which will be in place during 2013 - 2018.

Chris Cowan
Chief Executive Officer
Essendon Airport Pty Ltd

ESSENDON AIRPORT ENVIRONMENT POLICY

Essendon Airport recognises the importance of maintaining and enhancing the environment for the benefit of all Australians, present and future.

In developing and managing the Airport, Essendon Airport Pty Ltd will:

- Identify and manage the significant environmental impacts on the Airport;
- Comply with relevant environmental legislation and regulations;
- Continually measure, monitor, report and improve upon the environmental performance defined by our objectives and targets;
- Ensure persons responsible for the Airport Environment are provided with the necessary training to fulfill the strategy's objectives, and;
- Promote EAPL's commitment to the environment, to our employees, tenants and customers.

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Tree planting at Essendon Airport

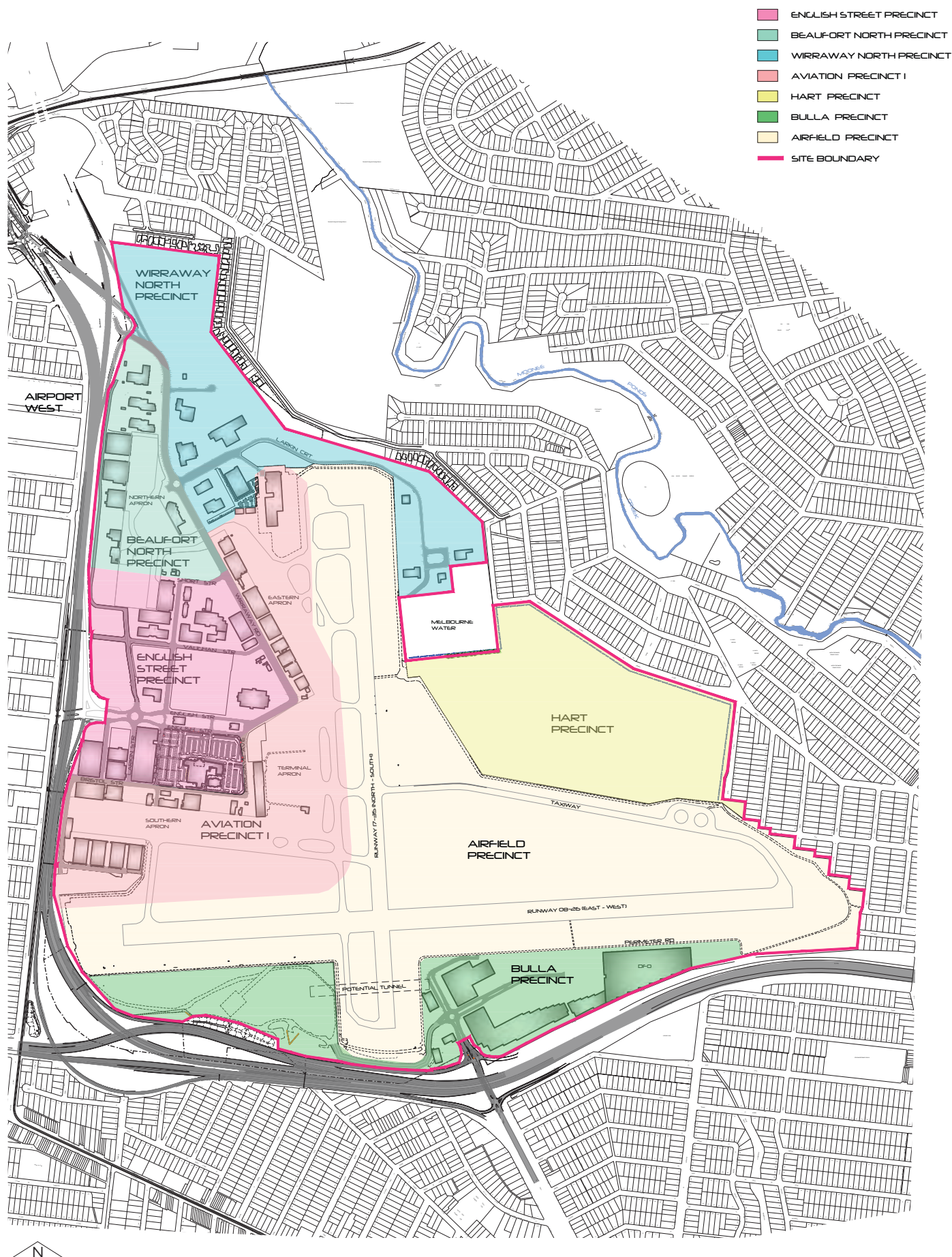
ABBREVIATIONS			
ASA	Airservices Australia	EMS	Environmental Management System
ABC	Airport Building Controller	EPA	Victorian Environment Protection Authority
AEO	Airport Environment Officer	EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
AER	Airport Environment Report	ILS	Instrument Landing System
AEPR	Airports (Environment Protection) Regulations 1997	MDP	Major Development Plan
AES	Airport Environment Strategy	MP	Master Plan
AHD	Australian Height Datum	NDB	Non Directional Beacon
ALC	Airport-lessee company	NPI	National Pollutant Inventory
CEMP	Construction Environmental Management Plan	The Act	<i>Airports Act 1996</i>
DtE	Department of the Environment (formerly SEWPaC)	UPSS	Underground Petroleum Storage System
EAPL	Essendon Airport Pty Ltd	SEPP	State Environment Protection Policy
EMP	Environmental Management Plan	WSUD	Water Sensitive Urban Design



GLOSSARY	
Airport Environment Officer	A person appointed under regulation 10.01 of the Airports (Environment Protection) Regulations 1997.
Airport lease	A lease of the whole or a part of the airport, where the Commonwealth is the lessor.
Airport-lessee company	A company that holds an airport lease.
Airservices Australia	A government business enterprise responsible for providing Australia's aviation industry with a range of aviation related operational services.
Airside	The part of the airport grounds, and the part of the airport buildings, to which the non-travelling public does not have free access.
Apron	A defined area of land at an aerodrome intended to accommodate aircraft for the purpose of loading and unloading passengers, mail or cargo, fueling, parking or maintenance.
Bio-Swales	Bio-swales are landscape elements designed to remove silt and pollution from surface runoff water.
Engine Run-up	The operation of an aircraft engine in preparation for flight (safety requirement).
Ground Running	The operation of an aircraft engine for maintenance or testing. Ground running does not include engine operation associated with engine run-up, flight, when landing, taking off, or taxiing at the airport.
Department of Infrastructure, and Regional Development (DIRD) formerly DIT	A Commonwealth department that provides policy advice, programs and regulation across a wide range of areas including: <ul style="list-style-type: none"> • Infrastructure • Regional Development • Aviation and airports
Department of the Environment, (DtE formerly SEWPac)	The Commonwealth department responsible for the administration of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
General aviation	All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire.
Landside	The part of the airport grounds, and the part of the airport buildings, to which the non-travelling public has free access.



Building 36



MASTER PLAN ESSENDON AIRPORT PTY LTD

1. INTRODUCTION

This 2013 - 2018 Airport Environment Strategy (AES) outlines the environmental objectives and the environmental management framework of Essendon Airport. This AES will apply for a period of five years from approval by the Minister for Infrastructure and Regional Development.

For the first time, the AES will be submitted to the Minister for Infrastructure and Transport for approval as part of the Master Plan process.

The AES has been prepared in accordance with the *Airports Act 1996* and sets out the framework for the environmental management of Essendon Airport.

It updates and replaces the previous AES, which was approved in 2010.

Essendon Airport Pty Ltd (EAPL) is responsible for the preparation of the AES in accordance with the *Airports Act 1996* and associated Regulations.

This AES will be available for download from the EAPL website and from EAPL's office during business hours.

www.essendonairport.com.au

**Essendon Fields House
Level 2, 7 English Street
Essendon Fields Victoria
Australia 3041**



Essendon Airport Terminal

2. BACKGROUND

2.1 AIRPORT LEASE

Essendon Airport Pty Ltd (EAPL) is the lessee of the Essendon Airport site, and is referred to as the Airport Lessee Company (ALC). The Commonwealth retains ownership of the property.

The ALC must provide for the use of the airport site as an airport and for access to the airport by interstate and intrastate air transport. The lease also requires that:

‘Throughout the term the Lessee must develop the airport site at its own cost and expense having regard to:

- a. the actual and anticipated future growth in, and patterns of, traffic demand for the airport site;
- b. the quality standards reasonably expected of such an airport in Australia; and
- c. Good Business Practice.’

The ALC must also prepare a Master Plan and an AES.

The current Essendon Airport Master Plan (2013) was approved by the Minister for Infrastructure and Regional Development in April 2014. The Master Plan sets out a broad framework for the development of the Airport for the next 20 years.

2.2 LEGISLATIVE CONTEXT

In September 1996, the Federal Parliament passed the *Airports Act 1996* (The Act) and subsequently various regulations under the Act, to govern the development and operations of Federal Airports leased to private organisations. The Act and the Airports (Environment Protection) Regulations 1997 (AEPR) establish a system of regulation to promote awareness of environmental issues and to ensure that appropriate systems are in place to manage pollution, noise and other environmental impacts generated by operations at airports.

The Airports (Environment Protection) Regulations 1997 sets the standards for environmental pollution in relation to air, water and soil quality and noise emissions, authorises the monitoring and remediation of breaches of environmental standards, and supports better environmental outcomes on leased Commonwealth airports.

The *Airports Act 1996* requires each airport to have an AES outlining the environmental management strategies and actions for operations at the Airport.

The AES forms part of the Essendon Airport Master Plan and is in force for 5 years from the date of its approval, after which a new AES is prepared and submitted to the Minister.

The requirements for an Environment Strategy are prescribed in Section 71(2)(h) of the *Airports Act 1996* and regulations 5.02A and 5.02B of the Airports Regulations 1997.

The Airports (Environment Protection) Regulations 1997 do not apply to pollution generated by aircraft, nor to noise generated by aircraft in flight, landing, taking off or taxiing at the airport. The Commonwealth regulates any pollution caused by aircraft engines under the Air Navigation (Aircraft Engine Emissions) Regulations 1984 and the noise caused by aircraft operations under the Air Navigation (Aircraft Noise) Regulations 1984. However, the noise from ground running of aircraft engines and auxiliary power units are covered by the Airports (Environment Protection) Regulations 1997 and details of management are discussed within this strategy.

Another Commonwealth law that applies to the Essendon Airport site is the *Environmental Protection and Biodiversity Conservation Act 1999*.

This Commonwealth law protects endangered species and national heritage at Essendon Airport.

Where there is no Commonwealth legislation, State laws are applicable. These include laws related to waste management, motor vehicle pollution, the storage of certain chemicals and occupational health and safety.

2.3 ENVIRONMENT STRATEGY

This AES will update and replace the 2010 - 2014 AES.

The AES sets out the management approach to monitor, report and prevent or minimise adverse environmental impacts. It also sets a framework for management through the implementation of procedures and action plans.

The AES outlines the operation and management of the following areas:

- air quality;
- noise;
- stormwater;
- groundwater;
- soil quality;
- waste management;
- dangerous goods and hazardous substances;
- resource use;
- flora and fauna; and
- heritage and native title.

2010 - 2014 Environment Strategy

The 2010 - 2014 AES was approved by the Commonwealth Minister for Transport and Regional Services on 7th December 2010.

2.4 CONSULTATION

Consultation with the community is important for an airport and its ongoing operations.

At present regular consultation occurs with the community through the Essendon Airport's Community Aviation Consultation Group (CACG). The CACG membership is as follows:

- a Rotating Chair, as agreed by the Committee's Membership;
- a Federal Member of Parliament;
- a State Member of Parliament;
- a Councillor from Moonee Valley City Council;
- two Community Representatives;
- Chief Executive Officer Essendon Airport;
- Operations Manager, Essendon Airport; and representatives from Airservices Australia and DIRD are invited guests to each meeting.

The draft environment strategy is provided to DTE for comment as part of the master plan consultation phase.

In addition, a Fly Neighbourly Agreement was tabled at a CACG meeting in June 2010. As of March 2013, 18 operators had signed up to the agreement.

EAPL meets every month with the AEO to discuss environmental issues at the airport. In addition to these meetings, EAPL consults the AEO on any environmental issues that arise at the airport.

The tenant audits conducted by EAPL and the AEO are used as a venue for feedback from tenants, and informing tenants of current issues on the site.

EAPL formally consults with Moonee Valley City Council on a regular basis covering a wide range of issues, in particular groundwater, stormwater and noise.

The preliminary draft of this AES was included with the 2013 Master Plan and subject to the Master Plan consultation process prior to submission to the Minister. EAPL received written submissions from the local community regarding the AES and gave due regard to those comments in preparing the draft AES for the Minister. Environmental issues raised by the CACG were also considered in the preparation of this AES.

Upon issue of the Draft Environment Strategy, EAPL intends to consult with the Victorian Department of Sustainability and Environment (DSE).

Regular consultation is also carried out with the Airport Environmental Officer, Moonee Valley City Council with regard to stormwater run-off and the CACG with regard to noise.

2.5 CLIMATE

Essendon Airport has a temperate climate with mean maximum temperatures ranging from 13 to 26.3°C on average, and mean minimum temperatures ranging from 5 – 14°C on average. The wettest months are July to November.

2.6 GEOLOGY AND HYDROGEOLOGY

Essendon Airport is located on the Quaternary aged Newer Volcanics, which are comprised of fresh to weathered basalts. The Newer Volcanics basalts extend across southwestern Victoria from Melbourne to the South Australian border.

The Newer Volcanics overlie the Brighton Group, which is comprised of marine to terrestrial cemented sandy sediments.

The Brighton Group sediments uncomfortably overlie the Fyansford Formation, which are comprised of grey-green clayey silts, clays and marls.

The Fyansford Formation uncomfortably overlies the Older Volcanics, consisting of basalt and pyroclastics (minor tuffs and ash deposits).

The Older Volcanics in the Melbourne area overlie Silurian aged, marine sandstones, siltstones and minor conglomerates. (Sunbury, 1: 63 360 Geology Map).

Groundwater is located between 23 to 29 metres below the surface level. The groundwater quality is saline.

2.7 LAND FEATURES

Generally, the majority of the airport is flat with the exception of the grade differential between sections of the Tullamarine Freeway and the Airport and the northern section of the airport that slopes down towards Boeing Reserve and Moonee Ponds Creek, and the adjoining residential area.

The western edge of the Airport contains the Airport Terminal, a number of warehouses, offices, car dealerships and industries, both aviation and non-aviation related.

The eastern portion of Bulla Road Precinct (located along the southern boundary of the airport) has been redeveloped into a commercial area containing retail outlets.

The Wirraway North Precinct and Beaufort North Precinct have been redeveloped and now includes an access road connecting Wirraway Road to Matthews Avenue and the Tullamarine Freeway.

The English Street Precinct has undergone gradual transformation both by construction of new buildings, and refurbishment of existing buildings.

The Aviation Precinct now includes an additional two hangars on the Northern Apron – these hangars facilitate the Victorian Emergency Services for the Police and Air Ambulance.

Melbourne Water has 5 water tanks located along the eastern perimeter of the airport. Boeing Reserve is located to the north-east of the airport, adjacent to Moonee Ponds Creek. Westfield Shoppingtown is located to the north-west of the airport, on the western side of the Tullamarine Freeway

3. ENVIRONMENTAL MANAGEMENT SYSTEM

The following aspects are covered:

RESPONSIBILITIES

The responsibilities of the various parties involved in managing environmental and other issues at Essendon Airport are summarised below:

- Essendon Airport Pty Ltd (EAPL). EAPL is the airport-lessee company (ALC) and as such is responsible for the management and planning of most airside and landside facilities at Essendon Airport. EAPL is also responsible for the environmental management of the airport, including ground-based air and noise emissions.
- Airservices Australia (ASA). ASA is responsible for air traffic control, flight path management and aircraft overflight noise and air pollution.
- Department of Infrastructure and Regional Development (DIRD). DIRD is responsible for enforcing the *Airports Act 1996* and the Commonwealth Government's aviation policy. In addition they are also responsible for any international agreements and airspace environment management (including aircraft air emissions). DIRD monitors the environmental performance of airports via AEO reports and the Annual Environmental Reports.

- Department of the Environment (DtE formerly SEWPaC) is responsible for the administration and regulation of the EPBC Act, and heritage legislation on Essendon Airport.
- Airport Environmental Officer (AEO). The AEO is appointed by DIRD and is responsible for regulating environmental issues at Essendon Airport. The AEO is involved in regular meetings with EAPL and conducts site inspections and facility audits.
- Airport Building Controller (ABC). The ABC is also appointed by DIRD and is responsible for ensuring that activities at Essendon Airport meet the appropriate building and engineering standards.
- Essendon Airport Tenants. The tenants of Essendon Airport have a responsibility to assist Essendon Airport in achieving its environmental objectives, and therefore to avoid polluting. Tenants must conduct their activities in an environmentally responsible manner, complying with the environmental legislation and the AES.

Planning

In order to implement the Environmental Policy, EAPL has identified the potential environmental impacts of activities conducted at the airport and set objectives and targets for managing impacts (refer section 4 and 13). The environmental management actions for achieving the objectives and targets are also detailed in sections 4 and 13, and summarised in section 14.



The Airport Environment Officer carries out regular inspections of construction projects at the Airport

Training

Ongoing training is provided to EAPL staff to ensure that they have the resources to efficiently fulfill the requirements of their responsibilities. EAPL requires their sub-contractors to also ensure that they are current with their training, and their staff have the required qualifications for their roles.

Training will be conducted by a person who possesses a Certificate IV in Workplace Training & Assessment, or a person who holds an Australian Qualifications Framework (AQF) certification in the field they will be teaching, or by a person who is recognised as an expert in the field to be taught.

Project Management

Project management of environmental works is undertaken by senior environmental engineers / scientists familiar with airport legislation, contamination issues and general environmental issues.

Environmental consultants are routinely used to ensure compliance with environmental regulatory obligations.

Development

Construction Environmental Management Plans (CEMPs) are prepared to manage potential environmental risks associated with the development of buildings, car parks and other major developments, covering the following aspects:

- Stormwater
- Run off
- Waste
- Contaminated Soil
- Noise

Auditing

To ensure that operations occurring at the airport are complying with legislative requirements and the commitments of EAPL, auditing is conducted of both tenants' and EAPL's activities.

Annual Environmental Report

EAPL is required to submit an Annual Environment Report (AER) to DIRD. The AER details the environmental issues on the airport and reports on the progress of the AES. The AER includes:

- Flora and Fauna
- Dust
- details of occurrences of environmental significance (detrimental or beneficial);
- details of EAPL's performance in achieving the policies and targets of the AES;
- details of EAPL's progressive management of enduring pollution problems at the airport; and
- report of incidents of pollution and other contraventions, if any, of the Regulations that have occurred during the year.

Systems for Testing

A test required by the Airports (Environmental Protection) regulations 1997 must be carried out in accordance with Regulation 1.08 of those Regulations.

3.1 PREVIOUS ACHIEVEMENTS

Environmental Management System -
Previous Achievements

ENVIRONMENTAL MANAGEMENT SYSTEM - PREVIOUS ACHIEVEMENTS	
Date	Initiative
2008	The previous Essendon Airport Master Plan was approved in October 2008.
Ongoing	Ongoing training and consultation has raised awareness of environmental issues throughout the Airport's tenants and operators.
Ongoing	Consultation with tenants and operators is a key focus of projects undertaken at Essendon Airport. This has resulted in an increased awareness of environmental issues amongst airport staff, tenants and operators.
2010 - 2013	The Airport participated in a number of community activities and provided numerous donations to various community based organisations and events.
2012	A Ground Running Procedure was formalised in 2012, which incorporates a new site for the mobile testing vehicle.
2012	A Stormwater Monitoring Procedure was completed by Meinhardt Infrastructure and Environment Pty Ltd in March 2012.
2011 - 2012	Environmental Awareness training was developed and implemented in 2011; further training is currently under development.
2001 - 2014	EAPL has retained Meinhardt Infrastructure and Environment to assist with environmental matters on an ongoing basis, and Godden McKay Logan to assist with heritage matters.
2014	The current Essendon Airport Master Plan was approved in April 2014
Ongoing	Construction Environmental Management Plans (CEMP's) are developed to manage potential risks to the environment associated with the development of buildings and car parks with significant environmental risks.

3.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

The following section outlines the environmental management objectives, targets and actions that are to be implemented as part of this AES for 2013-2018. EAPL incorporates environmental management principles within its business practices to assist in achieving environmental goals.

EAPL will manage the environment using systems appropriate to its scale of operations which are based on and maintain consistency with AS/NZS ISO 14001:2004 Environmental management systems - Requirements with guidance for use.

KEY OBJECTIVE 2013 - 2018

EAPL will manage the environment using systems appropriate to its scale of operations which are based on and maintain consistency with AS/NZS ISO 14001:2004 Environmental management systems - Requirements with guidance for use.

ENVIRONMENTAL MANAGEMENT SYSTEM – SUPPLEMENTARY STRATEGIES & OBJECTIVES 2013-2018		
Issues	Proposed Activity/Objective	Responsibility for Achieving/Timeframe
Continual Improvement of our systems.	Continually improve our systems appropriate to EAPL's scale of operations. Systems will include <ul style="list-style-type: none"> an annual review of the Essendon Airport Environment Policy in the AES to ensure it remains current; a methodology to determine which Essendon Airport tenants are to be prioritised for environment auditing each year; environmental audit procedures for Essendon Airport tenants; an introduction to environmental matters at Essendon Airport for airport employees and airport tenants; water sensitive urban design guidelines; and procedure to document how EAPL internally reviews the systems. 	EAPL – (2013 – 2018)
Disclosure of environmental issues to landowner.	EAPL will report to the AEO on all environmental matters on the airport.	EAPL (Ongoing)
Compliance by EAPL tenants and premises.	Targeted tenant audits will be conducted on an annual basis by a representative of EAPL. The audits consider the work practices, storage and handling of goods, waste management and procedures in place to manage emergencies e.g. spills etc.	EAPL (Risk based audit program undertaken by June 30 each year)
Implementation of best practice.	EAPL will engage appropriately qualified environmental and heritage consultants to assist with environmental and heritage matters on the airport as required.	EAPL has retained Meinhardt infrastructure and Environment to assist with environmental matters on an ongoing basis, and Godden McKay Logan to assist with heritage matters. (Ongoing)
Environmental awareness.	EAPL will provide training for management, staff and contractors to ensure compliance with environmental objectives.	Environmental Awareness Training Induction Package to be developed and implemented by April 2014. This material will be revised biannually thereafter or following identification of a new issue.
Currency	Review of existing procedures.	Review undertaken by EAPL each June. (Ongoing)

4. AIR QUALITY

The Airports Regulations do not apply to pollution generated by aircraft, and therefore air emissions from aircraft in flight, when landing, taking off or taxiing at the airport are not the responsibility of Essendon Airport. Pollutants from aircraft include hydrocarbons, nitrogen oxides and other components of combustion.

Ambient air quality objectives in Victoria are set in the State Environment Protection Policy (Ambient Air Quality). Ambient air quality is monitored by the Environment Protection Authority and is monitored in accordance with a monitoring plan developed under the Ambient Air Quality National Environment Protection Measure. Seven common pollutants are monitored – carbon monoxide, ozone, nitrogen dioxide, sulphur dioxide, lead, particles smaller than 10 micrometre and visibility reducing particles.

The main contributors to air pollution within the Melbourne region are motor vehicle emissions, industrial sources, domestic / commercial / rural sources (mainly wood fire heating) and other mobile sources. Airport contributions to air pollutants have not been considered in the Air Monitoring Plan for Victoria. In excess of 60 million cars & 4.5 million trucks use the freeway system on the boundary of the airport. By comparison there are less than 60,000 aircraft movements per annum.

Sources of air pollution within the airport include ground traffic (private vehicles, taxis, buses and airport service vehicles), fuel storage and refuelling operations, and dust generated during construction. Refuelling operations, fuel spillage and storage of fuel contribute to atmospheric emissions as a result of the formation and release of volatiles.

Across the world there are hundreds of thousands of airport workers employed daily on aircraft aprons working in and around aircraft and aircraft fume emissions. It is reasonable to assume that were these fumes to be noxious, their adverse outcomes would have been determined many years ago. It is unlikely that Essendon Airport would be unique in this regard.

Other air emissions include spray painting, paint stripping from aircraft, painting of runway markings, construction activities and other tenant activities.

One National Pollutant Inventory facility (Mobil – fuel store) is located on Essendon Airport. The facility reports annually to the NPI and has been ranked as “low emission producing facilities”.

4.1 PREVIOUS ACHIEVEMENTS

Air Quality – Previous Achievements

Ongoing	New developments have incorporated design ideas and equipment which minimises greenhouse gas pollutant emissions (eg, Essendon Fields House and 55 English Street).
2006	EAPL engaged EML Air to undertake an <i>Assessment of Exhaust Dispersion for Helicopter Departures</i> . The report concluded the long term annual average exposure beyond the airport boundary from helicopter exhaust emissions were 100 to 1000 times lower than Australian air toxic investigation levels. Also the hydrocarbon emissions are likely to be lower than that contributed by other sources such as motor vehicles & industry to typical background levels in urban areas.
2012	A new 3 level office building at 15 Vaughan Street which commenced construction in February 2012, has a selection of energy efficient ventilation and electrical fittings to ensure the building will reach the targeted 4.5 star NABERS Energy Rating and be capable of achieving a Green Star Rating of 4 stars for Office V3 by design.
2013	EAPL investigated an incident in April 2013 when a jet was held on take-off threshold for 25 minutes, leading to community complaints of jet fuel fumes. EAPL reviewed the event with the operator. This event was found to be an isolated incident caused by air traffic delays at Melbourne Airport and the aircraft was found to be operating as intended and is properly maintained. This matter was considered at the CACG.
Ongoing	Maintenance of fleet vehicles to ensure emissions are minimised.
Ongoing	Developments works were undertaken so as to minimise dust generation.
Ongoing	Essendon Airport's sole listing on the National Pollutants Inventory is correctly listed on the registry.

4.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

AIR QUALITY KEY OBJECTIVES 2013 - 2018

- To ensure Essendon Airport complies with legislative requirements for emissions.
- To minimise local air quality impacts from ground-based activities.

Issues	Proposed Activity/ Objective	Responsibility for Achieving/ Timeframe
Ground-based emissions	Undertake any EAPL spray painting operations in accordance with the National Guidance Material for Spray Painting, 1999, National Occupational Health and Safety Commission, and other relevant regulatory requirements.	EAPL (As required)
Greenhouse Impacts	<p>Purchase fuel efficient vehicles and maintain as per operating manual.</p> <p>Incorporate as reasonably possible energy efficient design in new and refurbished building projects.</p> <p>Implement strategies consistent with the carbon trading legislation as enacted by the Commonwealth Government.</p>	EAPL (As required)



Aircraft at Essendon Airport

5. NOISE

The Airports (Environment Protection) Regulations 1997 do not apply to noise generated by aircraft in flight, when landing, taking off or taxiing at the airport. However, noise emissions emitted from ground-based activities are subject to this AES and the Airports (Environment Protection) Regulations 1997. Ground based noise sources include the ground running of aircraft, maintenance activities, vehicle traffic and construction activities.

Ground running of aircraft engines is allowed at Essendon Airport between the following hours:

- 7.00 am – 6.00 pm, Monday to Friday
- 10.00 am – 6.00 pm, Saturday and Sunday

Most ground running activity occurs near the centre of the airport away from residential dwellings and during business hours when the ambient background noise is greater. Operators are also making a conscious effort to reduce noise associated with ground running. An example is the noise suppression system recently fitted to the mobile engine testing rig operated by GAM, which significantly reduces the noise created by ground running.

Most complaints about aircraft located on the ground are about engine pre-flight engine checks (run ups) which are a mandatory safety requirement prior to flight for non-jet engine aircraft types. Few run ups exceed five minutes in duration but run ups do occur when the ambient background noise is at lower levels.

In response to noise complaints, generally regarding engine run – up noise, Essendon Airport amended its Aircraft Engine Maintenance Ground Running procedure in 2012. The revised procedure incorporates a new site

for the mobile testing vehicle, which is closer to noise barriers and further away from residential areas surrounding the airport.

Noise which is generated from aircraft in flight or manoeuvring at Essendon Airport is regulated by the Commonwealth through the Air Navigation (Aircraft Noise) Regulations 1984. As Essendon Airport Pty Ltd is not a Commonwealth Statutory Authority it does not have a role in regulating aircraft noise. Essendon Airport's Master Plan contains an ANEF (Australian Noise Exposure Forecast) which describes the noise impact of aviation operations both within and external to the Airport.

A limited curfew restricts aircraft operations between 11pm and 6am daily - Air Navigation (Essendon Airport) Regulations 2001.

The Community Aviation Consultative Group (CACG) holds quarterly meetings to discuss aircraft noise issues. In December 2011 a meeting was held at the Victorian Police Air Wing and Air Ambulance facility to encourage open discussion between the community and aviation operators. This meeting endorsed changes to the local procedures for operations at the northern end of the runway 17/35 which utilise the green belt and Boeing Reserve rather than a direct route over houses in the Strathaird Street Area.

One of the first Fly Neighbourly Agreements to be introduced by an airfield was signed by 18 operators in 2012. The Fly Neighbourly Agreement conveys to both the aviation and general community what flying professionally and courteously entails.

Participants of the Fly Neighbourly Agreement adhere to 15 key principles that are designed to help protect local amenity for residents.

5.1 PREVIOUS ACHIEVEMENTS Noise – Previous Achievements

Date	Initiative
Ongoing	Essendon Airport has complied with legislative requirements with regards to the generation of noise.
2009	Essendon Airport facilitated a Minister initiated series of Working Group meetings in 2009.
2010	In January 2012, a group which comprised representatives from the Community and Commonwealth Government Departments commenced regular meetings to discuss and report back to the Minister for Infrastructure, Transport, Regional Development and Local Government on noise issues at and surrounding Essendon Airport.
2012	Aircraft Engine Maintenance Ground Running procedure was revised in 2012.
2012	One of the first Fly Neighbourly Agreements to be introduced by an airfield, was implemented and signed by 18 operators in 2012.

5.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

NOISE KEY OBJECTIVES 2013 - 2018

- To minimise noise associated with airport ground operations.
- To comply with legislative requirements.

NOISE - SUPPLEMENTARY STRATEGIES AND OBJECTIVES 2013 -2018		
Issues	Proposed Activity/Objective	Responsibility for Achieving /Timeframe
To minimise noise from ground based-airport operations and activities	Education of tenants about the requirements of the Ground Running Procedure.	EAPL / Tenants (2014)
Vehicular Noise	Ensure vehicles owned by EAPL are equipped with correctly operating baffles as per manufacturers instructions.	EAPL (2013 - 2018)
Noise from new developments	Ensure new developments comply with Land Use Plan requirements as specified in Master Plan.	EAPL (From 2013)
Noise generated from aircraft engaged in flight activities	<p>Provide assistance, as reasonably requested by the Commonwealth, in monitoring compliance with the Air Navigation (Essendon Airport) Regulations 2001.</p> <p>Where aviation operators are not signatories to the voluntary Fly Neighbourly procedures, EAPL encourages the operators to adhere to the principles of the Fly Neighbourly Agreement.</p>	EAPL (2013 -2018)

6. STORMWATER

Stormwater at Essendon Airport is collected via a network of underground drains that collect surface runoff from the runways, buildings, roads and other impervious areas at the airport. As part of the on-going redevelopment of areas of Essendon Airport, water sensitive urban design (WSUD) features have been, and continue to be, incorporated as part of the design and construction of buildings and infrastructure aimed at protecting receiving waters and conserving and re-using on-site water where possible. In addition to conserving and retaining water on site, WSUD features function as an aesthetic feature to the developments undertaken.

All current and future developments will adopt a similar high standard approach that incorporates WSUD features. The incorporation of WSUD features and devices in redevelopment have ensured that stormwater runoff quality from the Essendon Airport developments conform to the high standard Environmental Management Guidelines (BPEMG) (Victorian Stormwater Committee 1999).

Moonee Valley City Council and Melbourne Water are responsible for the management of stormwater once it leaves the airport.

Stormwater discharged from the site is regularly sampled to verify that it is of a satisfactory quality.

The range of pollutants that can effect stormwater quality include:

- Stormwater;
- Nutrients e.g. nitrogen and phosphorus;
- Pathogens e.g. bacteria and viruses;
- Toxicants e.g. salts and heavy metals;
- Organic material e.g. leaves;
- Litter and other debris;
- Flow (the volume and velocity of the water); and
- Hydrocarbons.

The main sources of stormwater pollution at Essendon Airport include:

- Flow (the volume and velocity of the water);
- Hydrocarbons;
- Runoff from infrastructure (e.g. zincallum coated buildings);
- Corrosion of plumbing infrastructure, degradation of roadways;
- Fertilisers and herbicides from grassed areas;
- Surfactants from cleaning processes;
- Spills from refuelling; and
- Trace heavy metals in urban precipitation; construction works, and vehicle traffic.



Water sensitive urban design features

6.1 PREVIOUS ACHIEVEMENTS Stormwater - Previous Achievements

STORMWATER - PREVIOUS ACHIEVEMENTS	
Date	Initiative
Ongoing	The incorporation of WSUD features and devices in redevelopment have ensured that stormwater runoff quality from the Essendon Airport developments conform to the high standard Environmental Management Guidelines (BPEMG) (Victorian Stormwater Committee 1999).
2013	A WSUD Maintenance Procedure was completed.
Ongoing	Essendon Airport has continued to sample storm water discharge from the site with the results reported to the AEO.
2012	A Stormwater Sampling Procedure was completed by Meinhardt Infrastructure and Environment in March 2012.
Ongoing	Essendon Airport maintains a dedicated aircraft washing bay.

6.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

STORMWATER KEY OBJECTIVES 2013 - 2018

- To minimise the impact of airport operations on surface water quality in and adjacent to Essendon Airport.
- To control the impact of any spill on Airport.
- No exceedences of Airports Regulations or SEPP (Waters of Victoria).
- Implement the WSUD Maintenance Procedure.

STORMWATER - SUPPLEMENTARY STRATEGIES & OBJECTIVES 2013-2018

Issues	Proposed Activity/ Objective	Responsibility for Achieving/Timeframe
Manage Stormwater	<p>Ensure that stormwater discharge points on the site are appropriately maintained through implementing the WSUD Procedures.</p> <p>Continue to implement and maintain water sensitive urban design principles to future developments to minimise the discharge of sediment and pollutants.</p> <p>Undertake biannual storm water monitoring.</p> <p>Maintain and use aircraft wash-down bay.</p>	<p>EAPL / Tenants (From 2013)</p> <p>EAPL (Ongoing)</p> <p>EAPL (Biannually)</p> <p>EAPL / Tenant (Ongoing)</p>
Prevent Spills / Contamination	<p>Ensure new developments are designed such as to ensure that the risk of uncontained spillage is minimised.</p> <p>Ensure triple interceptors (or other suitable alternate) are installed as appropriate and operational as required.</p> <p>Audit equipment and methods used to prevent spills and contamination by tenants / EAPL.</p> <p>Assess and manage the risks from underground storage tanks.</p>	<p>EAPL (Ongoing)</p> <p>EAPL / Tenant (As required)</p> <p>EAPL / Tenant (Ongoing)</p> <p>Tenant (2013 -2018)</p>
Spill Management	<p>Ensure sufficient bunding beneath any containers (as per Vic EPA Publication 347).</p>	<p>EAPL / Tenant (As required)</p>



Water Sensitive Urban Design Features

7. GROUNDWATER

Groundwater is located between 23 to 29 metres below the surface level within the Newer Volcanics basalts. The groundwater quality is saline. Groundwater is estimated to flow in a southerly direction towards the Maribyrnong River.

Contamination sources within the airport that may have an impact on the groundwater are related to historical land use. Historical land filling activities, leakage from underground storage tanks, spillage of fuels and chemicals and the use of chemicals such as pesticides and herbicides have all had an impact in earlier years (extant pollution).

Essendon Airport has been monitoring potential sources of groundwater contamination and placing management controls where necessary.

Groundwater has been managed in accordance with established practices and no offsite impacts have occurred.

7.1 PREVIOUS ACHIEVEMENTS Groundwater - Previous Achievements

Date	Initiative
2012	All potential groundwater contamination situations have been investigated. Expert assessment has determined that there are no risks to persons or the environment either on or off the airport site.

7.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

GROUNDWATER KEY OBJECTIVES 2013 - 2018

- To prevent groundwater contamination occurring from airport activities.
- To manage areas of contaminated groundwater in accordance with regulatory requirements.
- Implement the WSUD Maintenance Procedure.

GROUNDWATER - SUPPLEMENTARY STRATEGIES & OBJECTIVES 2013 - 2018		
Issues	Proposed Activity/Objective	Responsibility for Achieving/Timeframe
Manage groundwater	Maintain a network of groundwater monitoring points and sampling regime until such time as evidence supports the cessation of monitoring point and sampling.	EAPL (Ongoing)
Remediate groundwater	Where practicable implement active remediation of any contamination, including site management plans and human health and ecological risk assessments.	EAPL / Tenant
Actively manage potential issues	EAPL will continue to monitor tenant activities and assess groundwater, in order to ensure compliance with Airport Regulations.	EAPL (Ongoing)

8. SOIL QUALITY

Contamination sources within the airport that may have an impact on the groundwater also impact on the soil. Historical land filling activities, leakage from underground storage tanks, spillage of fuels and chemicals, and the use of chemicals such as pesticides and herbicides have all had an impact in the past years (extant pollution).

A number of soil assessments and remedial activities have been undertaken at the airport, including the removal of underground storage tanks, removal of asbestos contaminated material and clean-up of soil contamination.

Known contaminated areas are kept on an Environmental Site Register, in which details of the contaminants and the remedial status of the site are kept. The Environmental Site Register is reviewed annually. The majority of contamination present at the airport is due to activities of past tenants.

A desktop study and site inspection program in consultation with tenants is used to update the Environmental Site Register and identify sites with potential contamination. Where contamination is identified, risk assessments are used to prioritise clean-up actions and plans.

The following procedure is undertaken when a tenant's lease ends, there is a change in land use or when significant ground works are undertaken:

- AEO decides if site requires contamination investigation;
- Letter sent to lessee to undertake assessment;
- Based on results, lessee asked to remediate; and
- Lessee to forward report on final condition of site.

8.1 PREVIOUS ACHIEVEMENTS

Soil Achievements – Previous Achievements

Date	Initiative
Ongoing	Construction EMPs are developed to manage potential risks associated with the development of buildings and car parks for developments with significant environmental risk.
Ongoing	Soil samples are collected and analysed during excavation of USTs and in the proximity of former oil heaters. Soil identified as having contamination is removed.
Ongoing	Detailed soil investigation programs have been put in place where contamination has been identified, to ensure the site poses minimal risk to on-site commercial/industrial users.
2011/2012	Soil vapour assessments and risk assessments have been conducted at several sites to determine site specific target levels (of contamination).

8.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

KEY OBJECTIVES 2013 - 2018

- To prevent the contamination of soil from airport activities.
- To manage areas of known or suspected contaminated sites according to regulatory requirements. Where practicable, ensure tenants and former tenants are remediating soil contamination.

SOIL QUALITY - SUPPLEMENTARY STRATEGIES & OBJECTIVES 2013-2018

Issues	Proposed Activity/Objective	Responsibility for Achieving/Timeframe
Manage soil	Ensure soil is validated before imported to site. Soil is to be disposed of in accordance with the EPA Regulations. Implement dust controls during construction projects to minimise soil loss. Establish soil cover as soon as possible following disturbance by construction activities.	EAPL (As required) EAPL (As required) EAPL / Contractor (As required) EAPL (As required)
UPSS installation	Limit installation of new UPSSs. If new installed, ensure compliance with Vic EPA Publication 888.2 <i>Guidelines on the Design, Installation and Management Requirements for Underground Petroleum Storage Systems (UPSSs)</i> .	EAPL / Tenant (Ongoing)
Spill management	Ensure sufficient bunding beneath any containers (as per Vic EPA Publication 347).	EAPL / Tenant (As required)

9. WASTE MANAGEMENT

Waste collection, treatment and disposal is subject to State legislation under the *Environment Protection Act 1970*.

The Industrial Waste Management Policy (IWMP) (Prescribed Industrial Waste) (2000) outlines the Victorian Government's policy on the generation, management and disposal of prescribed wastes. The main objectives of the policy are to:

- Protect human health, amenity and the environment from hazardous wastes; and
- Minimise the generation of wastes; and
- Eliminate as soon as practicable the disposal of prescribed wastes to landfill.

The main sources of waste within the airport include office waste, aviation workshop waste, and nonputrescibles waste from retail operations.

For single tenancies, the management of waste is the responsibility of the tenant. However, EAPL continues to monitor and assist tenants to improve their waste management through the regular auditing program for the site in conjunction with the AEO. The AEO decides if the site requires contamination investigation (Refer Chapter 8).

For the EAPL offices and operational locations, and multi- tenanted buildings where the waste management is under EAPL control, EAPL has implemented a waste segregation program to encourage recycling.

9.1 PREVIOUS ACHIEVEMENTS

Waste Management – Previous Achievement

Date	Initiative
Ongoing	Asbestos waste is removed in accordance with Part 4 of the <i>Victorian Occupational Health and Safety Regulations (2007)</i> .
Ongoing	Tenant audits are undertaken to ensure general wastes and hazardous waste is disposed of correctly.
Ongoing	Tenant audits are undertaken to ensure wastewater emissions to sewer have a Trade Waste agreement in place.

9.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

WASTE MANAGEMENT KEY OBJECTIVES 2013 - 2018

- To implement the principles of reduce, reuse and recycle at the airport.
- To minimise the volume of waste being transported to landfill.



Water tanks on new ambulance wing

10. DANGEROUS GOODS & HAZARDOUS SUBSTANCES

The storage and handling of dangerous goods and hazardous substances is not covered by Commonwealth legislation for Airports. Therefore, the relevant legislation for Essendon Airport is the Victorian *Dangerous Goods Act 1985*, the *Dangerous Goods (Storage and Handling) Regulations 2012*, the *Occupational Health and Safety Act 2004* and the *Occupational Health and Safety Regulations 2007*.

Dangerous goods and hazardous substances stored at the airport are predominantly petroleum products related to the aviation industry. Tenants of the airport are subject to regular audits to ensure compliance.

Most of the dangerous goods and hazardous substances are aviation fuels currently stored at one aviation fuel depot, which is operated by Mobil. This depot is subject to tenant audits and to Mobil's own quality control procedures.

A number of aviation tenants at the Airport store small quantities of fuel and oils. Apart from fuels and oils, there are only minor quantities of other hazardous materials on site.

10.1 PREVIOUS ACHIEVEMENTS

Dangerous Goods & Hazardous Substances

Date	Initiative
Ongoing	Storage and handling of dangerous and hazardous goods is as per State guidelines.

10.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

Dangerous Goods and Hazardous Substances Key Objectives 2013 - 2018

- To comply with legislative requirements.
- To ensure that proper storage, transport and handling of EAPL dangerous goods and hazardous materials is undertaken.
- To reduce the number of dangerous goods and hazardous materials stored at the airport.
- To minimise the environmental impact following a spill event.

DANGEROUS GOODS & HAZARDOUS SUBSTANCES - SUPPLEMENTARY STRATEGIES & OBJECTIVES 2013 - 2018		
Issues	Proposed Activity/Objective	Responsibility for Achieving/Timeframe
Compliance	Undertake annual check of the National Pollutant Inventory for airport land to determine if a change has occurred. Regular audits of site.	EAPL (Annually)
Spill management	Ensure sufficient bunding beneath any containers (as per Vic EPA Publication 347).	EAPL / Tenant (As required)
Dangerous and hazardous goods storage minimisation	Ensure EAPL's dangerous and hazardous goods are disposed of promptly and correctly when no longer required.	EAPL (As required)
Hazardous waste (prescribed)	Ensure EAPL's dangerous and hazardous goods are disposed of promptly and correctly when no longer required.	EAPL (As required)

11. RESOURCE USE

EAPL is committed to reducing its use of non-renewable resources such as fuels and energy derived from fossil fuels. EAPL currently use electricity provided by the local electrical provider, in all their facilities.

Improvements to the use of energy and water resources are identified within new developments, with the incorporation of water sensitive urban design initiatives and energy efficient appliances and fittings into designs.

11.1 PREVIOUS ACHIEVEMENTS Resource Use – Previous Achievements

Date	Initiative
Ongoing	Rejuvenation of existing old building structure and materials (e.g. Everett Centre and Building 83).
Ongoing	Repair works undertaken to improve water mains network (leak repairs).
Ongoing	Installation of a PAALC controlled lighting system (allows runway lighting system to be placed on standby during the night (off) – reduced power consumption and therefore a reduction in greenhouse gas emissions).
Ongoing	A number of bio-swales have been constructed at Essendon Airport to minimise water requirements for gardens.
Ongoing	Reduced runway paint usage by 40% by moving to automatic application of runway paint instead of manual application.
2008 - 2013	Rainwater harvest tanks have been included in various constructions.
2012	The new office building under construction at 15 Vaughan Street has incorporated environmental initiatives such as rainwater harvesting and a selection of energy efficient ventilation and electrical fittings.
2008 – 2009	The Linfox Logistics Head Office achieved a Green Star rating of 5.

11.2 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

RESOURCE USE KEY OBJECTIVES 2013 – 2018

- To minimise the use of resources across the Airport e.g. water use, energy consumption.
- To encourage tenants to minimise their use of resources.



Linfox Logistics Head Office – 5 Star Green Star Rating

RESOURCE USE - SUPPLEMENTARY STRATEGIES & OBJECTIVES 2013 – 2018

Issues	Proposed Activity/ Objective	Responsibility for Achieving/Timeframe
Vehicle selection	Select vehicles which are adequate for the task required and are efficient.	EAPL (As required)
Building design	Consider inclusion of recycled materials within building design. Designs for new commercial office buildings to be consistent with Green Design Principles, in order to achieve a Green Star rating. Consider water capture and reuse within building design.	EAPL / Developer (As required) EAPL / Developer (Ongoing) EAPL / Developer (Ongoing)
Equipment maintenance & selection	Select equipment which requires less energy to operate and maintain.	EAPL / Tenant (As required)
Landscaping	Implement urban sensitive water design landscaping techniques to minimise water requirements for gardens.	EAPL / Developer

12. FLORA AND FAUNA

Essendon Airport has conducted a number of studies focused on the flora and fauna at the site, in consultation with State and Federal conservation bodies to identify areas of environmental significance. A summary of the assessments conducted is included below.

EAPL will continue to assess its environmental impact in accordance with EPBC Act for the duration of this plan.

Where amendments to EPBC lists are made EAPL will amend its environmental assessment processes to ensure that the organisation's legal obligations to protect new listings are met.

FLORA AND FAUNA SURVEYS CARRIED OUT BETWEEN 1998 - 2014		
DATE	REPORT	GENERAL FINDINGS
1998	Flora and Fauna Study	Essendon Airport is an area of low biological value. More than 70 years of clearance within the airport grounds and rapid urbanisation of surrounding areas has contributed to elimination of most native vegetation in the area. No environmentally significant areas were found within the airport's grounds.
2004	Flora and Fauna Survey of the Bulla Precinct	No flora or fauna species of national or state conservation significance were recorded. The survey of the Bulla Precinct located a small area of Natural Temperate Grasslands (referred to then as the modified Plains Grassy Woodlands) adjoining the southern end of the main north-south airstrip.
2007	Flora and fauna Report of the Wirraway North Site	No flora or fauna of national or state conservation significance was found. Most of the area is modified and of limited ecological value. The Natural Temperate Grasslands occupies the majority of the study area. The area was assessed to be "modified and of limited ecological value."
2008	Golden Sun Moth (Synemon plan) Survey	This survey did not detect either a viable population or any individuals of this species. It is thought that localised extinction of this species occurred in the past.
2008	EPBC Act	The Natural Temperate Grasslands of the Victorian Volcanic Plain (NTGVVP) were listed on the EPBC Act in June 2008 as a habitat for Golden Sun Moths and Legless Lizards.
2012	Golden Sun Moth Survey	A further survey of the entire undeveloped land was conducted in 2012 to determine the presence of the Golden Sun Moth. No Golden Sun Moths were detected during the targeted surveys. The survey concluded that development of the site is not likely to have an impact on this species.
2014	Flora and Fauna Assessment - north east section	Since the listing of NTGVVP on the EPBC Act in 2008, a flora and fauna assessment of the Airport's north east section identified four patches of Natural Temperate Grasslands of the Victorian Volcanic Plain totalling 4.13 ha. The assessment considered the patches to be of "low quality" and of "low ecological value."
2014	Flora and Fauna Assessment - English Street Precinct	A flora and fauna assessment of grassed areas within the English Street Precinct in May 2014 found that the areas assessed have little to no ecological value in their current condition. The assessment stated "no additional assessments or referral under the EPBC Act is considered necessary for works within the assessed areas."

12.1 AREAS OF ENVIRONMENTAL SIGNIFICANCE

No areas of environmental significance have been identified at Essendon Airport. Whilst some previous flora and fauna surveys have identified some areas of listed endangered native flora, their quality has been assessed as “low ecological value” or similar. Therefore, EAPL does not consider these areas to be environmentally significant.

12.2 PREVIOUS ACHIEVEMENTS

Flora and Fauna - Previous Achievements

Date	Initiative
Ongoing	The airport grounds are progressively being upgraded with water efficient and low maintenance landscaping.
Ongoing	Continued management of noxious weeds around airport boundaries.
Ongoing	Flora and fauna surveys carried out in 1998, 2004, 2007, 2012 and 2014

12.3 2013 - 2018 ENVIRONMENT STRATEGY OBJECTIVES, ACTIONS AND TARGETS

FLORA AND FAUNA KEY OBJECTIVES 2013 - 2018

- To minimise impacts of airport activities on the surrounding environment.
- To minimise the spread of noxious weeds and discourage feral animals.

FLORA AND FAUNA - SUPPLEMENTARY STRATEGIES & OBJECTIVES 2013 - 2018

Issues	Proposed Activity/Objective	Responsibility for Achieving/Timeframe
Weed management	Implement a noxious weed removal procedure, focusing on Serrated tussock and Scotch thistle.	EAPL (2015)
Noxious animal management	Control feral animal populations within the airport boundaries.	EAPL / Tenant (Ongoing)
Future compliance	Discharge obligations under the EPBC Act.	EAPL (Ongoing)
Building Development Consideration	Discharge obligations under the EPBC Act in relation to endangered flora, fauna species and ecological communities prior to the commencement of new development.	EAPL (As required)
Identify environmentally significant areas (if any)	Discharge obligations under section 71(2)(h)(ii) of the <i>Airports Act 1996</i> in relation to environmentally significant areas (if any).	EAPL
Landscaping	Maintain and improve airport landscape.	EAPL (Ongoing)

13. HERITAGE

Essendon Airport's history includes its prior role as the main international and domestic airport for Melbourne and one of Australia's major airports from 1921 to 1971 and its association with, and role in, the development of Australia's key domestic airlines.

Essendon was Melbourne's first and Australia's second International Airport.

In the 1940s, it was the busiest airport in Australia and one of the busiest in the British Commonwealth. The airport played an important role in aircraft manufacturing during the Second World War and also in accommodating air traffic during the 1956 Melbourne Olympic Games.

Ansett Airlines Ltd was based at Essendon from 1937 until the 1970s. The Holyman Company came to Essendon as Tasmanian Aerial Services and merged with Adelaide Airways to form Australian National Airways, and was based at Essendon for two decades before merging with Ansett in the 1950s. The wartime Beaufort manufacturing buildings at Essendon became the first home depot of the government-owned Trans Australia Airways, which was later renamed Australian Airlines, prior to merging with Qantas.

Essendon Airport Pty Ltd remains committed to complying with its heritage obligations and recognises the heritage significance of the place. In 2006 EAPL prepared a Heritage Management Plan as part of its environment strategy.

EAPL's commitment to heritage management plan has been amply demonstrated by the complete heritage upgrade of the Met Ops building to become the Everett Centre and Building 83 which was transformed into the Beaufort Offices between 2007 to 2011.

During the Second World War, the Beaufort Building helped to manufacture the Beaufort Bombers, which were used throughout the course of the war. The upgrade of this building occurred over two stages; Stage One, completed in 2008, converted the southern end of the building into 4,500sqm of office space over three levels. The facade of the building was restored and the tenancies were fitted out with exposed services helping to preserve the industrial feel of the building. Stage Two was the development of the northern end of the building, once again converting 3,000sqm into premium office space. The industrial feel created by the exposed services of Stage One was carried through into the fitout of Stage Two. Highlighting the significance of this building to wartime Australian History, the foyer area at the southern end of the building has a display outlining the role that the building played throughout the Second World War.

Similar to the Everett Centre, EAPL is also committed to restoring the facade of the Essendon Airport Passenger Terminal. This Passenger Terminal was established in 1959 and is the airport's largest airside building.

EAPL's Heritage Management Plan lists the Heritage Value Ranking as High. The building is associated with the first genre of terminal buildings to a standard design - passenger entrance and exits at the road access

interfaces, glass viewing areas to airside and passenger access via tarmac are consistent with this era.

EAPL is currently undertaking detailed analysis for the restoration and upgrade of this facility to meet current commercial market demands. A Construction Environmental Management Plan will be prepared prior to any construction works commencing which are likely to have a significant environmental risk.

Notwithstanding these important heritage aspects, the building's facade has been severely diminished in recent decades, especially throughout the 1970s, 80s and 90s. The building has been painted in various shades of green, aqua, blue and white, and its visual and historical appearance has been devalued. EAPL intends to reverse this decline and where possible restore the facade to a visual position consistent with its 1959 appearance.

Building 4 and Hangar 4, located on Wirraway Road, are the former home of Australian National Airways and Ansett, EAPL is considering upgrading this building.

In addition to these upgrades, EAPL has commenced the establishment of a Heritage Walk, which will encompass many of the social and historical aspects of the property.

The Heritage Walk meanders through the Aviation and English Street Precincts, and provides educational and general information on the airport and its history. A number of streets in the area have been named after significant aviation figures, and plaques have been placed recognising the contribution made by these important people.

A heritage park has been established at the corner of English Street and Wirraway Road where a series of signboards have been established which depict notable historical events such as Queen Elizabeth and President Lyndon Johnson's arrival.

Other important events such as the Melbourne Olympics, arrival of the Beatles and the use of the airport during World War II are also recorded.

EAPL considers that once completed, the walk will be beneficial for school groups, local history organisations, aviation enthusiasts and the general community

During design and construction of heritage projects, EAPL conducts frequent consultation with SEWPAC.

Indigenous Cultural Heritage

Consultation was carried out with Aboriginal Affairs Victoria during preparation of the 2000 AES. This correspondence states that "Given the previously disturbed nature of the land and the absence of any remnant native vegetation or archaeologically sensitive landforms, the likelihood for any proposed works to impact upon Aboriginal cultural materials is considered to be low. On this basis, no further archaeological investigation is considered necessary at this stage."

However, in the event that any aboriginal archaeological material were uncovered during works, Aboriginal Affairs Victoria have provided recommendations for procedures to be followed. These procedures were included in the 2000 AES and are quoted below.

"In the event that Aboriginal Archaeological material is uncovered during development or future land management works, it is recommended that the

following procedures be noted in the Essendon Airport Environment Strategy to ensure that the archaeological material is dealt with appropriately:

1. Development / land management works must cease immediately upon the discovery of any Aboriginal cultural material, and Aboriginal Affairs Victoria shall be immediately notified of any such discovery. (this has been incorporated into the CEMP)
2. Development / land management works on the subject land shall cease immediately upon the discovery of any suspected human remains. The Police or State Coroner's Office must be informed of the discovery without delay. If there are reasonable grounds to suspect that the remains are Aboriginal, the discovery should also be reported to Aboriginal Affairs Victoria."

A cultural heritage report was commissioned as part of the Calder - Tullamarine Freeway Interchange in 2004.

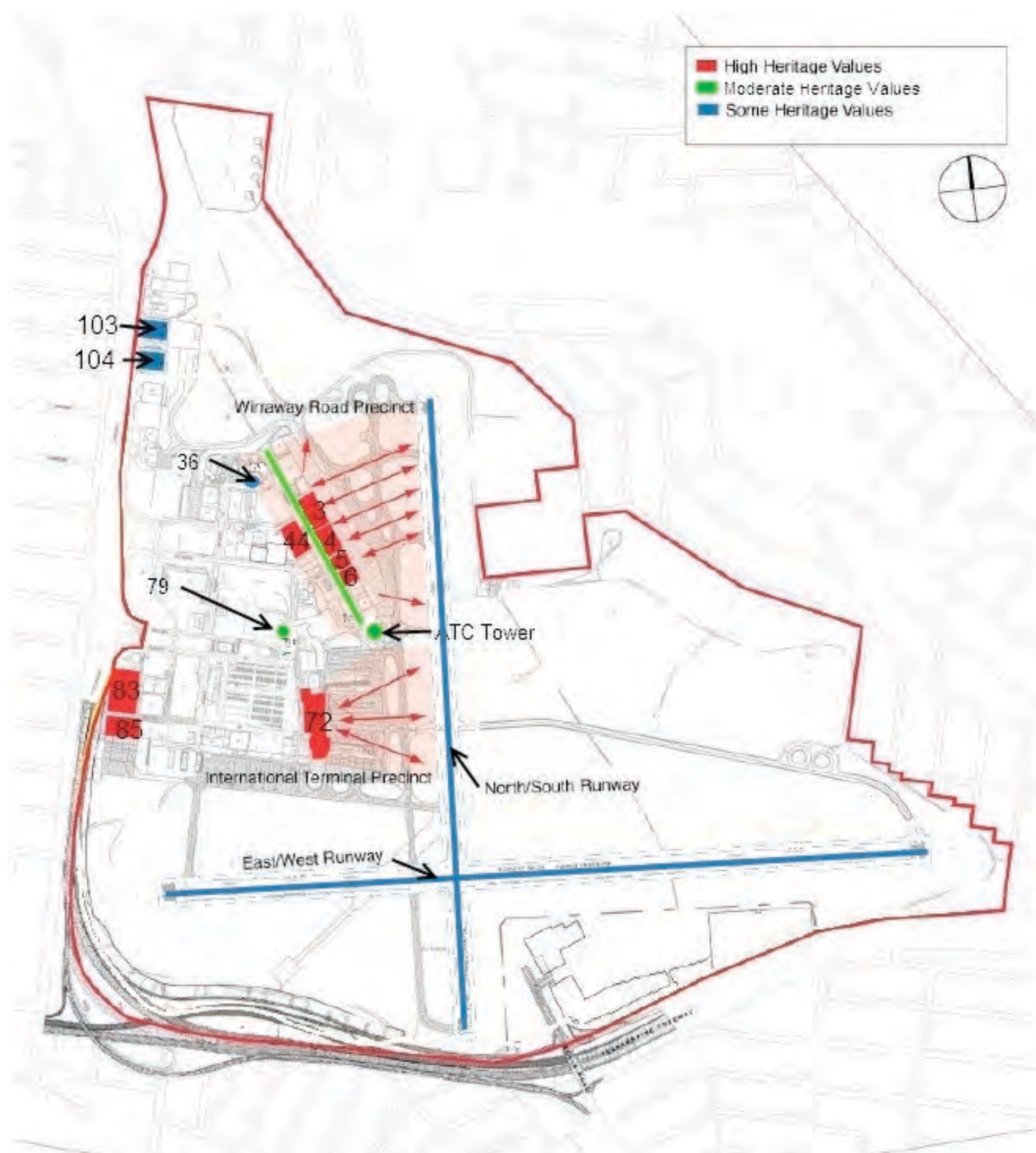
Surveys undertaken were unable to identify the presence of archaeological sites. The report confirmed that the survey site was highly disturbed and had been influenced by European activity from the 1850s. The report recommended an approach to the ongoing management of the site that was consistent to that provided by Aboriginal Affairs Victoria for the 2000 AES.

Right is a plan highlighting the Heritage Value sites identified at Essendon Airport, by Godden Mackay Logan Heritage. On the following page is a table listing the identified sites of Heritage Value, including a description of the site and a Heritage Value Ranking.



Heritage Walk

Heritage Values sites identified by Godden Mackay Logan heritage



HERITAGE VALUE SITES IDENTIFIED BY GODDEN MACKAY LOGAN HERITAGE		
Element	Historical Use/Description	Heritage Value Ranking
Hangar 3 and curtilage	Former Ansett Hangar	High
Hangar 4 and curtilage	Former ANA Terminal/Hangar	High
Hangar 5 and curtilage	Former Holyman Hangar	High
Hangar 6 and curtilage	Former ANA Hangar	High
Building 44 and curtilage	Former ANA Airframe shop	High
Building 72 and curtilage	Former international Terminal	High
Building 83	Former Beaufort/TAA Building	High
Building 85	Former Beaufort/TAA Building	High
Building 79 and curtilage	Former Area Approach Control Centre (Ops Met)	Moderate
Building 154 and curtilage	Air Traffic Control Tower	Moderate
Wirraway Road	Wirraway Road	Moderate
Building 36 and curtilage	Water Tower	Some
Building 103	Former Ansett-ANA Hangar	Some
Building 104	Former Ansett - ANA Hangar- now Victoria Police	Some
Runways	North-South Runway and East-West Runway	Some

13.1 PREVIOUS ACHIEVEMENTS

Heritage - Previous Achievements

Issues	Proposed Activity/Objective
2006	Development of a Heritage Management Strategy for the Airport.
2007 - 2011	Successful redevelopment of heritage buildings (Buildings 79 and 83).
2011	A Heritage Impact Statement for proposed works at Hangar 4 was commissioned by EAPL in July 2011. The proposed works aim to sympathetically repair and restore the external fabric of the Hangar and internally provide facilities that will attract a long term tenant.
2011	A Conservation Management Plan, (CMP) was completed for Hangars 4 and 5. The primary objective of the CMP was to establish a policy framework, in order to promote their significance and to outline policies that support their continued use and management.
2012	EAPL prepared a Conservation Management Plan for Essendon Airport Terminal, which was completed in early 2012. This document will assist in the planning for the re-development of this building.



Hangar 86

13.2 2013 - 2018 ENVIRONMENT STRATEGY
OBJECTIVES, ACTIONS AND TARGETS

HERITAGE KEY OBJECTIVES 2013 - 2018

- To protect and preserve all identified items with significant Commonwealth Heritage values at the airport.

HERITAGE AND NATIVE TITLE - SUPPLEMENTARY STRATEGIES & OBJECTIVES 2013 - 2018

Issues	Proposed Activity/Objective	Responsibility for Achieving/Timeframe
Protection of Essendon Airport's Identified Heritage Values	Any works on Heritage Buildings are in accordance with the Heritage Management Strategy for Essendon Airport. Review the sites heritage prior to any developments.	EAPL (As required)
Indigenous Heritage	If any archaeological sites, artefacts or objects are discovered at any time during development, excavations or construction works, the site shall be stabilised and further work in the area stopped. Qualified personnel shall be contacted to further assess the significance of the findings.	EAPL (As required)



Olympic Terminal - 1956

14. REFERENCES

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Essendon Airport, Tullamarine Fwy, Strathmore, VIC, Australia
- **Register of National Estate Buildings,**
103 and 104, Essendon Airport, Lionel St, Airport West, VIC, Australia
- **Sinclair Knight Merz Pty Ltd, May 2014,**
Essendon Fields Flora and Fauna Assessment
- North East Section
- **Sinclair Knight Merz Pty Ltd (Jacobs), May 2014,**
Essendon Fields English Street Precinct Flora and Fauna Assessment



Aerial view of Essendon Airport