

Guideline Construction Environmental Management



Background

Since 1998 Adelaide Airport Limited (AAL) and Parafield Airport Limited (PAL) have leased the Adelaide and Parafield Airport sites from the Federal Government. Activity on leased federal airport land is controlled by the *Airports Act 1996* (Airports Act), Airport (Building Control) Regulations 1996 (ABCR 1996) and Airports (Environment Protection) Regulations 1997 (Airport Regulations).

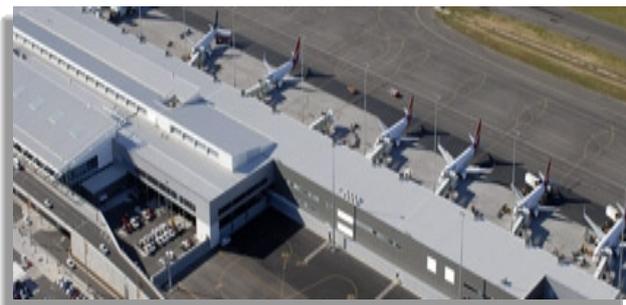
The Department of Infrastructure and Regional Development (DoIRD) is charged with administration of the Airports Act and is responsible for overseeing the activities on leased airport land. As head lessees, AAL and PAL are responsible for managing airport activities and are required to report any potential degradation and devaluation of the land from its operations to DoIRD. To oversee protection of the environment on airports, an Airport Environment Officer (AEO) is employed by DoIRD to administer the Airports Act and the Airports Regulations.

Building and construction activity on Adelaide and Parafield Airports is subject to statutory controls under the Airports Act, the ABCR 1996 and the Airports Regulations. Accordingly, all building and construction activity must be approved by AAL/PAL and the Airport Building Controller (ABC) via the documented AAL/PAL Building Activity Approval (BA) process.

Assessment of potential environmental risks and their management forms part of the AAL/PAL BA process.

Purpose

The purpose of this guideline is to provide BA applicants and contractors with information on construction environmental management for activities undertaken on airport land and the requirements for on-airport Construction Environmental Management Plans (CEMPs), to minimise delays in BA approvals.



Airport Environmental Legislation

As discussed above, Adelaide and Parafield Airports are located on federal land and activities occurring on-airport are thus subject to the provisions of the following federal legislation:

- *Airports Act 1996*
- Airports (Environment Protection) Regulations 1997
- Airport (Building Control) Regulations 1996

Furthermore, because the airports are located on federal land, environmental management, including soil and groundwater contamination, does not fall within the jurisdiction of the South Australian Environment Protection Authority (SA EPA).

Consequently, all construction environmental management must be compliant with federal airport legislation rather than state legislation.

State environmental legislation is only applicable to on-airport activities when there is an established material risk to the off-airport environment or where federal legislation is silent.

Notification under s83A of the Environment Protection Act 1993 (SA)

There is *no* requirement to notify the SA EPA of actual or potential harm to groundwater, as required under s83 of the Environment Protection Act 1993; unless, there is clear evidence that on-airport contamination presents a risk of serious or material harm to groundwater off-airport.

Where required, AAL/PAL is able to provide copies of official communications with the SA EPA, confirming that there is no requirement to notify under s83A.

As head lessee of Adelaide and Parafield Airports, AAL/PAL expects contractors to notify them of the potential need for notification under s83A, rather than directly approaching the SA EPA on behalf of AAL/PAL or sub-lessees (unless circumstances require consultants to do so in order to meet regulatory obligations).

Construction Environmental Management Plans (CEMP)

CEMPs are the principal means by which the AAL/PAL Environment Department assess the proposed management of construction environmental risks. CEMPs can either be submitted as part of tender submissions or as part of the BA process.



Principal CEMP components

AAL/PAL understand that the majority of contractors have established environmental management frameworks including a CEMP template. AAL/PAL does not therefore seek to provide CEMP templates to BA applicants and contractors.

AAL/PAL expects to see the following **principal components** included in **CEMPs** provided to AAL/PAL:

- identification of all project specific **environmental risks** (e.g. using aspects and impacts assessment)
- clearly defined **management measures** to address each of the identified environmental risks
- process for **measuring the effectiveness** of the proposed **management measures**

AAL/PAL would prefer to see CEMPs that have adequately addressed these project specific principal components, rather than be provided with a generic document that has not adequately considered the project specific environmental risks.

Other CEMP considerations

In addition to the CEMP components listed above, other factors that need to be considered when drafting CEMPs for on-airport activities, particularly in relation to the unique on-airport regulatory environment described above, include:

- references must be to the Airport Regulations, rather than other inapplicable state or federal environmental legislation (e.g. *Environment Protection Act 1993* (SA) and subsidiary legislation)
- appropriate reporting of environmental incidents (i.e. to AAL/PAL, who report to DoIRD, not the SA EPA)
- referencing of AAL/PAL guidelines (see below) as part of management measures.

BA/CEMP Approval Process

Before Building Consent is issued for BAs, the AAL/PAL Environment Department needs to review and accept contractor CEMPs. Once AAL/PAL have completed their review and either accepted or provided comment on submitted CEMPs, they are forwarded to the AEO for review and comment. Often, these two processes occur in parallel. The process described above can take some time to complete, so AAL/PAL encourage contractors to submit CEMPs at their earliest possible convenience.

Monitoring & Review

Contractors are required to undertake regular environmental inspections to ensure compliance with contractual requirements and relevant legislation. Inspections should include a audit of the current site activities and the effectiveness of controls, including drainage, chemical storage, dust and air emissions, stockpiles, plant/machinery, waste management and sediment controls.

The Contractor is responsible for reporting all environmental management actions undertaken during construction to AAL. This includes:

- Internal and external audit/inspection results
- Complaints & infringements
- Environmental incidents
- Results of CEMP reviews

Guidelines

AAL/PAL have produced guidelines to provide information on a range of construction related activities with potential environmental impacts and to provide guidance on how these activities can be undertaken in a manner consistent with applicable legislation.

All activities on airport land must be undertaken in accordance with these guidelines and AAL/PAL encourage the use of these guidelines in the development of CEMPs. It is considered acceptable to state in CEMPs that construction activities will be *'undertaken in a manner consistent with the... AAL/PAL Guideline'* (or words to this affect), to demonstrate adequate management of a particular environmental risk.

A brief overview of the guidelines' contents is provided below.

Environmental Site Assessment

Provides information on appropriate soil and groundwater sampling methodologies and the use of the Airports Regulations criteria for comparison with contaminant concentrations.

The Guideline also includes consideration of potential Per- and poly-fluorinated alkyl substances (PFAS) contamination risks (see section below for more detail).

Construction dewatering

Sets out the appropriate management of dewatering, including methodologies and water quality testing.

The guideline also notes that where dewatering presents a risk of possible off-site impact, state environmental legislation is applicable.

AAL/PAL guidelines available to BA applicants and contractors include:

- Environmental site assessment
- Construction dewatering
- Waste fill importation and soil management
- Acid sulfate soil
- Noise management
- Landscaping

Waste fill importation and soil management

Describes the manner in which on-airport or imported soils and fill materials must be managed.

Guidance on imported fill management is consistent with the SA EPA *'Standard for the production and use of Waste Derived Fill'* and the chemical criteria provided in the associated, *'Current criteria for the classification of waste—including Industrial and Commercial Waste (Listed) and Waste Soil'* document.



Acid sulfate soil (ASS)

Indicates where ASS risks are likely to exist on Adelaide Airport and how to assess these potential ASS risks.

The guideline also outlines the requirements of ASS management plans, where ASS assessment suggests that a management plan is required.

Noise management

Discusses the principal sources of on-airport noise and the responsibilities of contractors to manage construction related noise.

Landscaping

Explains how on-airport landscaping can be undertaken in a sustainable manner that minimises potential risks to aviation due to vegetation penetrating the obstacle limitation surface or encouraging on-airport bird activity.

The guideline also includes a list of acceptable plant species for use in on-airport landscaping.

PFAS contamination

Potential per- and poly-fluorinated alkyl substances (PFAS) contamination risks may need to be considered where:

- the project site is located within an area where firefighting training using aqueous film forming foam (AFFF) is known or suspected to have occurred
- the subject site is located down gradient of a site where firefighting training using AFFF is known or suspected to have occurred *and* groundwater beneath the subject site is likely to be intersected.

Where activities involving potential PFAS contamination risks are associated with BAs, the ABC/AEO must be provided with a PFAS Trigger Assessment. These trigger assessments are undertaken by the AAL/PAL Environment Department and are used to determine potential PFAS contamination risks and establish any requirement for the inclusion of PFAS management measures in CEMPs. The *AAL/PAL PFAS Planning and Development Information Sheet* provides more detail on the timing and nature of PFAS Trigger Assessments and is available from the Environment Department.

PFAS Trigger Assessments must be reviewed, signed and forwarded to the ABC by contractors or BA applicants.

Construction Environment Inspections

Once approved on-airport construction works have commenced, the AAL/PAL Environment Department will seek to undertake one or more construction environment inspections. The objectives of these inspections are to:

- confirm conformance with the management measures described in CEMPs
- ensure site activities comply with the relevant environmental legislation
- provide an opportunity for AAL/PAL to assist contractors in assessing and managing environmental risks and/or addressing any identified non-conformances or non-compliances.

Inspections will usually be organised in collaboration with the AAL/PAL Project Officer assigned to the project.

Contractors will generally be provided with copies of inspection reports within 2 days following completion of the inspection. Inspection reports detail any non-conformances or non-compliances and the agreed measures to address them.

Further Guidance and References

Members of the AAL/PAL Environment Department are available to provide further advice on construction environmental management.

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