



Balgo Hill Airstrip - Crushing and Screening

## **Distribution**

This Environmental Management Plan is a controlled document, to be reviewed and approved by the Project Engineer at the commencement of the project. The Project Engineer is responsible for ensuring this plan and all associated documentation is maintained and up to date. This is to be achieved through regular reviews of the plan and the supporting system (minimum six (6) monthly).

The master-controlled plan will be held within Black Cat Civil's document management system, where it can be accessed by personnel as necessary.

### **Terms and definitions**

The following terms, abbreviations and definitions are used in this plan

Terms / Abbreviations	Definitions
AAPA	Aboriginal Areas Protection Authority
ANZECC	Australian and New Zealand Environmental and Conservation Council
BCC	Black Cat Civil Pty Ltd
DoT	WA Department of Transport
E&SC	Erosion and Sediment Control
EMP	Environmental Management Plan
EPBC	Environmental Protection and Biodiversity Conservation
ERP	Emergency Response Procedures
ESCP	Erosion and Sediment Control Plan
IECA	International Erosion Control Association
PPE	Personal Protective Equipment
RFT	Request for Tender
SDS	Safety Data Sheet
SSEM	Standard Specification for Environmental Management
SWMS	Safe Work Method Statement
WA	Western Australia
WMPC	Waste Management and Pollution Control



# Balgo Hill Airstrip - Crushing and Screening

## **Table of contents**

Docu	ument Control	1
Revis	sion History	1
Distrik	bution	1
Term	ns and definitions	1
1.	Introduction	4
1.1	Purpose	4
1.2	Background	4
1.3	Scope of works	5
1.4	Site Location and Key Feature	5
2.	Responsibilities And Authorities	6
2.1	Authorisation, Revision and Distribution	6
2.2	Project Manager/Engineer	6
2.3	Project Engineer	7
2.4	Project Supervisor and Leading Hands	7
2.5	HSEQ Manager	7
3.	Approvals, Licenses and Permits	7
3.1	AAPA Permit	7
3.2	Land Authority Permit	7
3.3	Water Extraction	7
3.4	Erosion and Sediment Control Plan	7
4.	Excess Material and Waste	8
5.	Site Rehabilitation	8
5.1	Project Induction	9
5.2	Prestart Meetings	9
5.3	Record Keeping	9
5.4	With the Client and their Representatives	9
5.5	Reporting to the Superintendent	9
5.6	Within the BCC Project Team	10
5.7	Volatile Substance Management	10
6.	Environmental Management Elements	10
6.1	Environmental Induction and Training	10
6.2	Community Liaison	10
6.3	Borrow/Extraction areas	10
6.4	Stockpile Sites	11
6.5	Site Clearing	12
6.6	Soil Erosion and Sedimentation Management	12
6.7	Acid Sulphate Soils Management	12
6.8	Asbestos Management	12
6.9	Water Quality	12
6.10	Air Quality	13
6.11	Noise and Vibration	13



# Balgo Hill Airstrip – Crushing and Screening

6.12	Vegetation and Fauna	13
6.13	Heritage	14
6.14	Waste Management	14
6.15	Weed Management	14
6.16	Pest Animal Management	15
6.17	Fire Management	15
6.18	Major Spills	15
6.19	De-Watering	16
7.	Monitoring and Evaluation of Environmental Performances	17
7.1	Environmental Inspections	17
7.2	Reporting – Internal	17
7.3	Reporting – External	17
7.4	Corrective and Preventative Actions	17
8.	Emergency Procedures (Environmental)	18
8.1	Onsite Emergency	18
8.2	After Hours	18
9.	EMP Review and Auditing	19
9.1	Internal Audits	19
9.2	Reviewing and reporting project performance and continuous improvement	19
9.3	Communication of Updates	19
Appe	endix A – Emergency Response Plan	20



Balgo Hill Airstrip - Crushing and Screening

### 1. Introduction

## 1.1 Purpose

This Environmental Management Plan (EMP) has been prepared for use by all personnel engaged by Black Cat Civil Pty Ltd (BCC) for the crushing and screening of material required for use in the Balgo Hil Airstrip project.

The EMP describes the actions required to effectively protect the environment from any potential impacts that may arise from construction activities and site operations.

This EMP provides a system for the management and implementation of mitigation measures identified to be necessary for this project and has been developed in conjunction with the provided documents available at the time of this submittal. EMP consists of a series of environmental management elements whereby requirements for each element are addressed. The EMP aims to:

- · Meet government, client, and community expectations for protection of the environment.
- Document controls to be implemented for environmental compliance.
- Implement controls to effectively mitigate environmental impacts throughout the project.
- Ensure construction personnel are fully aware of their environmental obligations under the relevant legislation and the contract.
- Establish roles and responsibilities for implementing controls.
- Ensure the project site is returned to a satisfactory condition upon completion of the contract.

## 1.2 Background

Delivering this Project is a priority for the State Government. DoT is providing administrative support and co-funding to the Wirrimanu Aboriginal Community through the Aboriginal Community Airstrip Renewal Program (ACARP). This funding was committed to ACARP through the Kimberley Resilience Package, a state initiative in the 2024-25 Budget. The funding aims to strengthen regional supply chains and improve emergency response capabilities. The Project will fulfil these State commitments by providing year-round, all-weather accessibility to one of Western Australia's most remote Aboriginal communities. Balgo is approximately 1100km east of Broome and 250km south of Halls Creek, with a population of approximately 500 to 600. In 2024-25, the Balgo Hill Airstrip was the Royal Flying Doctor Services' (RFDS) second busiest emergency retrieval location in Western Australia.

Aerodromes are critical infrastructure for remote communities that enable year-round delivery of essential goods and services, reliable access to health services such as those provided by the RFDS, improved access to work and education opportunities, and help connect residents of remote communities. The significant role that Aboriginal community aerodromes play in enabling improved socio-economic outcomes complements the objective of the National Agreement on Closing the Gap.

The Balgo Hill Airstrip runway, taxiway, and apron are worn out and due for reconstruction. The runway's condition encourages water to pond and causes early closure of the airstrip during wet conditions putting the community at risk of losing essential goods and services for extended periods. The airstrip lighting system additionally needs replacement as some sections are incorrectly installed and in poor condition.

Maintaining the necessary aerodrome standards ensures regular services continue, providing year-round access to Balgo during wet and dry seasons. This access is vital for the health, well-being, and economic sustainability of the communities it services, as it facilitates the consistent supply of essential services. Furthermore, replacing these supply chain services with alternative transport methods during emergencies would be extremely costly or even impossible.



Balgo Hill Airstrip - Crushing and Screening

### 1.3 Scope of works

The scope of works of the crushing and screening is to produce enough material required for the Balgo Hill Airstrip project.

## 1.4 Site Location and Key Feature

The Balgo community is approximately 1,750km north west of Perth in Western Australia. The community, including the quarry (borrow pit) reside within both Reserve 46573 and Kearney Reserve 26399. The borrow pit itself is on the corner of Solar Road and Balgo Road. Please see figures 1 to 3.

Reserve 46573 is a reserve under management order to the ALT.

Reserve 26399 is a reserve vested under statute in the AAPA and under management order to the ALT.



Figure 1: Location of Balgo Hill Airport in relation to Perth

Balgo Hill Airstrip - Crushing and Screening



Figure 2: Local area map of Balgo Hill and Airport



Figure 3: Location of borrow pit

## 2. Responsibilities And Authorities

### 2.1 Authorisation, Revision and Distribution

This EMP is a controlled document, to be reviewed and approved by the Project Engineer at the commencement of the project. The Project Engineer is responsible for ensuring this EMP and all associated documentation is maintained and up to date, through regular reviews of the plan and supporting system. This is to be done in consultation with the project management team.

## 2.2 Project Manager/Engineer

The Project Manager will be primarily responsible for the Contractor's overall management of this project. The Project Manager will provide effective management and leadership to the site and site team to meet contractual and BCC project targets across all business functions involving safety, financial, program, HR, quality, community, environment and design.



Balgo Hill Airstrip - Crushing and Screening

#### 2.3 Project Engineer

The Project Engineer will assist the Project Manager in providing effective management and leadership to the site and site team to meet contractual and BCC project targets across all business functions involving safety, financial, program, HR, quality, community, environment and design.

## 2.4 Project Supervisor and Leading Hands

Project Supervisor and Leading Hands will work directly with site staff, responsible for the performance and coordination of site construction workers performing day to day construction activities. They shall show leadership to their crew and commitment to environmental management.

## 2.5 HSEQ Manager

BCC's HSEQ Manager, will work directly with the Project Manager, Project Engineer and site staff to ensure the environmental performance of the project is communicated and adhered to throughout the project. It will be the responsibility of the HSEQ Manager to show leadership and an understanding of the works being performed on site.

The HSEQ Manager will ensure that works are preformed safety with the project's environmental and quality performance in mind.

## 3. Approvals, Licenses and Permits

BCC's Environmental Management system adheres to the requirements of AS/NZ ISO:14001:2004 and AS/NZ ISO:14004:2004.

BCC will comply with all permits, approvals and certificates whether obtained by ourselves or by WA Government DoT.

#### 3.1 AAPA Permit

Before commencing works, BCC will ensure that all Aboriginal Areas Protection Authority permits have been approved and certificates issued for works.

### 3.2 Land Authority Permit

BCC will comply with all permits, approvals and certificates whether obtained by ourselves or by WA Government DoT.

BCC will obtain from the relevant Community Council, Land Council or other relevant authority as appropriate all necessary permits/permissions and have paid all costs applicable to working in that Community.

#### 3.3 Water Extraction

Water extraction shall occur from a water bore nominated by the DoT. At this time it is their intention to re-establish Balgo Bore 1/86.

#### 3.4 Erosion and Sediment Control Plan

An Erosion and Sediment Control Plan (ESCP) in accordance with Australian best practice guidelines such as the International Erosion Control Association (IECA) Australia Best Practice Erosion has been developed for this project. The ESCP has been developed by a suitably qualified professional, where the designer will continue to monitor the performance of the ESCP throughout the various stages of this Project.

The ESCP will ensure appropriate ESC measures are implemented during the civil works phase, including the earthworks associated with the construction of the embankments and modifications to be made to Lockheed drain.



## Balgo Hill Airstrip - Crushing and Screening

The plan states that the risk of erosion for this project is considered very low during the dry season period and moderate during the wet season. Most of the project area is located in areas with a flat topography until the fill batters come up.

Erosion and sediment control will be monitored as outlined in the ESCP plan and in the event of a large rain event control measures such as silt fences and sandbags will be kept onsite to be installed as further control measures.

#### 4. Excess Material and Waste

BCC will ensure that the dumping of spoil will be at a location specified by WA Government DoT. The site will be clear of organic material/topsoil prior to stockpiling material. BCC will ensure dump areas shall not dam surface water and stream or damage the works or other property. The main source of spoil will be topsoil.

All site waste and recycling will be managed in line with conditions set out in accordance with project requirements The nominated location for waste disposal will be the notified to DoT after project award. A waste register will be maintained and at a minimum record:

- · Type of waste
- Location of waste disposal or reuse
- Quantity of waste
- · Date of disposal or reuse
- Name of transporter
- And receipt number (including record of receipt).

Hazardous waste will be stored in separate containment cells and labelled accordingly. These chemicals and hazardous materials will be transferred to licensed disposal facilities within the Northern territory and transfer certificates provide upon request. The project superintendent will be notified when prescribed waste materials are planned for transport and request written approval.

Where possible materials will be recycled or reincorporated into the works for reuse to maximise the use of materials and mitigate waste. Potential options for material reuse on this project are:

- Respreading of any topsoil materials and vegetation to disturbed areas outside of the works
- · Recycling of waste oils at appropriate transfer facilities.

#### 5. Site Rehabilitation

BCC strives to limit the lasting impact to environments and communities which it operates and constructs infrastructure. As part of the demobilisation of works, upon completion, the following areas have been identified as potential rehabilitation areas:

- Site Facilities
- (a) Upon demobilisation all temporary infrastructure including any sewer and rubbish will be removed and the affected areas returned pre-commencement conditions
- (b) Where applicable the ground will be levelled, and topsoil and vegetation will be respread.
- (c) All waste will be removed and disposed in accordance with section 5 above.
- 2. Topsoil Stockpiles where surplus topsoil remains on the project it will be stored in a location agreed with the DoT representative. If required, it may be seeded for stabilisation.
- 3. Site access areas trafficked as part of site access may require rehabilitation including:
- (a) Rumble/shaker grids.



## Balgo Hill Airstrip – Crushing and Screening

#### (b) Temporary haul routes

### 5.1 Project Induction

All personnel will be required to attend a site induction prior to commencement of any work. The environmental component of the induction presentation will include the following items:

- · General environmental duty of care
- EMP overview
- Key environmental management strategies e.g., E&SC measures, refuelling, littering etc.
- · Significant vegetation areas, including access restrictions and clearing limits.
- Environmental Incident notification process
- · Complaint management
- · Culturally sensitive areas and exclusion zones
- · Weeds and seeds management.

#### 5.2 Prestart Meetings

A prestart meeting will be conducted each morning prior to commencement of works and will outline the tasks for the day and any environmental hazards that may be encountered.

## 5.3 Record Keeping

Project records must be managed and maintained for the life of the project and should include but not be limited to the following:

- · Induction register
- · Environmental incidents, non-conformances, and complaints
- Inspection reports, checklists, diary entries
- Monitoring results
- Meeting minutes
- · Formal letters Communication.

### 5.4 With the Client and their Representatives

In addition to the daily face to face discussions between parties from BCC and the projects Superintendent, the following examples of communication will be used:

- Monthly meetings
- Meeting minutes
- Formal letters
- Email
- RFI
- NCR.

#### 5.5 Reporting to the Superintendent

The following records, in addition to being maintained by project staff, will be reported to the principal as required:

• Breaches of licence conditions or environmental incidents in accordance with licence conditions under the EP Act to be submitted as required.



Balgo Hill Airstrip - Crushing and Screening

- Immediate notification of incidents involving material or serious environmental harm as required.
- Incidents of environmental nuisance and non-conformance with the EMP to be reported monthly.

## 5.6 Within the BCC Project Team

The following forms of communication will be used within the BCC team:

- Daily Pre-start meetings
- Weekly toolbox meetings
- · Notice boards.
- Internal memo's
- · Meeting minutes.

## 5.7 Volatile Substance Management

BCC are not aware of any formal Volatile Substance Abuse plans active for the Balgo community. In lieu of a formal plan, BCC has implemented the following controls in accordance that will be included on project audits.

- Only diesel vehicles will be permitted on site.
- Were possible, all small motors will be diesel. If petrol driven motors are required, no more than 100L of unleaded fuel will be retained on site at any given time. Any unleaded will be low aromatic and stored securely in the site container under lock and key.
- All other generic volatile substances, such as: paint, oils, lubricants, and other substances will be kept secured to the project container at all times and stored in small quantities.

### 6. Environmental Management Elements

### 6.1 Environmental Induction and Training

Action	Responsibility	Timing
All site staff will be made aware of the site EMP, environmentally sensitive areas and environmental responsibilities.	Site Supervisor	Prior to construction Site Inductions

#### 6.2 Community Liaison

Action	Responsibility	Timing
Members of the affected community will be notified of the proposed works prior to their commencement by DoT.	DoT	Prior to construction
BCC will notify the relevant stakeholders for the project via email correspondence. The traffic management plans for the project will be submitted to DoT.		
Complaints received will be recorded and attended to promptly. On receiving a complaint, works will be reviewed to determine whether	Site Supervisor	Prior to construction
issues relating to the complaint could be avoided or minimised. Feedback will be provided to the complainant explaining what outcomes resulted.		During Construction
A written report of environmental complaints will be provided to the DoT Superintendent within one working day.		

### 6.3 Borrow/Extraction areas

Action	Responsibility Timing



## Balgo Hill Airstrip - Crushing and Screening

Clearly delineate the bounds of site as stipulated in the project ERA. DIPL requirements for the operation of gravel pits are as follows:

Site Supervisor N/A

- construct only one access road to each pit
- · confine all transport operation to the access road
- provide and maintain adequate road drainage
- strip 100mm depth top layer throughout the area of operation
- stockpile stripped material clear of drainage to a maximum height of 2m
- side slopes of sand or gravel to be no steeper than one vertical to two horizontal at any time when the excavation is unattended
- by-products of the excavation operation to be removed or buried unless otherwise required
- not within 6m of any fence line or utility
- not within sight of road traffic
- not within 125m of any road or railway centre line
- not within 25m of a water course (see 2010 Land Clearing Guidelines4 for water course buffers)
- not within 200m of a defined waterway crossing
- maximum area: 1ha
- align the long side with the contour
- maximum width: 50m
- maximum depth: 2m
- leave natural vegetation strips 25m width between pits
- stockpile cleared vegetation and subsequently spread over the surface of the extraction area.

#### 6.4 Stockpile Sites

Action Responsibility Timing

All spoil area will be located in approved area allocated by WA DoT. Site Supervisor Pre, during and Post

Depositing of excess spoil is a hold point.

Spoil is to be disposed of as follows:

- · Not less than 125m from the new road centre line
- Spread excess material and sheet with topsoil as specified
- Dumped material remains the property of the principal
- Ensure dumps shall not dam surface water and streams or damage the works or other property.
- · Ensure dumping is not in streams
- Haul, dump and spread the materials in legally acceptable locations using legal methods.
- Comply with AAPA clearances
- Comply with Environmental management approvals, including those within the road reserve

Stockpiling of materials will comply with Australian Standard AS 4970 Protection of trees on development sites, will not place stockpiles within 50 metres of any drains, drainage lines, creeks or other waterways. Will locate the stockpiles so that any slump of the stockpile would not affect erosion and sediment control measures if applicable or infringe upon specified minimum clearance requirements. Stockpiles are not to be more than 2 metres in height. Maintain the stockpiles to prevent the growth of weeds on the stockpiles.

Construction



Balgo Hill Airstrip - Crushing and Screening

## 6.5 Site Clearing

Action	Responsibility	Timing
Trees and the extent of areas to be cleared will be taped and marked out using survey pegs and inspected by superintendent and signed off prior to vegetation clearing.	Site Supervisor	Pre, during and post Construction
Prior to clearing any area, it is to be demarcated with fencing, flagging tape, spray paint or other method approved by the Superintendent. Provide documented advice of the proposed methods for demarcation of areas to be cleared.		
Any works that are required to be completed outside of the design footprint will be confirmed with the Superintendent prior to commencement. No works outside of the design footprint are foreseen to occur over the life of the project.		

## 6.6 Soil Erosion and Sedimentation Management

It has been indicated risk of sedimentation into waterways and the surrounding environment is a minor risk on this project due due to the project being comepleted during the dry season.  An erosion and sediment control plan has been developed by a CPESC and is attached as part of this document. The plan outlines all ESC requirements for this project. Further, erosion or sediment areas of concern will be monitored on a daily basis. Some temporary control structures such as silt fence will be implemented at the indicated drainage depressions. Other control measures such as silt socks, fences, bags etc. will be stored on site and installed in the event of a large rain event or as required.  Erosion and sediment control measures will be maintained regularly	Action	Responsibility	Timing
CPESC and is attached as part of this document. The plan outlines all ESC requirements for this project. Further, erosion or sediment areas of concern will be monitored on a daily basis. Some temporary control structures such as silt fence will be implemented at the indicated drainage depressions. Other control measures such as silt socks, fences, bags etc. will be stored on site and installed in the event of a large rain event or as required.  Erosion and sediment control measures will be maintained regularly	surrounding environment is a minor risk on this project due due to the		
and after rainfall events if required.	CPESC and is attached as part of this document. The plan outlines all ESC requirements for this project. Further, erosion or sediment areas of concern will be monitored on a daily basis. Some temporary control structures such as silt fence will be implemented at the indicated drainage depressions. Other control measures such as silt socks, fences, bags etc. will be stored on site and installed in the event of a large rain event or as required.		

## 6.7 Acid Sulphate Soils Management

Actions	Responsibility	Timing
It is not anticipated that Acid Soleplate Soils will be found on the project, however in the case that a test comes up with a pass for the acid soleplate soils BCC will cease work immediately and contact the NTG and engage with and Environmental consultant and DOT representative to assist and help manage the soils.	and Site	Pre, during and post construction

## 6.8 Asbestos Management

Actions	Responsibility	Timing
It is not anticipated that asbestos will be found on the project, however in the case that a test comes up with a pass for the asbestos BCC will cease work immediately and contact the DOT representative and engage with and Environmental consultant and DOT to assist and help manage the asbestos on site.	, ,	Pre, during and post construction

## 6.9 Water Quality

Actions	Responsibility	Timing
Water quality control measures will be implemented to prevent any materials entering drain inlets and waterways.	Site Supervisor	Pre, during and post construction
Storage areas for fuels, oils and chemicals will be surrounded by an impervious bund. The location of storage areas will not be within 50 metres of any areas of concentrated water flow, flood and poorly drained areas, on undesirable slopes or near any areas of native vegetation.		
Spill containment equipment kits will be available on site.		

When printed this document is an uncontrolled version and must be checked against the electronic version for validity



Balgo Hill Airstrip - Crushing and Screening

Responsibility

Site Supervisor

#### 6.10 Air Quality

Action

Exhaust systems of construction plant, vehicles and machinery will be maintained in accordance with the manufacturers specifications in order to ensure emissions do not exceed EPA regulations. Visual inspections will be undertaken daily to ensure ongoing compliance with the Standard Specifications for Environmental Management, provided by infrastructure.nt.gov.au. If visible emissions are detected from plant and equipment, the plant and equipment will be removed from service until it has been inspected by a mechanic and either repaired, maintained or shown to comply with EPA regulations.

Dust Control will be minimised as much as practicable; a semi-truck water cart will be utilised for dust suppression and construction works. This will be undertaken through spraying of the earthwork formations with water. The site supervisor and the project superintendent will communicate daily regarding such topics bearing in mind the proximity of the nearby residents and businesses.

In addition to the construction effects of dust, natural affects such as wind speed and directions may affect dust control. These conditions will be monitored by visual assessment and the site and client will be communicated as required with appropriate action will be taken.

Any vehicle transporting waste or other materials that may produce odours, or dust will be properly covered during the transportation of the materials or waste.

Site Supervisor During Construction

**Timing** 

#### 6.11 Noise and Vibration

Action Responsibility Timing

Affected residents and businesses will be notified when work is likely to cause vibration or offensive noise to impact on the public.

All reasonable practical steps will be undertaken to reduce maintenance activity noise and vibration from the site.

It is not anticipated the noise, or vibration will affect this project due to the remote location of the project.

Assumed work hours for the project 6.30am to 6.30pm, 7 days a week.

The plant and equipment on site are not considered to be outside the normal noise or vibration range for plant and equipment on a construction site therefore no spherical noise requirements for fauna have been noticed. As this work area is a current operational publicly used road. Noise on site will be monitored and managed.

BCC use the latest CAT Advanced technology equipment, this equipment has low fuel C02 emissions and reduced operating decibel readings.

A register will be kept onsite for all complaints (section 8.2) and corrective actions implemented for any complaints that are recorded.

#### 6.12 Vegetation and Fauna

Action Responsibility Timing
BCC is committed to protecting all native fauna. Before work Site Supervisor During

commences in a work area, the area will be viewed and swept to ensure that there are no native birds, reptiles or mammals within the work area. If native fauna is located within the work area, work will cease until the animal has moved on and should only proceed after approval from the DOT Superintendent has been received.

Advice must be sought from DEPWS or the Department's Environment Services Branch if nesting fauna are sighted. Ensure sufficient time is available to allow any required specialist to make a determination and give advice to the Superintendent.

r During Construction

**During Construction** 



## Balgo Hill Airstrip - Crushing and Screening

BCC will still ensure that these species potential presence in the area is communicated to all personnel and will be added to the site induction and included on posters on the site office wall to ensure that personnel keep an eye out for these vulnerable fauna.

If a threatened species is encountered on the project all construction work that might affect the identified species is to cease, a temporary protective barrier is to be erected and the superintendent is to be notified.

BCC is committed to protecting all native flora within the area. Works will be restricted to existing road formation with low inherent risks for flora. Any protected species for flora will be identified prior to the commencement of works and be demarcated to ensure no damage to vegetation within the area occur.

#### 6.13 Heritage

Action Responsibility **Timing** 

Should any item be encountered which is suspected to be a relic of heritage value or any relic, artefact or material suspected of being of Aboriginal origin, all construction work that might affect the item will cease and the item protected from damage and disturbance. The Principal and Heritage Branch will be notified immediately.

RWAs onsite will be marked and delimited and notices of the areas displayed on notice boards and covered in site inductions and prestarts. Site Supervisor Pre, during and post construction

#### 6.14 **Waste Management**

Action Responsibility **Timing** 

Waste oil will be sent to approved recyclers where appropriate and will not Site Supervisor be used as a dust suppressant.

**During and Post** construction

All effluent is collected and transported by a licensed waste contractor for disposal. A black water holding tank will be utilised in conjunction with a 6x3m M/F abluations building. This tank will be emptied regularly by a licesned waste collector.

BCC Waste and containers will be disposed of at a licensed landfill site located locally.

No construction waste material will be left on site once the maintenance activity has been completed.

The site will be left in a clean and tidy state on completion of the maintenance works.

A waste register will be maintained and at a minimum record:

- Type of waste
- Location of waste disposal or reuse
- Quantity of waste

#### **Weed Management** 6.15

Action	Responsibility	Timing
Works are proposed in an area that has been previously cleared and highly modified. A mix of predominantly introduced grasses exists over the alignment where works are proposed. Where machinery is required to work in areas of weed infestation, appropriate vehicle/machinery cleaning equipment is to be available to wash down machinery before moving to weed free areas. Weed and Seed Declaration Certificates will be supplied with all items of plant to confirm they are free from weed and seeds. BCC will include weed management/information sheet in the site induction that details existing weeds on site, etc. A page of the local weeds will be printed and erected on the walls of the lunch room so that all persons onsite		At the commencement of project, during and on completion.



Balgo Hill Airstrip - Crushing and Screening

Action Responsibility **Timing** 

During the project, no soil material is required to leave the works area.

If any weeds are brought to our attention by DOT or stakeholder BCC will work with the DOT representatives regarding management of the weeds and seeds detected. When weeds are present on the site, consult with Local Council and Department of Environment, Parks and Water Security and be guided by best practice removal and control techniques and any management procedures that may have been developed for particular noxious and declared weeds.

Upon completion of the project all items will be washed down and cleaned before leaving site for the next project.

#### 6.16 **Pest Animal Management**

Responsibility **Timing** 

Black Cat Civil will ensure that all necessary measures are undertaken to prevent and minimise the risk of the introduction and spread of pest animals. No domestic pets, including dogs, are to be brought to the construction site.

Site Supervisor

Site Supervisor

Site Supervisor

At the commencement of project and during

All necessary measures are to be implemented to prevent the establishment of suitable environments for mosquito breeding habitat.

All waste bins will have lids to prevent the attraction of pests and vermin. Where skips are used for food waste covers are to be utilised to reduce the risk of attracting pests.

#### 6.17 **Fire Management**

Action Responsibility **Timing** 

The site will be assessed upon commencement of works to ensure all fire risks are assessed and control measures put in place.

All site plant and vehicles will be fitted with a compliant fire extinguisher.

Once established on site and upon commencement of works, fire malmanagement risks and control measures will be assessed and implemented, these will then be communicated to all personnel through the site-specific induction.

An emergency evacuation point will be established an appropriate distance from the project site in the event of a fire that is unable to be contained. The Emergency Muster Locations will be displayed on the site notice board, in the crib room and in the site office. As per clause 12.5 of the Standard Specifications of Environmental Management, the lighting of fires for disposing rubbish and cleared vegetation is prohibited.

At the commencement of project and during

At the commencement

of project and during

#### 6.18 **Major Spills**

**Action** Responsibility **Timing** 

BCC conduct regular spill kit training with personnel and have flyers placed around the crib facilities advising on the correct procedure to follow in the event of a spill.

Storage areas for fuels, oils and chemicals will be surrounded by an impervious bund. The location of storage areas will not be within 50 metres of a waterways. Hazardous materials will be stored within selfbunded containers or bunded pallets.

In the event of a major spill all works on site would cease immediately and all personnel would assist in the containment of the spill.

Although Spill response plans will vary dependant on the situation, 7

steps that BCC will follow to ensure effective spill response are:

1. Assess the risk

Page 15 of 20



Balgo Hill Airstrip - Crushing and Screening

Action Responsibility Timing

From the moment, a spill occurs and throughout response, responders should determine the risks that may affect human health, the environment and property. The spilled material can be identified from the container label or the Safety Data Sheet (SDS). Next, identify how much has been spilled and the primary dangers posed to the spill responders and the environment. Once the extent of the spill and the risks are understood, appropriate measures may need to be taken to isolate the spill area (e.g. setting up exclusion zones).

#### 2. Select personal protective equipment (PPE)

The spill responder may already be wearing the necessary PPE because they were working with the spilled liquid, but if not, it is crucial that the appropriate PPE is chosen.

#### 3. Confine the spill

Confining the spill may be a simple task for spills of a few litres or it could be more difficult for larger spills, so it is important to make sure that the correct absorbents and size of spill kit are available for the liquids that have been spilled. Once the correct absorbents or kits have been chosen, responders should limit the spill area by blocking, diverting, or confining the spill.

#### 4. Stop the source

This step may happen before the spill is even confined depending on the extent or the size of the spill. This could simply involve turning a container upright, or plugging a leak from a damaged drum or container.

#### 5. Evaluate the incident and implement cleanup

Once the spill is confined and the leak has been stopped, it is time to reassess the incident and develop a plan of action for implementing the spill clean-up. First, responders should make sure they have enough spill response supplies to deal with the incident. Once the absorbents are saturated, they may be considered hazardous waste and should be disposed of properly.

#### 6. Decontaminate

The site, personnel, and equipment should be decontaminated by removing or neutralising the hazardous materials that have accumulated during the spill. This may involve removing and disposing of contaminated media, such as soil, that was exposed during the spill incident. PPE may be able to be reused after inspection and clean-up. An effective decontamination area should also be created to ensure the health and safety of emergency responders.

#### 7. Complete required reports

As soon as possible after the spill, all spill notifications and reports required by local and national guidelines should be completed.

There are numerous spill kits located around the project, including in site vehicles. Hazardous materials on site are stored within self-bunded containers or specials designed storage pallets. When storing hazardous substances, the SDS is consulted to ensure the correct management of the material is maintained and provided.

Site Supervisor

At the commencement of project and during

#### 6.19 De-Watering

Action	Responsibility	Timing
Dewatering is unlikely to be required due to this project being constructed during the Northern Territory dry season. If this project is to be commence within the wet season, the appropriate dewatering measures will be implemented. BCC will look at collecting the water by pumping, filtering/removing the silt and then discharging into an approved location. BCC will seek DOT superintendent approval prior to commencing dewatering.	Site Supervisor	Pre, during and post construction

When printed this document is an uncontrolled version and must be checked against the electronic version for validity



Balgo Hill Airstrip - Crushing and Screening

## 7. Monitoring and Evaluation of Environmental Performances

## 7.1 Environmental Inspections

The following inspections will be conducted during the project.

- The site supervisor will conduct daily visual inspections of the site to ensure that appropriate
  control measures (e.g., sediment fences, sediment basins) are in good order and effective.
  Recommendations or instructions for environmental improvement made by the Officer will be
  given to the Site Supervisor for immediate actioning (if practicable). Visual inspections of site
  conditions that may affect water quality, erosion and sediment control, land stabilisation, cultural
  heritage, noise and vibration, air quality, issues shall also be conducted daily.
- Weekly inspections of the site will be conducted by the Project Engineers/Site Supervisors and reported on the Weekly Site Inspection Form. This inspection is more formalised and will be used to track environmental performance.

In the event of rain (not including light showers), additional inspections (during daytime hours) will be conducted by the Site Supervisor and or HSE Lead to ensure environmental controls are functioning correctly.

#### 7.2 Reporting – Internal

It is the responsibility of each team member to notify the Site Supervisor immediately of all environmental incidents (e.g., fuel spill, sediment entering waterway etc.) that may occur on site. The site supervisor will notify the HSE Lead who will follow procedures for an environmental incident.

## 7.3 Reporting – External

In the event of an environmental incident resulting in a breach of license conditions or environmental harm has been identified, the HSE Lead must notify the clients HSE Lead. All Environmental incidents will be reported to the project superintendent immediately.

It is the responsibility of the Project Engineer to complete a monthly report which outlines all environmental monitoring results undertaken on the project. When applicable, the monthly report will include:

- · any breaches of license conditions
- · serious environmental harm events
- statutory notifications
- injury or death to fauna.

#### 7.4 Corrective and Preventative Actions

Project personnel must notify the Site Supervisor and HSEQ Manger of all environmental incidents so that immediate action can be undertaken. Environmental incidents will be investigated to prevent a repeat of the event and will include the following:

- Identifying the extent of the incident
- · Identifying and implementing the necessary corrective actions
- Identifying the personnel responsible for carrying out the corrective action
- Identifying who was responsible for the incident so that additional training can be offered.
- Implementing or modifying controls necessary to avoid a repeat occurrence of the incident.
- Documenting incident (including photos' if necessary)



Balgo Hill Airstrip - Crushing and Screening

• Conducting follow up inspection of location where incident occurred and if necessary, implementation of a monitoring program (e.g., water quality testing if incident was in waterway).

Implementation of this EMP will assist in the prevention of environmental incidents. Weather forecasts should be monitored daily by the Project Engineer to determine if storm events are likely. It is the Project Engineer's responsibility to distribute the information to the wider project team. This will enable the project team to ensure control measures are able to minimise the impacts of the storm.

## 8. Emergency Procedures (Environmental)

BCC maintains a separate Project Emergency Response Plan (Appendix A) as part of our Project Plans. Once established on site and commencement of the project site specific emergency procedures are evaluated and established, these procedures are then communicated to all personnel through the site-specific induction and on the Safe Work Method Statement (SWMS).

## 8.1 Onsite Emergency

In the event of an emergency such as a fire or a major spill, personnel should contact their onsite supervisor immediately the following communication method will be used to notify the site of the emergency:

- An emergency call will be made over the UHF channel and repeated 3 times the message will include what the emergency is, and the nearest emergency muster point that employees should evacuate to.
- Once notified, all personnel should stop work, leave communication lines open and wait for further instruction.
- The Project Engineer in conjunction with the HSE Lead will handle all communications in relation to the emergency.
- All radio and telephone contact will be restricted to emergency communications during the event. All requested communication updates regarding the emergency will be directed to the Project Engineer.

The muster locations will be communicated as part of the site-specific induction. Where safe to do so any spills shall be controlled with site spill kits and bunded with earth materials to prevent spread. All contaminated materials shall be disposed of in accordance with section 5 of this document.

NOTE: All personnel are authorised to contact emergency services in the event of an emergency. They should then immediately contact their Supervisor, HSE Lead or Project Engineer to advise of the situation in accordance with the ERP (Refer to Appendix A).

When emergency services arrive at the site, they will take control of the situation, and their own communication protocols will be implemented.

Displayed in the following table are the relevant contacts regarding site emergencies.

Name	Position	Contact
TBD	Supervisor	XXX

#### 8.2 After Hours

In the event of an after-hours emergency, the client or a member of the public will likely notify BCC of the circumstance directly due to the camp being within close vicinity of the works. In these situations, the Project Engineer or HSE Lead will be notified immediately, and depending on the available information, will attend the scene or will immediately contact emergency services. The





Balgo Hill Airstrip - Crushing and Screening

person attending the scene will coordinate resources, including BCC personnel, to mitigate the impact of the emergency.

### 9. EMP Review and Auditing

#### 9.1 Internal Audits

The Project Engineer will review the adequacy of this plan following compliance audits ensuring that any relevant changes due to corrective actions have been reflected in updates. The EMP will be audited and subsequently reviewed on a three-monthly basis or if required sooner to ensure environmental obligations are being met. Site compliance inspections regarding environmental management will be conducted on a weekly basis.

## 9.2 Reviewing and reporting project performance and continuous improvement

The Project Engineer in conjunction with relevant members of the project team will review the projects performance each month and report performance to the Director. The monthly review will consider the suitability, effectiveness, and adequacy of the project safety management system.

## 9.3 Communication of Updates

All updates to the EMP will be communicated to personnel through a site toolbox talk. A copy of the most up to date EMP is available in the site office at any time for perusal.



Balgo Hill Airstrip - Crushing and Screening

# Appendix A – Emergency Response Plan

To be provided on project award.