# CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

## VS1 CSP PROJECT

| | |
|---|---|
| **Job Code** | 42104 |
| **Project Name** | VS1 CSP PROJECT |
| **Contract No** | **HOLD 1** |
| **Principal** | Vast Solar |
| **Principal Document No.** | VS1-00-Y-V-NS-PG-001 |
| **Primero Document No.** | 42104-PLN-PM-010 |
| **Revision** | B |
| **Revision Date** | 11/09/2024 |

## Revision History

| Revision No. | Revision Date | Change Record | Author | Reviewer | Approver |
|---|---|---|---|---|---|
| A | 02/08/2024 | Issued for review | F Morellini | C Austin | C Austin |
| B | 11/09/2024 | Re-Issued for Review | F Morellini | C Austin | C Austin |
| | | | fmorellini | Chris Austin | Chris Austin |
| | | | | | |
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# TABLE OF CONTENTS

## HOLDS

| No | Description |
|---|---|
| 1 | Design and Construct Contract title and number to be confirmed |
| 2 | Project specific deliverable number TBC |
| 3 | Principal Approvals yet to be executed. Approval details and reference no's TBC. |

# 1 PURPOSE

The Construction Environmental Management Plan (CEMP) identifies the way in which Primero will interface with the Principal's environmental management systems and standards to achieve environmental compliance during the construction phase of the Vast Solar VS1 CSP Project (Project). The aim is to meet or exceed legislative compliance through the integration of the Primero Environmental Management System (EMS) and the Principal's environmental management plans and standards.

The CEMP is also a key deliverable to meet a number of the Project compliance conditions stated within the Project Development Approval 010/V061/17 V3.

Compliance to this CEMP and supporting procedures is mandatory and is to be adhered to by all members of the project team including the Principal, on-site employees, workers, subcontractors, suppliers, and designers involved in the planning, design, and construction of the Project.

It is the intention of Primero to undertake all works associated with this Project in accordance with all relevant Acts, Regulations, Standards and Codes of Practice, to ensure we achieve our objectives. There have been references made to these Acts and Regulations, as guidelines and as good practice.

Should any significant changes or amendments be made to the Contract, or significant risk mitigation strategies be identified, then this plan will be revised accordingly to reflect those changes.

For clarity, operational phase environmental management will be subject to the Principal developed and implemented Operations Environmental Management Plan. In addition, environmental management during the decommissioning phase will be subject to the Principal developed and implemented Decommissioning Environmental Management Plan.

# 2 SCOPE

## 2.1 Project overview

### 2.1.1 General

Vast is developing VS1 in Port Augusta, South Australia, a 30MW / 288 MWh concentrated solar thermal power (CSP) plant.

VS1 will use Vast's modular tower CSP v3.0 technology and will be based at the Aurora Energy Project site approximately, 20km north of Port Augusta, South Australia. VS1 will generate clean, low-cost, dispatchable power with 8+ hours thermal energy storage.

*Figure 1: 3D Image of Proposed Facility Project*

An early phase 3D render images of the proposed facility is shown, showing the central power block and solar array fields either side.

The central power block consists of the large salt tanks, steam generator and power generation packages, air-cooled condenser package, HV Switchyard and site operational buildings and ancillaries.

The solar array field includes heliostats (mirrors) directed at collector towers to heat liquid sodium which is in turn utilised to heat molten salt, which is in-turn utilised to heat demineralised water and produce steam to drive the steam turbine for power generation.

## 2.2 Project Scope

The VS1 CSP Project will consist of six main works packages/area's:
Note: all non-Primero entities below are contracted and managed by Vast

| Works Package Description | Design Party | Construction Party |
|---|---|---|
| Site and Facility Access Roads | Fyfe | Primero |
| Central Power Block (excluding hot and cold tanks) | Primero – Earthworks & Foundations<br>AFRY – Structural & Piping<br>Worley – Process & Electrical<br>John Cockerill – Steam Generation Package<br>Doosan-Skoda – Steam Turbine and Power Generation Package | Primero |
| Hot and Cold Tanks (within the Central Power Block footprint) | CyD Tank Foundations and Tanks (Hot & Cold Tanks) | Primero – Tank Footings<br>CyD - Tanks |
| Solar Array Fields (8-off total, 4 to the east and 4 to the west of the central power block. | Vast<br>Primero (Solar Tower Footings) | Vast<br>Primero (Solar Tower Footings) |
| HV Switchyard and Power Cable | Worley/Fyfe | Vast Subcontractor (TBC) |
| Electranet Grid Connection Substation* | Fyfe/Electranet | Bulk Earthworks by Primero<br>Electranet |

* Note: this package of work is outside of the Primero Principal Contractor scope and will be delivered independently by Vast, Electranet and select subcontractors.

Primero will be engaged to Vast under a Design and Construct Contract and will act as the Principal Contractor responsible for HSE matters for the entire Project Site, excluding the Electranet Grid Connection Substation site (being a separate site from the Central Power Block and Solar Array Fields) which will be managed by a separate party under direct contract to Vast.

Vast and their Subcontractor's will be required to work in accordance with this Construction Environmental Management Plan for the Site.

Primero's Design and Construction scope is summarised as follows:

- Project Management, Engineering Management and Construction Management (including quality management for Primero delivered works).
- Engineering Detailed Design for Power Block and Laydown area Earthworks (including evaporation pond)
- Engineering Detailed Design for all Power Block foundations, excluding only the large salt tank foundations.

- Earthworks and Roads construction.
- Civil Foundations/Footings and in-ground works, including electrical conduit, earthing and fire-water service mains.
- Structural, Mechanical and Piping (SMP) installation, including installation of Pre-Assembled Modules (PAM's), stick steel, mechanical equipment packages and plant piping.
- Electrical, Instrumentation and Controls (E&IC) installation, including cable tray, cables, instruments, and E&IC equipment.
- Construction verifications and completions.
- Commissioning support to Vast.
- Principal Contractor for the Site, inclusive of HSE Oversight for the Project during construction and commissioning phases (i.e.: from initial mobilisation through to handover from project commissioning team to Vast's facility operations team).

Please also refer to the Detailed Design and Construction Scope of Work (42104-SOW-PM-001) for further detail.

# 3 SITE CONTEXT

## 3.1 Location

The site is located on the property known as Carriewerloo pastoral station and is accessed only via the Stuart Highway. This is located approximately 20km north of Port Augusta on the Stuart Highway. The site is not within a Council area but is close to the Port Augusta Council boundary and is within the SA Arid Lands Natural Resource Management area.

Port Augusta is the nearest centre to the site. This is a significant regional centre that services much of the northern most part of the State and includes a range of regional level services including a hospital, medical centre as well as some regional state agency outlets.


*Figure 2: Project location (approximately 20km North of Port Augusta)*

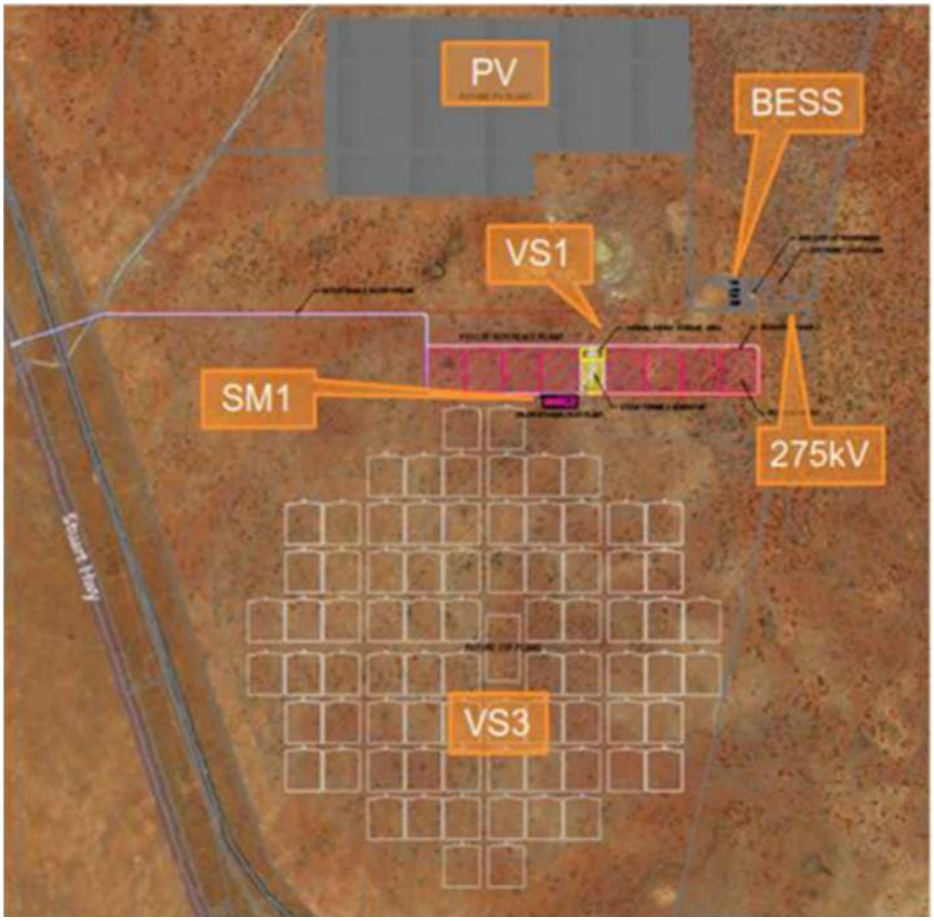



*Figure 3: Project location*

## 3.2 Land Use and Ownership

The project will be located on land that is owned by the Crown but subject to a Pastoral Lease. Much of the surrounding land is also under Crown ownership with overlying Pastoral Leases. Native Title and Mining lease interests may also apply to surrounding land. A number of infrastructure corridors run through the site and the locality generally. It is important that the multiple tenure and land interests in this locality is acknowledged and respected.

Most of the land in the locality is used for stock grazing. Apart from grazing, the land is relatively undisturbed.

## 3.3 Topography and Climate

The topography of the area is generally flat with localised undulation. The site is located within the Gawler bioregion which features calcrete plains and gypsum dune fields and ranges which drain into terminal salt lakes. The site does not contain any defined drainage lines. Vegetation cover is critical to protecting soil from erosion cause by episodic, irregular and extreme boom and bust periods.

The project is situated in a semi-arid location with a very low rainfall. The mean annual rainfall is less than 220 mm per year. The area has relatively few days of rainfall where the mean rainfall days (rain ≥ 1 mm) is only 34 days in a year. Nevertheless, while the annual rainfall is low, the area does experience isolated high rainfall events (particularly in summer) that can lead to short duration flooding.

## 3.4 Project Schedule and Working Hours

The Project Schedule is subject to Vast's Final Investment Decision in the Project, which is currently targeted for late 2024. On this basis, the Project works at Site could commence in late 2024 and construction and commissioning works are expected to be conducted across an approximate two and a half (2.5) year period through to Q1 2026.

Working hours on Site will typically be between the hours of 7am and 6pm, 7 days per week, with work crews working on rolling rosters to ensure a continuous Site presence, with Christmas and New Years shut-downs expected. It is noted there may be night-shift on occasion or earlier starts in summer months as a mitigation against extreme heat conditions that may be encountered from time to time.

As required, the Contractor will obtain both Principal and statutory (EPA SA) approval for any works proposed to be conducted outside of the hours of 7am to 7pm.

# 4 SENSITIVE RECEPTORS

This section summarises the environmental features which have been identified as potential sensitive receptors for this project.

| Receptor | Management Criteria |
|---|---|
| Community | The site is located in a very sparsely populated area. The closest dwelling (homestead) is approximately 1.8 km to the south west of the site. The next closest dwelling is 14 km to the south of the site. The site will be located on a parcel of land that is within a Pastoral Lease and a substantial grazing operation.<br>The site is within the Barngarla Native Title claim area. Where relevant, discussions and agreements with this group will be established by the Principal to address use of land and management of cultural heritage. |
| Ecology | Limited access to water resources in this region means that much of the land has been protected from large scale clearance. Most of the vegetation that exists is native vegetation which is protected from removal or damage. There is evidence of Wedge-tiled Eagle breeding in the proximity to the site. |
| Water Resources | There are no defined drainage lines within the site area, although there may be some associated with the transmission line. Access to groundwater resources is not part of the project. While rainfall levels are relatively low, episodic storms can bring heavy rainfall (particularly during summer). |
| Soils and Geology | The plains of the southern Flinders Ranges are generally calcareous soils of loams and sands, including red calcareous earths, crusty red duplex soils and reddish sands. The geology of the general area contains Quaternary Sediments (mix of gravel, sand and clay layers), Tertiary Sediments (mix of sand, limestone and clay layers) and Proterozoic Basement Rocks. |
| Cultural Heritage | The project site is within the traditional lands of the Barngarla people. Any heritage artefacts discovered on site are protected by the *Aboriginal Heritage Act 1988*.<br>No sites of European Heritage have been identified within the site. |

# 5 ABBREVIATIONS

| Abbreviation | Description |
|---|---|
| **ALARP** | As Low as Reasonably Practicable |
| **BOM** | Bureau of Meteorology |
| **CEMP** | Construction Environmental Management Plan |
| **CFS** | County Fire Service |
| **Contractor** | Primero Pty Ltd |
| **CRAW** | Critical Risk Assessment Workshop |
| **EMS** | Environmental Management System |
| **EPBC** | Environmental Protection and Biodiversity Conservation |
| **ERP** | Emergency Response Plan |
| **Hazard** | Anything which has the potential to cause harm, injury ill health or damage to any living or non-living thing. |
| **HAZOB** | Hazard Observation |
| **HSE** | Health Safety and Environment |

| Abbreviation | Description |
|---|---|
| **KPI** | Key Performance Indicators |
| **LV** | Light Vehicle |
| **MS** | Management System |
| **Near Miss** | Any unplanned incidents that occurred at the workplace which, although not resulting in any injury or disease, had the potential to do so. |
| **Principal** | Vast Solar |
| **SES** | State Emergency Service |
| **SA** | South Australia |

# 6 REFERENCES

## 6.1 Legal and Other Requirements

Primero shall comply with all relevant federal, state, and local legal requirements. Personnel working for and on behalf of Primero shall be made aware of Primero, Principal, legal and other compliance requirements through inductions, specific training, and regular communication.

The key environmental legislation and other compliance requirements relevant to the project includes, but is not limited to:

South Australian and Commonwealth Legislation (including subsidiary regulations), Standards and Approvals.

| Type | Title |
|---|---|
| **Act** | *Aboriginal Heritage Act 1988 (SA)* |
| **Act** | *Dangerous Substances Act 1993 (SA)* |
| **Act** | *Environmental Protection Act 1993 (SA)* |
| **Act** | *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* |
| **Act** | *Fire and Emergency Services Act 2005 (SA)* |
| **Act** | *National Greenhouse and Energy Reporting System Act 2007 (Cth)* |
| **Act** | *Natural Resources Management Act 2004 (SA)* |
| **Act** | *Native Vegetation Act 1991 (SA)* |
| **Act** | *Native Title Act 1994 (SA)* |
| **Act** | *Native Title Act 1993 (Cth)* |
| **Code of Practice** | *Stormwater Pollution Prevention, Code of Practice for the Building and Construction Industry (SA) 1988* |
| **Standard** | *AS/NZS ISO 14001:2016 - Environmental Management Systems - Requirements with Guidance for Use (SA)* |
| **Policy** | *Environment Protection (Air Quality) Policy 2016* |
| **Policy** | *Environment Protection (Commercial and Industrial Noise) Policy 2023.* |
| **Policy** | *Environment Protection (Waste to Resources) Policy 2010 (SA)* |
| **Policy** | *Environment Protection (Water Quality) Policy 2003 (SA)* |
| **Principal Approval** | VS1 Conditions of Development Approval – DA 010/V061/17 V3 |
| **Principal Approval** | Native Vegetation Clearance Approval (consent) – Decision Plan 2023/3123/010 |

| Type | Title |
|---|---|
| **Principal Approval** | 2017_10_22 Cultural Heritage - Original Solar Reserve Agreement |
| **Principal Approval** | Infrastructure Crossing License - ARTC Rail (**HOLD 3**) |
| **Principal Approval** | Infrastructure Crossing License – DoD water pipeline (**HOLD 3**) |
| **Contractor Approval** | South Australian Public Health (Wastewater) Regulations 2013 (SA) & Development Approval page 12. Effluent Treatment (this approval will require waste-water system design detail to be provided by the Principal). |
| **Contractor Approval** | CFS / Local Council issued Fire Permits (as required for construction/hot-works) |
| **Contractor Approval (Only if required)** | EPA South Australia - Nightworks - EPA 425/23 Noise information sheet. Principal Contractor is responsible for obtaining all statutory approvals relating to nightworks (works outside the hours of 7am to 7pm) |

Refer to the Department of Environment, Water and Natural Resources for information on managing natural resources, including native vegetation, water-affecting activities, biodiversity etc. http://www.environment.sa.gov.au/Home

- Information on CEMP requirements for South Australian projects may be found at: https://www.epa.sa.gov.au/files/12330_guide_cemp.pdf
- Information on South Australian Weeds and Pest Animals may be found at: http://www.pir.sa.gov.au/biosecuritysa/nrm_biosecurity/weeds https://www.pir.sa.gov.au/biosecurity/introduced-pest-feral-animals
- Refer to Department of Planning, Transport and Infrastructure for information relating to issues relevant to construction (cultural heritage, fauna, vegetation, noise, weeds etc.): Environmental Awareness Workbook - Civil Construction.
- Refer to the Worksafe SA Publications regarding chemicals, asbestos and hazardous substances: https://www.safework.sa.gov.au/workplaces/chemicals-substances-and-explosives/hazardous-chemicals

## 6.2 Documents

The following documents are referenced within this plan.

| Document Number | Title |
|---|---|
| **PRIM-HS-POL-0003** | Environmental Policy |
| **PRIM-HS-PRO-0003** | Job Hazard Analysis Procedure |
| **PRIM-HS-PRO-0006** | Incident Reporting Procedure |
| **PRIM-HS-PRO-0009** | Personal Protective Equipment Procedure |
| **PRIM-HS-TMP-0019** | HSE Monthly Report |
| **PRIM-HS-TMP-0024** | Job Hazard Analysis Form |
| **42104-HS-PLN-0007** | Emergency Response Management Plan |
| **42104-REG-PM-002** | Project HSE Risk Assessment (CRAW) |
| **HOLD 2** | Project Hazardous Substance / Chemical Register / Chemalert |
| **HOLD 2** | Safety Data Sheet (SDS) Register. |

# 7 RISK ASSESSMENT

## 7.1 Project Risk Assessment

Primero will comply with the CEMP and hazard identification procedures to ensure that all works are analysed for risk and that the Hazard and Primer Card processes are followed in consultation with employees and subcontractors for all work activities.

The work method will be agreed by the project team and the hazards associated with the job identified, controls put in place and responsibilities for implementing those controls will be assigned.

Identification of potential hazards will be achieved through application of systematic procedures, e.g., risk assessment, SWMS, Hazard cards or Primer Cards.

Primero HSE Management Software System SAI 360 will be maintained for all hazards identified during the life of the Project.

## 7.2 Project Risk Assessment (Risk Assessment Workshop)

Prior to commencement of work on the project, an assessment of the project environmental risks will be arranged by the Project Manager. This will be conducted in a workshop forum.

The purpose is to identify and recommend risk control strategies for foreseeable hazards in consultation with the entire project management team, Principal representatives, and other relevant stakeholders. The risk assessment will be recorded on the project risk register (42104-REG-PM-002**)**.

When undertaking any hazard identification process, it is important that all hazards associated with each activity / task are assigned individual controls (i.e., A risk such as uncontrolled spill to ground may require multiple controls. Each control must be recorded on individual rows of a risk assessment) This will ensure that an effective analysis of the level of risk is identified.

Basic risk assessment awareness for all other project personnel will be provided via the project Induction process.

# 8 ENVIRONMENTAL SUMMARY

## 8.1 Key Environmental aspects

Primero has identified the following key environmental aspects associated with construction:

- Compliance with the Native Vegetation Clearance obligations
- Compliance with the Project EPBC Approval obligations
- Compliance with the Project Development Approval obligations
- Compliance with Cultural Heritage Agreement obligations
- Weeds and seeds
- Storage and handling of hazardous substances
- Noise
- Dust
- Bush Fire
- Flood
- Water quality
- Soil Erosion and Drainage Management (including Discharges to waterways, soil/land)
- Waste
- Flora and Fauna

- Pests
- Use of raw materials and natural resources
- Energy consumption
- Public Safety
- Emergency response planning
- Site remediation (post construction)

Potential environmental impacts through activities applicable to Primero's scope of work include:

- Ground disturbance and topsoil through bulk and detailed earthworks and excavations.
- Hydrocarbons and chemicals via refuelling activities and chemicals used on the project.
- Spills to ground, spill response through general operations of mobile plant and equipment.
- Fire through use of mobile plant during clearing works and via hot works generating sparks / flames during construction works.
- Waste and recycling including hard waste and wastewater.
- Flora and fauna weed hygiene through the mobilisation of mobile plant and equipment.
- Dust; site driving and excavation activities.
- Demobilisation activities.

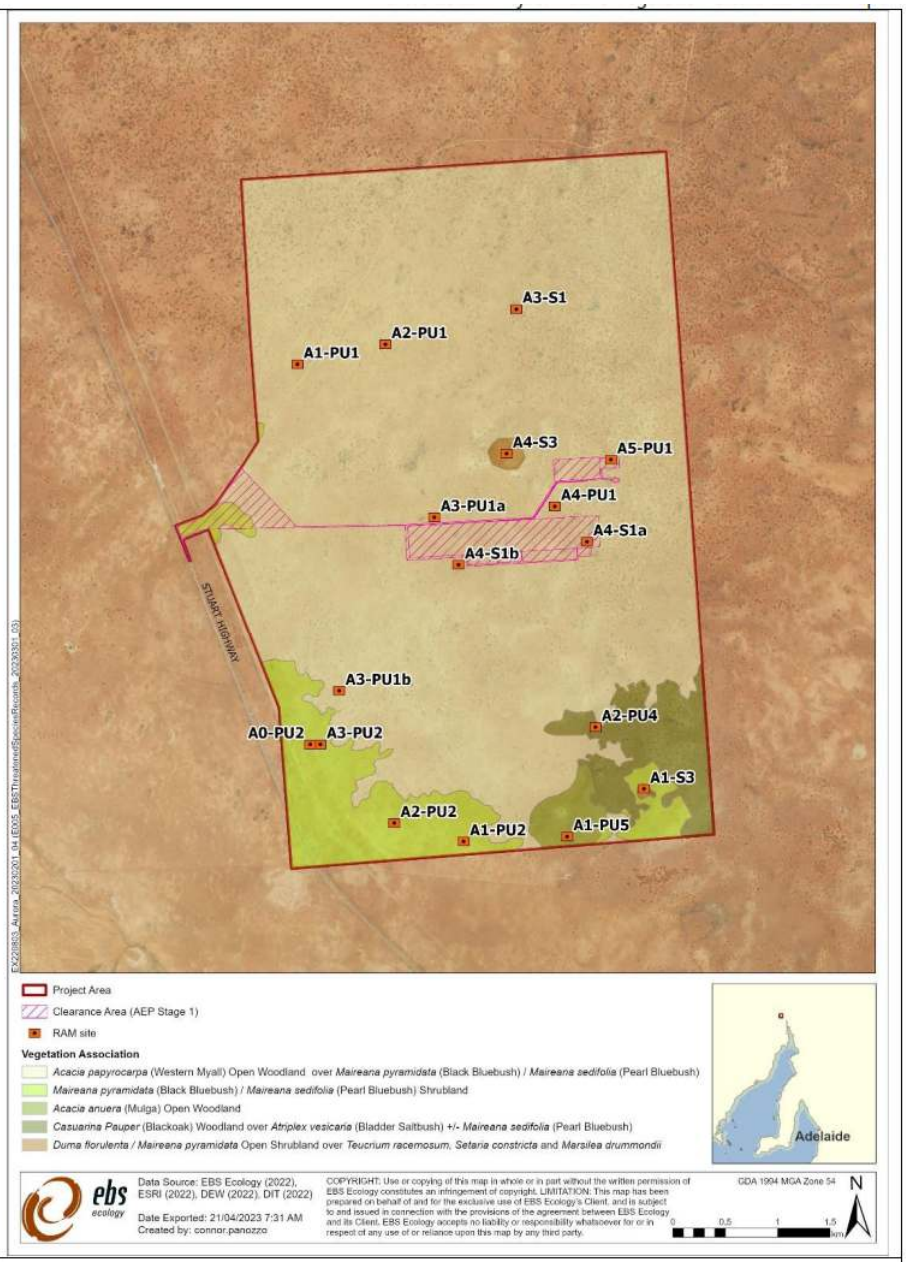
## 8.2 Procurement

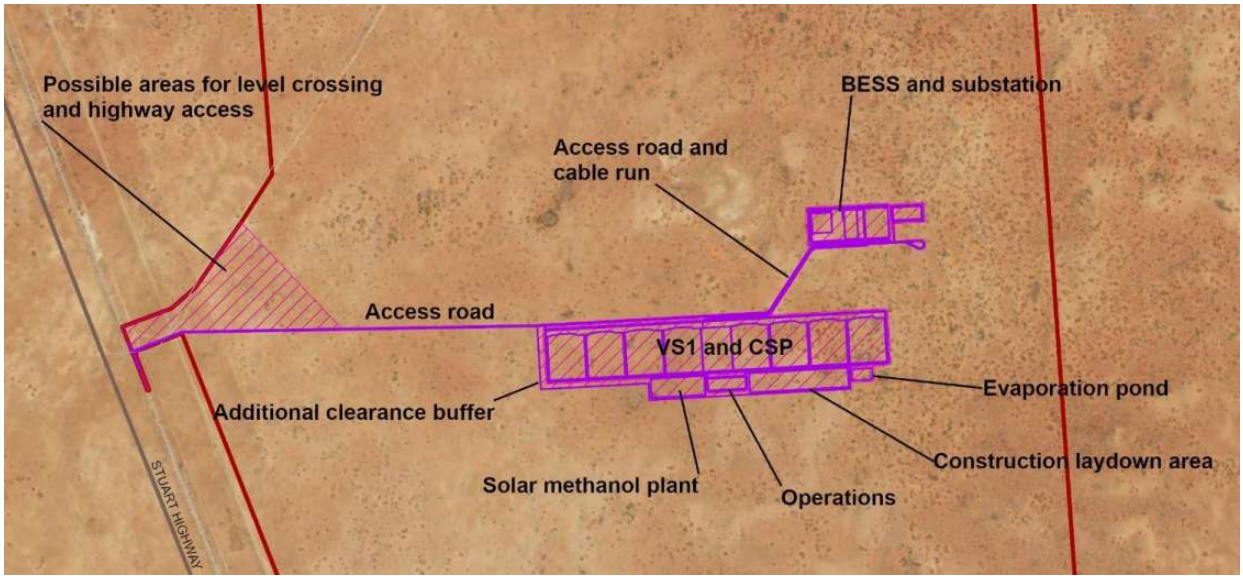
Environmental impacts are considered during the procurement process, to ensure that the finished project results in minimal adverse impacts upon the environment.

Key principles include:

- Suppliers and subcontractors who comply with Primero management system requirements to be selected and preferred.
- All non-Primero personnel accessing the site shall be inducted in the environmental requirements for the project.
- Safety data sheets to be obtained and reviewed prior to any dangerous, hazardous, or potentially contaminating substance is approved for use on site.
- Plant and vehicles selected for construction are fit for purpose and weed and pest free.
- Imported materials shall not contain any contaminants or pest species.

## 8.3 Environmental Exclusion Zones

| | |
|---|---|
| **Map of proposed clearance area:** |  |




*Figures 4 & 5: Construction Footprint/Native Vegetation Clearance Boundary.*

The approved Construction Footprint is within the approved Native Vegetation clearance boundary in the figures shown above. The co-ordinates for this boundary shall be provided by the Principal to the Contractor to enable setting out of the approved clearance boundary for the Project and implementation of physical signage and barriers as applicable to prevent any works occurring outside of the approved clearance boundary.

The Principal has confirmed that all works confined within the approved Construction Footprint will not impact any known areas of cultural significance.

It is also noted that clearing works within the approved Construction Footprint are to be kept to the minimum practicable areas required to safely and efficiently construct and operate the VS1 facility.

## 8.4 Conditions of Development Approval – CEMP Requirements

The VS1 Development Approval (DA 010/V061/17 V3) Conditions require specific items to be addressed within the Project CEMP. Specifically, the Development Approval Conditions state:

*'A Construction Environmental Management Plan (CEMP), prepared in accordance with current industry standards (including the EPA Guideline: Construction environmental management plans (CEMP)) and in consultation with relevant State Government agencies, shall be implemented to the satisfaction of Minister for Planning, prior to the commencement of construction. The CEMP should address the specific elements of the project outlined in the development application and be amended to incorporate environmental management measures identified through these conditions of approval.*

*Construction of the project must be in accordance with the approved CEMP and include specific management measures or plans for at least the following aspects:'*

These minimum requirements are listed and mapped to the relevant sections of this CEMP in the table below:

| Development Approval Conditions Requirement | Location of CEMP or reference document that stated requirement is addressed |
|---|---|
| a) Noise and vibration. | Section 9 – Objectives, Targets and KPIs<br>Section 11 – Noise & Vibration Management Plan |
| b) Air quality and dust (especially during the clearing of the site in preparation for construction and from the access road). | Section 9 – Objectives, Targets and KPIs<br>Section 12 – Air Quality Management Plan |
| c) Native flora and fauna. | Section 9 – Objectives, Targets and KPIs<br>Section 13 – Native Flora and Fauna Management Plan |
| d) Aboriginal heritage. | Section 9 – Objectives, Targets and KPIs<br>Section 14 – Aboriginal Heritage Management Plan |
| e) Traffic and access. | Section 9 – Objectives, Targets and KPIs<br>**HOLD 2** – Project Specific Traffic Management Plan to be developed. |
| f) Erosion and stormwater management. | Section 9 – Objectives, Targets and KPIs<br>Section 15 – Soil Erosion & Drainage Management Plan |
| g) Waste management (including litter). | Section 9 – Objectives, Targets and KPIs<br>Section 16 – Waste Management Plan |
| h) Storage and handling of hazardous substances. | Section 9 – Objectives, Targets and KPIs<br>Section 10.6 – Hazardous Substances |
| i) Weeds and pests. | Section 9 – Objectives, Targets and KPIs<br>Section 17 – Weed and Pest Management Plan |
| j) Water quality. | Section 9 – Objectives, Targets and KPIs<br>Section 18 – Water Management Plan |
| k) Fire risk. | Section 9 – Objectives, Targets and KPIs<br>Section 10.5 – Construction Site Establishment<br>Section 10.6 – Hazardous Substances<br>Section 19 – Fire Management Plan<br>Section 23 – Emergency Preparedness and Response<br>42104-PLN-PM-007 Project Specific Emergency Response Management Plan |
| l) Flood risk. | Section 15 – Soil Erosion & Drainage Management Plan<br>42104-HS-PLN-0007 Project Specific Emergency Response Management Plan |
| m) Public safety. | 42104-PLN-PM-005 Project Specific Health and Safety Management Plan<br>42104-PLN-PM-007 Project Specific Emergency Response Management Plan |
| n) Emergency response planning. | 42104-PLN-PM-007 Project Specific Emergency Response Management Plan |
| o) Site remediation (post construction). | Section 9 – Objectives, Targets and KPIs<br>Section 13 – Native Flora and Fauna Management Plan |
| p) Complaint management procedure. | 42104-PRO-CM-001 Complaints Management Procedure |

# 9 OBJECTIVES, TARGETS AND KEY PERFORMANCE INDICATORS

The CEMP has been prepared in a manner to ensure that objectives are assessed and communicated to project personnel, initially, at induction and, then through the course of the works. Normal communication processes will ensure all project personnel are fully informed of the project environmental goals and performance standards.

| ASPECTS | TARGETS |
|---|---|
| Noise & Vibration | Protect personnel health & environment from noise & vibration Impact<br>• No noise complaints for the Project.<br>• No unintended environmental impacts due to vibration during construction. |
| Air Quality | No effects on individuals or simultaneous operations<br>• Dust and other emissions do not adversely affect the workforce or relevant stakeholders. |
| Native Flora and Fauna | Protect vegetation and fauna<br>• Vegetation and habitat to be retained is protected from damage.<br>• No unauthorised disturbance to vegetation, fauna, or habitat.<br>• No clearing works or site access outside of approved clearing footprint. |
| Aboriginal (Cultural) Heritage | Protect Aboriginal (Cultural) Heritage at Site<br>• Specified areas of potential Cultural Heritage to be protected from damage.<br>• No unauthorised entry to or disturbance to specified areas of potential Cultural Heritage. |
| Traffic and Access | All Project traffic to utilise approved routes and stay within approved construction footprint at all times. |
| Erosion, Sedimentation and Stormwater | Mitigation and management of pollutants and / or sediment at site:<br>• No uncontrolled water discharges on site.<br>• Mitigation and management measures to be implemented to reduce erosion and sediment risk from rain events during construction. |
| Waste (including spoil) | Recycle and re-use.<br>• Minimise waste produced.<br>• Maximise recycling.<br>• Dispose of waste to appropriately licensed facilities. |
| Chemical Storage, Maintenance and Refuelling | No pollution<br>• Storage and handling of materials does not result in pollution.<br>• Dangerous, hazardous, and potentially contaminating materials are managed to avoid pollution. |
| Weeds and Pests | No pests or weeds<br>• No introduced pest plants or animals onto the site.<br>• No removal of pest plants or animals off site in an uncontrolled manner. |
| Water Quality | No adverse effects on local environment, aquifers or watercourses.<br>• Water sourced from approved sources.<br>• Site sewage disposed offsite to approved facility via licensed carrier.<br>• Water disposed of at site only as approved and using appropriate control measures. |
| Fire | Minimise the risk of fire resulting from the construction of the project. |

## 9.1 Environmental Performance Monitoring

The project HSE manager (or delegate) is responsible for the completion of the monthly project HSE report. Environmental items related items to be reported on include, but is not limited to:

- Project hours.
- Environmental incidents.
- Area of ground disturbance
- Volume of topsoil stripped
- Fuel usage.
- Water usage.
- Waste management records.

All incidents and non-conformances will be reported in accordance with the Project wide HSE incident and hazard reporting system.

Reports required by the Principal will be the responsibility of the project manager and will be completed and submitted as specified in the contract.

# 10 LEADERSHIP

## 10.1 Organisation Chart

The success of the CEMP is dependent on the clear and concise assignment of accountability to key positions within the organisational structure. Primero management are aware of the Principals minimum operating requirements and will interface with the Principals site management to ensure Primero and any subcontractors, meet, or exceed Principal standards.

## 10.2 Project Management Organisation Structure

Refer Primero project organisational chart (42104-PLN-PM-009).

## 10.3 Individual Responsibilities

**Project Manager and Construction Manager**

- Directly accountable for the safe and environmentally acceptable operation of site works and compliance with the CEMP and statutory requirements.
- Plan and establish the required site facilities.
- Provide the necessary resources to minimise any environmental impacts from the project.
- Provide the necessary resources to ensure effective induction and training of all employees, subcontractors, and visitors.
- Provide direction and guidance to the site manager, HSE Advisors and supervisors to implement the CEMP.
- Report any incident that may result in environmental harm.
- Ensure all employees report any environmental risks or hazards.

**Project HSE Manager (or delegate)**

- Provide input to the stakeholder engagement, design, procurement, and construction teams to ensure environmental requirements for the project are addressed.
- Checks all environmental requirements, licences and procedures are implemented.
- Periodic monitoring of performance and adherence to the requirements of the Primero EMS.
- Oversee the planning, preparation, maintenance, operation, and surveillance of the CEMP and procedures.

- Review and update the environment objectives and targets and develop and support strategies to meet these objectives and targets.
- Evaluate and ensure legal compliance.
- Report any legal non-compliances to the project manager and Corporate HSE Manager.
- Encourage environmental innovation and ensure that environmental initiatives are incorporated in the approach to project management and performance.

**HSE Advisors**

- Communicate and assist management and employees to implement this CEMP.
- Advise management on environmental requirements and assist to correct any non-conformances that have been identified.
- Provide assistance in incident response, investigation, and reporting.
- Liaise with Principal representatives on environmental matters.
- Conduct regular environmental inspections of the work area and manage any actions that have arisen.
- Provide training to employees on environmental matters.
- Assist with weekly and monthly environmental reports.
- Maintain any required environmental registers.
- Attend / facilitate risk assessment workshops ensuring that any environmental risks are identified.

**Site Engineer**

- Be familiar with the CEMP.
- Review design in the field, in relation to the environmental context of the site, to avoid impacts, and advise the construction manager of the circumstances.
- Seek advice from the project HSE manager if there is a perceived risk of impacts.
- Report any incident that may result in environmental harm that arises in the course of, or in connection with, their work.
- Ensure all employees report any environmental risks or hazards.

**Supervisors**

- Establish site controls as per the CEMP and procedures.
- Carry out regular environmental site inspections and propose and implement actions to address shortfalls.
- Assist with the induction and training requirements of the project.
- Implement mitigation measures in the event of actual or potential non-conformances or emergencies.
- Exercise an appropriate level of diligence in enforcing work practices that minimise adverse environmental impacts.
- Ensure all employees in the workplace are aware of the environmental issues associated with the works and comply with environmental requirements.
- Report any incident that may result in environmental harm that arises in the course of, or in connection with, their work.
- Ensure all employees report any environmental risks or hazards.
- Liaise with subcontractors to ensure prompt response when environmental issues are raised.

**Employees, Subcontractors and Labour Hire Personnel (including Principal's Personnel)**

All employees (including subcontractors) have an obligation to protect the environment through carrying out their own work with due diligence. In particular, they must:

- Comply with statutory and project requirements, as identified at the time of induction, as they apply to the type of work the employee is involved in.
- Be aware of the requirements of the CEMP, including environmental responsibilities and measures to minimise impacts.
- Comply with instructions / directions given by site management and the HSE advisor.

- Report any incident that may result in environmental harm that arises in the course of, or in connection with, their work.

## 10.4 Construction Site Establishment

The Construction Manager, in consultation with the site Supervisor will, at the start of a project, consider suitable locations for site facilities including office buildings, equipment storage and refuelling compounds, access tracks, laydown areas and the location of waste storage.

Factors to be considered prior to finalising locations will be:

- Location of sources of water (for this project, water will be sourced from water tanks).
- Location of drainage lines – permanent and temporary.
- Location of any areas to be protected (habitat, vegetation, heritage etc.).
- Location of any sensitive neighbours (note that there are non currently identified).
- Access and egress to and around any compound including parking.
- Aesthetics of any compound.
- Emergency service access and availability.
- Firefighting and evacuation potential.
- Possible vandalism potential.

Once site locations are established and agreed with the Principal, it is the responsibility of the construction manager or his nominee to ensure that locations are correctly used and maintained.

At the end of the project the construction manager shall ensure that any locations used for site facilities are rehabilitated to as close as practicable to the original state, based on pre-construction photography.

## 10.5 Hazardous Substances

Hazardous or Dangerous goods shall be identified as part of the Project Risk Assessment.

Hazardous chemicals will be documented on a Project Haz Chem register. A risk assessment will be completed for high-risk Hazardous Chemicals. They will be accompanied by the appropriate Safety Data Sheet (SDS). All SDS will be current and up to date. (Within 5 years).

Where required licences and permits will be obtained to for storage of hydrocarbons or chemicals, including Hazardous substances.

Hydrocarbons and chemicals, including waste, are to be stored within a bunded area. Temporary storage in bunded pallets is acceptable. Empty/used hydrocarbon and chemical containers must also be bunded at all times. Bunds are required to contain 110% of the volume of the largest container or 25% of the total volume of all containers in the bund.

Bulk fuel storage tanks are to be above-ground and double skinned (self-contained). Adequate crash protection is required such as bollards or windrows to prevent penetration from vehicle collision. Hydrocarbon and chemical storage vessels and bulk fuel tanks are required to be labelled. Fire extinguishers and spill kits must be available at these storage areas.

All personnel working with hazardous chemicals will be provided with information (via SDS, training and information sessions) regarding the safe use of the substance. Adequate labelling must be maintained on all chemical containers until final disposal of the container at an approved facility. Decanting of chemicals into unlabelled or inappropriate containers is strictly prohibited.

Chemicals will be used in accordance with manufacturer's instructions. Personnel will wear PPE nominated on the SDS as a minimum requirement. PPE requirements will be required for the work in which the hazardous substance(s) will be used. Chemicals will be stored in hazardous storage cupboard compliant to AS1940:2017.

Spill kits will be available at all sites where chemicals are present and are being stored. Fire extinguishers will be placed, and sign posted at sites near stored chemicals and hazardous substances.

## 11 CONSTRUCTION NOISE & VIBRATION MANAGEMENT PLAN

The following outlines the project requirements for any construction noise and vibration caused by the works.

| References | Aspect |
|---|---|
| Site Characteristics | • Construction activities undertaken by heavy earthmoving equipment<br>• Transport and delivery by light vehicles and trucks |
| Sensitive Receptors | • Residential dwellings.<br>• Wildlife. |
| High Risk Activities | • Excavation works (topsoil removal, bulk earthworks etc.)<br>• Loading and transport of excavated spoil (as required)<br>• Stockpiling and backfill of spoil<br>• Import, placement and compaction of select fill (e.g.: earthworks pad build-up, road construction)<br>• General plant and vehicle use and site access |
| Potential Impacts | Noise and vibration from construction activities may impact on nearby sensitive receptors including residential dwellings and/or wildlife. |
| Targets | Protect Personnel Health & Environment from Noise & Vibration Impact<br>• No noise complaints for the Project.<br>• No unintended environmental impacts due to vibration during construction. |
| Controls | • Throughout construction activities the Contractor will be required to observe all obligations under the Environment Protection Act 1993 and Section 6 of AS2436 – 1981 “Guide to Noise Control on Construction, Maintenance and Demolition Sites”.<br>• Activities to be undertaken must be compliant with requirements of Environment Protection (Noise) Policy 2007.<br>• All vehicles and equipment will be operated and maintained to comply with regulatory standards in order to control noise emissions.<br>• Appropriate routes for light and heavy construction vehicles selected to minimise disturbance prior.<br>• Construction traffic must use agreed access roads to travel to and from site. Approved areas for parking will be identified.<br>• Construction to occur only during the hours specified and approved hours.<br>• Works carried out outside of the hours will only entail:<br>  ◦ works that do not cause noise emissions which exceed the noise limits of the Policy at any nearby dwelling not associated with the project; or<br>  ◦ emergency work to avoid the loss of lives, property, and/or to prevent environmental harm; or<br>  ◦ works with the prior consent of the Environment Protection Authority (EPA) (an example might be occasional concrete pours on hot days).<br>• Nearby residents/stakeholders will be notified of construction activities.<br>• Separation distances maintained to the greatest extent possible from construction works or fixed plant, to any sensitive receptors.<br>• Noise monitoring undertaken if required upon receipt of a complaint |
| Monitoring (refer below) | • Noise monitoring will be conducted if complaints are received or to verify that the established controls are effective |
| Contingency Actions | • If an activity is causing abnormal or high noise emissions, the activity will cease until appropriate noise controls are put in place to reduce the noise emissions, of an alternate less noisy construction methodology is developed. |

# 12 AIR QUALITY (DUST) MANAGEMENT PLAN

The following outlines the project requirements for any air emissions caused by the works.

| References | Aspect |
|---|---|
| Site Characteristics | • Local soils exposed after vegetation clearance or disturbed by general access within or near construction present a risk of dust generation.<br>• Minor localised dust from vehicle movements and plant operation |
| Sensitive Receptors | • Construction and operational personnel on site<br>• Passing motorists<br>• Passing trains<br>• Surrounding vegetation and fauna |
| High Risk Activities | • Excavation works (topsoil removal, bulk earthworks etc.)<br>• Loading and transport of excavated spoil (as required)<br>• Stockpiling and backfill of spoil<br>• Import, placement and compaction of select fill (e.g.: earthworks pad build-up, road construction)<br>• General plant and vehicle use and site access |
| Potential Impacts | • Reduced visibility<br>• Visibility and breathing impaired on site<br>• Smothering of vegetation and impacts to wildlife |
| Targets | • None or minor visible dust only.<br>• No community complaints |
| Controls | • Monitor wind and weather forecasts (Bureau of Meteorology) and cease non-essential operations during excessively windy conditions.<br>• Adhere to site speed limits and designated roads.<br>• Operate water carts during dry, windy conditions, and during the summer months, across the site to apply water to unsealed areas (i.e., roads and loading areas).<br>• Management of stockpile heights, location and orientation.<br>• Apply water sprays to stockpiles, loading and trafficable work areas, if deemed by the Contractor to be required |
| Monitoring (refer below) | • Community and/or personnel dust monitoring to verify effectiveness of controls.<br>• Monitoring will comprise ongoing visual assessments (including monitoring impact of dust on vegetation) and formal inspections (refer below)<br>• Monitor wind and weather and record conditions with potential to cause disturbance.<br>• All site staff will be responsible for reporting high or abnormally dusty conditions to the Site Manager as soon as is reasonably practicable. |
| Contingency Actions | • If an activity is causing high or abnormally dusty conditions (determined by dust monitoring or visual assessment), the activity will cease until weather conditions change or appropriate dust controls are put in place to reduce the dust emissions. |

# 13 NATIVE FLORA AND FAUNA MANAGEMENT PLAN

This outlines the project requirements for vegetation/habitat clearance, protection of vegetation adjacent to the works and protection of fauna.

| References | Aspect |
|---|---|
| Site Characteristics | **Flora:**<br>• Native flora general location<br>• One State and EPBC threatened flora species: Gratwickia monochaeta (One-bristle Everlasting). Not found in the areas likely to be impacted by the Project<br>**Fauna:**<br>• Native fauna general location<br>• One threatened fauna species was recorded in the Project Area in 2022: Southern Whiteface (Aphelocephala leucopsis)<br>  <br>  |
| Sensitive Receptors | • Wildlife and native vegetation<br>• Wedge tailed-eagles<br>• Southern Whiteface (Aphelocephala leucopsis)<br>• Blue-winged Parrot.<br>• Spring Migratory birds |
| High Risk Activities | • Vegetation Clearance and topsoil stripping<br>• Excavation<br>• General access and site establishment<br>• Construction of evaporation pond |
| Potential Impacts | • Smothering, damage, or destruction of vegetation and/or habitat beyond construction footprint and access tracks.<br>• Injury, death or displacement of fauna<br>• Potential for legal compliance/approvals breach if protected fauna injured or killed. |
| Controls - Preconstruction | • Minimise the construction footprint to avoid the disturbance of native vegetation, where possible.<br>• Implement clearing permits and install appropriate demarcation to identify extent of native vegetation clearance area for the Project.<br>• Notify construction personnel of vegetation to be protected or avoided (weed-affected areas) and the appropriate protection measures during the site induction process and through site demarcation controls (e.g.: exclusion zone implementation).<br>• Plan access tracks, plant/vehicle parking and stockpile locations away from vegetation to be retained and protected. |

| References | Aspect |
|---|---|
| Controls - Construction | • Clearly identify exclusion zones on permit drawings.<br>• Supervisor, operator, and spotter to walk the perimeter of the area to be cleared checking that the boundary is clearly surveyed, pegged, and flagged as per the permit drawings.<br>• Mark access tracks and keep traffic to these areas. Restrict construction traffic speed limits.<br>• Clear vegetation only in accordance with the specifications set out in the approved clearing permit and minimise clearance to only that required for construction.<br>• Cleared vegetation and topsoil to be stockpiled appropriately.<br>• Check excavations and materials at the start of each day to ensure there is no trapped fauna and, where possible, cover/seal excavations and pipe openings etc. at night to prevent entry.<br>• Check evaporation pond for bird-activity<br>• Clearing works to be conducted in daylight hours only.<br>• |
| Monitoring | Monitoring will comprise:<br>• Inspections of the perimeter of the site for damaged or smothered vegetation.<br>• Inspections of trenches and pipes etc. for any trapped fauna.<br>• Site walks to identify any potential bird habitat areas.<br>• A log of unplanned incidents involving flora and fauna will be maintained. |
| Contingency Actions | • If there is any unauthorised damage to vegetation, clearing works shall immediately cease, while all protection measures will be reviewed and replaced/repaired where required, and personnel will be reminded of the requirements during a toolbox session.<br>• If any fauna is injured or killed, an incident shall be raised. |

# 14 ABORIGINAL HERITAGE MANAGEMENT PLAN

The following outlines the project requirements for management and protection of known and suspected Heritage sites, discovery of any fossils, artefacts, or objects of antiquity or of anthropological interest.

| References | Aspect |
|---|---|
| Site Characteristics | • The project site is within the traditional lands of the Barngarla people. Any heritage artefacts discovered on site are protected by the Aboriginal Heritage Act 1988.<br>• Cultural heritage surveys have been completed which did not identify any artefacts. There are areas on the project site with a high potential to contain artefacts, but these areas have been excluded from the construction footprint. However there is a remote possibility that artefacts may be identified within the construction area and if identified, works shall cease to ensure they are not disturbed and the protocols to be followed are identified within figure 6 below.<br>• No sites of European Heritage have been identified within the site.<br>• |
| Sensitive Receptors | • Barngarla Community |
| High Risk Activities | • Vegetation clearing and topsoil stripping.<br>• Excavation and bulk earthworks. |
| Potential Impacts | • Damage to sites or artefacts of Aboriginal or European heritage or to their setting. |
| Targets | Protect Aboriginal (Cultural) Heritage at Site<br>• Specified areas of potential Cultural Heritage to be protected from damage (note there are currently no specified areas identified by the Principal to the Contractor).<br>• No unauthorised entry to or disturbance to specified areas of potential Aboriginal Heritage |
| Controls | • The Native Vegetation clearance boundary will be identified and demarcated at Site, which will serve as a control to ensure any high potential areas of cultural significance are not disturbed as noted above, the identified areas are outside of the construction footprint.<br>• Based on the Principal's guidance that the Site does not have any known Aboriginal or European heritage sites, the project focus will be on potential identification of artefacts or remains during soil disturbance activities. |
| Monitoring (refer below) | • Project personnel will be advised of the potential for Aboriginal Heritage at the Site and informed of the protocols to follow in the event of a suspected find as noted in the Contingency actions section below. |
| Contingency Actions | • Should any suspected archaeological occurrences or skeletal human remains be located during the course of the works the contractor and the Principal must report such an occurrence to the appropriate Aboriginal organisations in accordance with the Aboriginal Heritage Act 1988.<br>• All work is to cease that may negatively impact on the sites integrity until it has been assessed by an appropriately qualified Cultural Heritage professional with representation from the Indigenous recognised Aboriginal stakeholders<br>• The process for suspected discoveries is outlined in the below flowchart. |

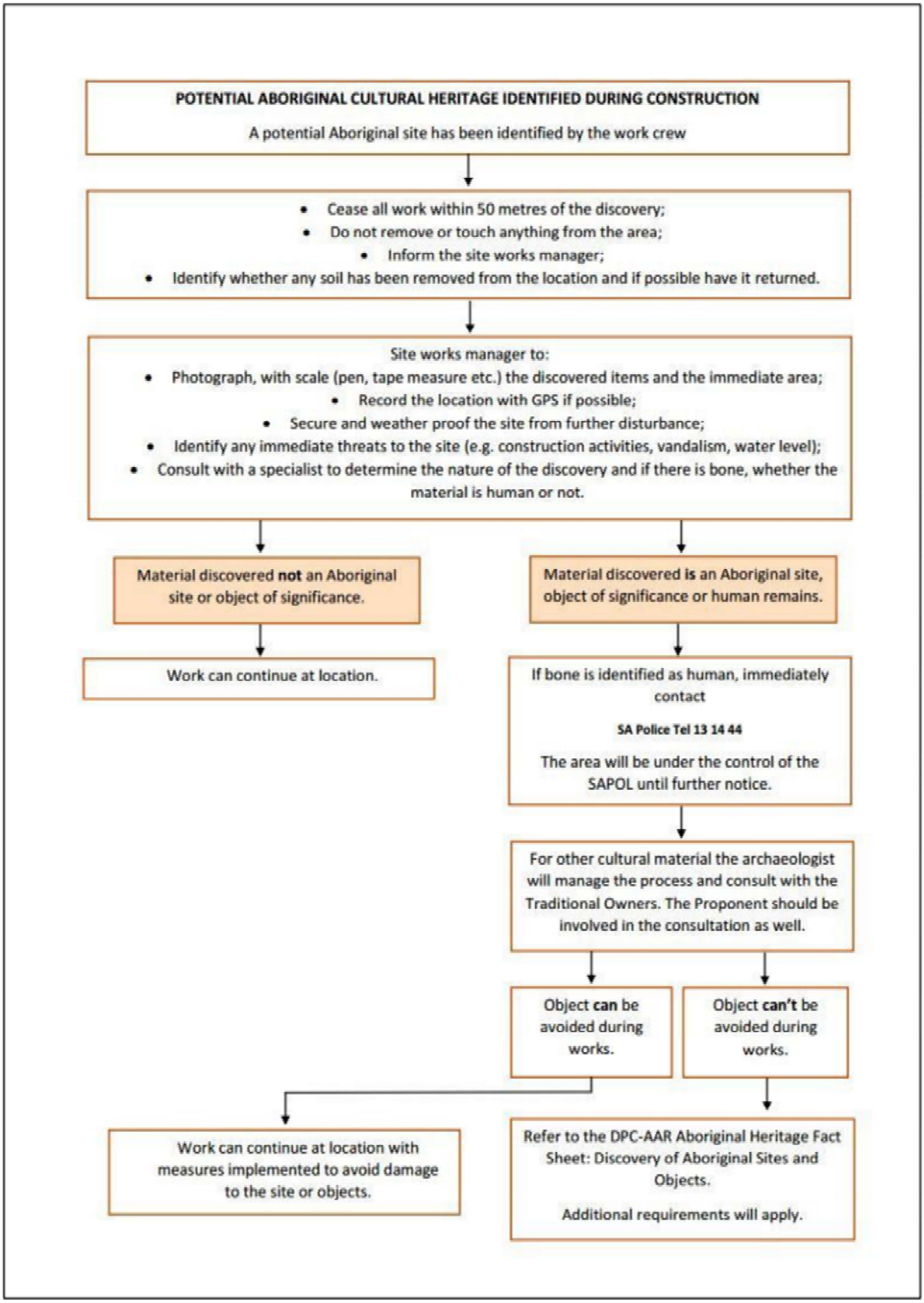



*Figure 6: Potential Aboriginal Cultural Heritage Discovery Flow-Chart*

# 15 SOIL EROSION & STORMWATER DRAINAGE MANAGEMENT PLAN

The below outlines the project requirements on erosion and sediment control in order to safeguard soil loss and in turn sedimentation and potential water quality impacts.

| References | Aspect |
|---|---|
| Sensitive Receptors | • Native vegetation<br>• Wildlife<br>• Drainage lines and waterways<br>• Stuart Hwy |
| High Risk Activities | • Vegetation clearing and topsoil stripping.<br>• Excavation and bulk earthworks.<br>• General sites access and establishment. |
| Potential Impacts | • Contaminated watercourses<br>• Lose of vegetation<br>• Damage to infrastructure<br>• Impact on motorists utilising Stuart Hwy<br>• Damage to topsoil and subsoil<br>• Reduction in agricultural capacity of land<br>• Decrease in water quality and aesthetic of water courses |
| Targets | Mitigation and management of pollutants and / or sediment at site:<br>• No uncontrolled water discharges on site.<br>• Mitigation and management measures to be implemented to reduce erosion and sediment risk from rain events during construction. |
| Controls | • Management of surface water during the works until the completion of works<br>• Do not clear any excess vegetation<br>• Minimise the extent and duration of soil exposure<br>• Sequence earthworks activities, so that water runoff feeds into established drainage channels with minimal or no scouring<br>• Diversion of clean water from work areas<br>• Diversions to prevent surface waters discharging onto the Stuart Hwy.<br>• Do not drive equipment off established tracks or create unnecessary compacted soils<br>• Multiple handling of soil materials increases the risk of damage to soil structure so should be minimised<br>• Ensure topsoil stockpiles are not located in drainage lines or areas of low topography, with stormwater diverted around these areas<br>• Deep rip and rehabilitate compacted temporary construction areas and respread topsoil and vegetation material.<br>• Temporary erosion and sediment controls will be assessed as required |
| Monitoring | • Inspect and maintain any sediment control and stormwater drainage devices at all times, particularly after rainfall events. |
| Contingency Actions | • Assess effectiveness of site drainage, erosion and sediment controls after rainfall events.<br>• Excavate and recontour any temporary drainage that becomes sediment laden |

# 16 WASTE MANAGEMENT PLAN

This below outlines the project requirements for the minimisation and management of wastes from the works.

Ongoing controls will be installed throughout the works.

**Waste:** any discarded, rejected, abandoned, unwanted or surplus matter, whether intended for sale or for recycling, reprocessing, recovery, or purification by a separate operation from that which produced the matter.

**Waste Management Hierarchy:**

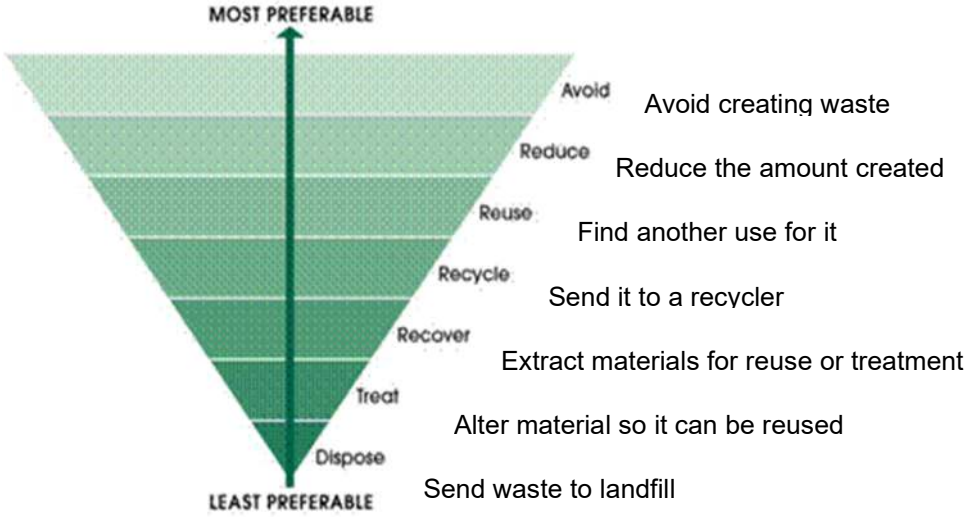



*Figure 7: Waste Management Hierachy*

| References | Aspect |
|---|---|
| Site Characteristics | Wastes generated from the works include:<br>• Fresh concrete, slurry, and wash water.<br>• Steel surface preparation wastes (metals and paint fragments).<br>• Surplus /used oils, chemicals, e-waste and paints (hazardous waste).<br>• Sewage from site facilities.<br>• Putrescible waste from crib rooms / site offices.<br>• Timber from packaging, dunnage.<br>• Steel offcuts from on site fabrication activities, removal of temporary transport steel, etc. |
| Sensitive Receptors | • Local environment (land & water)<br>• Landfill<br>• Local community (residents, recreational users etc.) |
| High Risk Activities | • General works<br>• Concrete works<br>• Materials handling / unpacking |
| Potential Impacts | • Generation of excessive waste<br>• Waste impacts adjacent to site (e.g.: wind-blown waste travelling off-site)<br>• Landfill volumes<br>• Pest attraction |

| References | Aspect |
|---|---|
| Objectives | • Recycle and Reuse<br>• Minimise waste produced.<br>• Dispose of waste to appropriately licensed facilities.<br>• Ensure adequate waste capture and storage on site (prior to appropriate disposal) |
| Controls - General | • Carry out works in a way that minimises the generation of waste in accordance with the Waste Management Hierarchy.<br>• Avoid over ordering and overuse of materials and encourage attention to recycling.<br>• Direct the maximum practicable quantity of waste to recycling.<br>• Cover or enclose waste to prevent spread by wind and fauna.<br>• Do not burn waste.<br>• Do not discharge or dispose of any liquid wastes on site.<br>• Collect surplus materials and dispose of at EPA licensed facilities.<br>• Remove wastes from the site using appropriately licensed waste transporters.<br>• Store waste from site ablution facilities in tanks for final disposal by a licensed Waste Disposal Contractor. |
| Controls – Chemicals (Hazardous waste) | • Collect surplus materials, waste oils, e-waste and dispose of at appropriately licensed facilities.<br>• Store controlled waste in a manner that prevents spillage, in accordance with the associated SDS.<br>• Liquid wastes are to be stored in appropriate containers in bunded areas (or equivalent purpose-built device). |
| Controls – Concrete | • Control all discharges of concrete wastes (including concrete pump hopper and hose wash-water, concrete/grout chute wash-water and testing equipment wash-water) to prevent release to the land.<br>• Establish a plastic-lined concrete washout tray/bin in a convenient location on land for concrete works and ensure all relevant personnel are aware of the location and the requirements for use.<br>• Prior to ordering, direct all concrete truck and concrete pump contractors to remove from site any surplus concrete or grout remaining within the truck/pump after delivery.<br>• Direct all concrete truck/pump contractors to discharge other concrete/grout waste (including concrete pump hopper and hose wash-water, concrete/grout chute wash-water and testing equipment wash-water) to the concrete washout pit/tray/bin. |
| Monitoring (refer below) | • Inspection of waste management practices<br>• Waste volumes, types, and destinations<br>• Maintain records of weight of waste removed from site as well as destination. |
| Contingency Actions | • If waste is not managed in accordance with this process, an incident will be raised. |

# 17 WEED AND PEST MANAGEMENT PLAN

The below outlines the project requirements for management of weeds on site.

| References | Aspect |
|---|---|
| Sensitive Receptors | • Soils over site generally<br>• Local flora<br>• Local and regional community |
| High Risk Activities | • Excavation, loading and stockpiling in general.<br>• General access |
| Potential Impacts | • Increased spread of invasive weeds<br>• Increased infestation of pests<br>• Import of invasive weeds and pests |
| Targets | • Control of site weeds and pests.<br>• No spreading of weeds or pests as a result of works. |
| Controls – Clearing & access track construction Phase | • All plant, equipment and vehicles will be inspected for weeds and seeds and cleaned prior to mobilisation and inspected upon arrival at site, accompanied by a Weed Hygiene Certificate<br>• All plant, equipment and vehicles being demobilised post this work phase will be inspected for weeds and seeds and cleaned prior to demobilisation as required. |
| Controls – post clearing and access track construction. | • All plant, equipment and vehicles will be inspected for weeds and seeds and cleaned prior to mobilisation and inspected upon arrival at site.<br>• Restrict construction traffic to existing roads and designated access tracks and limit access of construction personnel to areas inside nominated construction areas. |
| Monitoring | • Equipment weed hygiene inspected prior to entering (at initial Mobilisation) or departing site (on Demobilisation).<br>• Once the site has been cleared of vegetation and topsoil, and access tracks and general work areas established only equipment arriving to site will be inspected. Equipment that arrived after the site is sterile will not require inspection upon departure; and<br>• Weed Hygiene Certificate records may be inspected as part of inspection and auditing programs.<br>• Weed outbreaks shall be monitored during the Works and if weed treatment is deemed to be required, this shall be undertaken in consultation with and only after consent is received from the landowner(s). |
| Contingency Actions | • Any incidents or events relating to the spread of weeds or pests as a result of works will be reported to the Principal as soon as possible.<br>• Post initial site clearing works where plant that may collect weed/seeds will remain on site until clearing is complete; any plant or vehicles noted as bearing weed-affected material that cannot be adequately cleaned at site (e.g.: via compressed air blow-down or water/detergent wash-down) will be either quarantined on site for later wash-down or immediately sent offsite for wash-down. |

# 18 WATER MANAGEMENT PLAN

The below outlines the project requirements to manage the water supply and discharge associated with construction activities and ancillary project facilities.

| References | Aspect |
|---|---|
| Sensitive Receptors | • Local flora and fauna<br>• Local community<br>• Waterways |
| High Risk Activities | • Vegetation clearing and topsoil stripping<br>• Sourcing and distributing construction water<br>• Hydrotesting<br>• On-site ablution facilities |
| Potential Impacts | • Groundwater contamination can result from poor hydrocarbon and chemical storage, handling and disposal Increased infestation of pests<br>• Surface water pollution or local drainage characteristics altered<br>• Compliance breaches with approvals / licences |
| Targets | No Effects on local environment, aquifers or watercourses.<br>• Water sourced from approved sources.<br>• Site sewage disposed offsite to approved facility via licensed carrier.<br>• Water disposed of at site only as approved and using appropriate control measures. |

| References | Aspect |
|---|---|
| Controls | Construction Water:<br>• All construction water is to be obtained from authorised sources. SA Water have indicated that a potable water connection to their existing water infrastructure can be supplied<br>• Water carts will be utilised to distribute water to site for construction and dust suppression.<br>• No saline groundwater is to be utilized on site<br>• Construction water tested (if required) to ensure suitability for use.<br>To minimise the impact on natural drainage patterns and surface water quality:<br>• Implement control measures (such as silt fencing and coir logs) to mitigate the risk of contaminated stormwater (sediment and hydrocarbons) entering surface water features or running-off the project boundary.<br>• Only wash vehicles and equipment in designated and approved locations.<br>• Construction materials shall not be placed or stored in drainage lines.<br>• Contaminated soils to be immediately cleaned-up and stored in bunded area or bin prior to disposal at an approved facility.<br>• Servicing and maintenance of equipment to be conducted in designated and approved locations and facilities,<br>• Wastewater (wash-down water, basin water, hydrotesting water) is not to be discharged to the environment without authorisation.<br>To minimise the likelihood of sewage contamination from site ablutions:<br>• temporary self-contained ablution facilities will be fitted with audio and visual high-level alarms.<br>• The ablution facility is to be inspected regularly to ensure there are no leaking taps and cisterns, and<br>• Sewage is to be transported and disposed of by a licensed contractor. |
| Monitoring | • Monitor and report volume of construction water utilised.<br>• Leaking pipes, taps and cisterns shall be regularly inspected.<br>• Maintain records and receipts of sewage removed off site by the licensed contractor |
| Contingency Actions | • Any contaminated areas resulting from poor water quality will be remediated and reinstated |

Please also refer to section 15 Soil Erosion and Stormwater Drainage Management, that deals with these environmental aspects.

# 19 FIRE MANAGEMENT PLAN

The below outlines the project requirements to minimise the risk of fire resulting from the construction of the VS1 CSP project.

| References | Aspect |
|---|---|
| Sensitive Receptors | • Flora and Fauna<br>• Local and regional community<br>• Nearby residences |
| High Risk Activities | • Early site works (e.g.: survey) prior to clearing and earthworks commencement.<br>• Clearing and grubbing<br>• Hot works<br>• Operating earthmoving equipment |
| Potential Impacts | • Dry grass ignition causing damage to the grazing paddocks, local infrastructure and the project.<br>• Fire may spread causing damage to the project infrastructure and ancillary services and structures<br>• Smoke may disrupt traffic on the adjacent primary arterial road. |
| Targets | • Minimise the risk of fire resulting from the construction of the VS1 CSP project. |
| Controls - Preconstruction | • Liaise with CFS during the pre-construction stage with regards to requirements surrounding construction, during the “Fire Danger Period”<br>• Determine, in consultation with CFS, the appropriate firefighting measures and equipment required on site during construction.<br>• Provide CFS and SES information regarding the location of the equipment and measures implemented during the construction stage. |

| References | Aspect |
|---|---|
| Controls - Construction | • Project Induction<br>• Emergency Response Management Plan<br>• Exotic grass must be no more than 200 mm in height.<br>• Maintenance works such as mowing and tree pruning to be done before entering the Fire Danger Season or under CFS supervision.<br>• Leaf litter must be less than 20 mm deep.<br>• No fires would be lit at any time, for any purpose, including burning waste materials;<br>• Vehicles may only be operated on approved roads and tracks for that class of vehicle. Only diesel powered vehicles may operate “off road” at any time.<br>• Welding to be undertaken under controlled manner.<br>• Minimise on-site storage of flammable materials.<br>• All vehicles to be equipped with compliant fire extinguishers.<br>When conducting work using or generating intensive heat:<br>• Use a fire resistant shield to prevent sparks or hot material from leaving the work area;<br>• Provide a fire proof container for off-cuts.<br>• The work area around active grinding equipment and hot work source (1.5 m) to be kept clear of flammable material or will be kept wet.<br>• Fire extinguishers and water tap to be made available in close proximity of the hot works area.<br>• Location of water supply infrastructure to be clearly indicated on site;<br>• Emergency management plan to include fire risk scenario and emergency drills; and<br>• Firebreaks will typically be created around the perimeter of the site.<br><br>During periods of High Fire Danger:<br>• All hot work will be subject to approval by the Construction Manager (or delegate).<br>• As applicable, hot works shall only be conducted in accordance with CFS Schedule 10 permit requirements.<br><br>During periods of Total Fire Bans:<br>• All hot work will be subject to approval by the Construction Manager (or delegate).<br>• As applicable, hot works shall only be conducted in accordance with CFS Schedule 10 permit requirements. |
| Monitoring | • Workplace inspections to identify fire hazards and adequate supply and maintenance of fire fighting equipment.<br>• Ensure preventive maintenance schedules are in place. |

| References | Aspect |
|---|---|
| Contingency Actions – Emergency Situations | **Equipment Fire**<br>• In the event of equipment fires the following must be undertaken.<br>• Immediately make the Emergency Notification<br>• Park up;<br>• Shut down engine;<br>• Deploy on board fire suppression system (where available);<br>• Stand upwind from the fire;<br>• Ensure you have a safe path of retreat;<br>• Ensure you remain a safe distance from equipment in case of explosion;<br>• Use fire extinguishers if safe to do so;<br>• Test the extinguisher;<br>• Aim the nozzle at base of fire and activate;<br>• If the fire is still burning after the extinguisher is empty retreat at least 500 meters from the front or rear machine.<br>**Building Fire**<br>• In the event of a fire in the office complex,<br>• Immediately make the Emergency Notification;<br>• Isolate power (shut down generator) to building;<br>• If safe to extinguish fire, attempt to extinguish the fire with extinguisher; only if trained to do so;<br>• Do not use water on units until electrical switch boards have been isolated.<br>• Fire wardens are to ensure all personnel are to evacuate to the designated muster points (In the event of wind blowing smoke towards muster points all personnel shall relocate upwind of the affected area);<br>• Roll call to be conducted by using the Pre-Start/Visitors sign on sheet;<br>• Do not leave the designated muster point;<br>• Workers are not to return to the area until the all clear has been given.<br>**Bushfire**<br>• In the event of a bush fire around the laydown or site work areas, Primero will initiate an emergency call and response. The CFS will be notified immediately if the fire becomes uncontained.<br>• This may require heavy earthmoving machinery and water trucks to be on standby to assist in protecting the site infrastructure.<br>• If required a fire break will be installed and area dampened down to minimize the impact of the fire;<br>• Available water trucks to be full and ready to protect plant and building that cannot be moved to a safe area;<br>• All personnel not required must be moved offsite to a safe area. |

# 20 DEMOBILISATION

At completion of the project Primero will conduct a demobilisation checklist with the Principal ensuring any areas that require to be rehabilitated have been completed as per the Contract and that all Primero generated spills, waste, surplus materials, bunded areas, laydowns and facilities have been removed from site unless otherwise specified by the Principal.

# 21 ENVIRONMENTAL SYSTEM REQUIREMENTS

## 21.1 Project Inductions

Prior to commencement of works on site, all personnel must undergo a Primero project induction. Inductions are separated into two categories as follows:

- Full Project Induction - for personnel carrying out works on site for more than 5 days.
- Short Term Induction – for personnel carrying out works on site for 5 days or less.
- Visitor and delivery driver induction – for general visitors not conducting works and delivery drivers.

Visitors must be accompanied at all times by a fully inducted person and must conform to all HSE requirements.

Details of inducted personnel will be recorded on the Project Training Matrix.

## 21.2 Inspections

Inspections shall be carried out as per the schedule below. Actions raised in the inspections will be entered in SAI 360 and should be completed as soon as possible. Issues arising from site inspections shall be discussed at the weekly toolbox meetings and may have non-conformances raised if not addressed in the nominated timeframe.

| FREQUENCY | RESPONSIBLE | RECORD | ISSUES |
|---|---|---|---|
| Prior to works | Primero Logistics | Checklist | • Vehicles and plant are fit for purpose (low noise and emissions) and clean of weed and seed material. |
| Prior to works | Construction Manager | CEMP | • Location of vegetation to be protected and known weed-affected areas.<br>• Location of stormwater entry points and watercourses<br>• Other environmental issues of interest. |
| Daily | Site Supervisor | Daily site inspection | • Spill kit is readily available (Y/N)<br>• Dust control available (Y/N)<br>• All waste and recyclables stored correctly (Y/N)<br>• Chemicals are stored correctly in bunds (Y/N) |

# 22 AUDITING

Environmental management performance is monitored periodically by the Primero project HSE manager (or delegate) throughout the project and feedback will be given to the project and construction manager.

The scope of audit will include daily reporting and monitoring of the implementation and effectiveness of work activities in regard to environmental management, in addition to documented daily and weekly inspections facilitated by the project management team.

All identified corrective actions will be recorded in the project's corrective actions register.

# 23 EMERGENCY PREPAREDNESS AND RESPONSE

The project specific Emergency Response Plan (42104-PLN-PM-007) includes the evacuation process for the site in the event of fire, including bush fire, gas, smoke, or structure collapse, each of which may have environmental consequences. If this occurs, appropriate emergency services will be alerted, rather than engaging site personnel in the control of the situation.

If a major environmental incident with these consequences occurs on or adjacent to the construction site the site evacuation emergency response plan is to be applied, to ensure the safety of personnel.

Essential emergency information will be communicated to all personnel via the site-specific induction. A full list of emergency contacts, including the emergency warden and first aider(s) will be posted at the site notice boards and provided during the induction process.

Emergency response training needs shall be assessed during the project risk register workshop and provided to nominated wardens who have been assigned specific responsibilities in relation to the coordination of emergency responses as soon as practicably possible.

# 24 INCIDENT MANAGEMENT

All incidents, accidents, and near miss events must be reported immediately or as soon as practicably possible by the person(s) involved or witnesses to the site supervisor immediately. In relation to this CEMP environmental incidents will be treated in the same manner as a Health and Safety incident.

Verbal notification shall be made immediately to the Principal representative, construction manager, project manager, and corporate HSE manager in the event of any incident with an actual consequence of "Medium" or above.

The project Construction manager must notify the HSE manager immediately of any notifiable environmental incidents.

Photographic evidence and witness statements must also be utilised and forwarded with the completed report and, if requested, a copy of the relevant risk assessment attached.

The Primero HSE Management Software System will be used to record corrective/preventative actions resulting from the Investigation Reports.

# 25 SUBCONTRACTOR MANAGEMENT

All Subcontractors prior to engagement must be listed as preferred suppliers / providers. An initial assessment is undertaken to evaluate suitability.

Prior to engaging a subcontractor, the nominated subcontractor(s) and their management systems shall be assessed for capability against Primero safety, quality, and environmental and industrial relations requirements.

SWMS's are required from subcontractors prior to commencing activities and must be an equivalent standard to the Primero template. Primero reserves the right to request a subcontractor to use the Primero format.

Subcontractors that are responsible for the supply of any chemical SDS brought onto site both initially and on-going and are also responsible for the provision of appropriate PPE for their employees.

All subcontractor employees are required to attend all weekly toolbox meetings and daily pre-start meetings, and shall be involved, when requested, in the site safety inspections and audits.

# APPENDIX A ENVIRONMENTAL POLICY


## ENVIRONMENTAL POLICY

### PURPOSE

Primero recognises the critical significance of safeguarding the environment sustainably, and the need to mitigate any adverse environmental impacts resulting from our operations and activities.

Our commitment extends to minimising environmental damage, reducing incidents with environmental implications, and continually improving our environmental performance across all areas of our business operations.

### OUR AIM

- Understand and adhere to legislative obligations and requirements, ensuring the environment impacted by our operations is preserved.
- Conduct comprehensive environmental risk assessments and implement effective control measures before the commencement of each project, ensuring a proactive approach to environmental protection.
- Build and continually improve an Environmental Management System in alignment with ISO 14001 standards, reflecting our dedication to continual improvement.
- Implement, achieve, and regularly review objectives and targets focused on reducing environmental risks and enhancing overall environmental performance.
- Minimise environmental impacts by employing integrated management procedures and planning throughout our operations.
- Actively prevent pollution, reduce waste generation, and prioritise waste recovery and recycling over disposal wherever possible, demonstrating our commitment to responsible environmental stewardship.

### OUR ACTIONS

- Communicate clear environmental requirements to our workforce, promoting a shared commitment to environmental responsibility.
- Allocate appropriate resources to ensure the fulfillment of environmental requirements, providing a sustainable approach to resource management.
- Conduct comprehensive evaluation, costing, and detailed incorporation of environmental management considerations in tender bid preparation, demonstrating our commitment to integrating environmental sustainability into all aspects of our operations.
- Regularly review environmental performance, identifying and seizing opportunities for continual improvement in our environmental practices.
- Encourage and seek input from our workforce, incorporating their insights into the development and refinement of our environmental plans and processes.
- Commit to only engaging with suppliers and subcontractors who demonstrate compliance and commitment to our environmental policy, goals, and principles.
- Conduct a review of this Policy and assess its impact every two years, ensuring alignment with evolving business objectives and industry best practices.

***Michael Gollschewski***
*Chief Executive Officer and Managing Director*

21st of December 2023 PRM-HS-POL-0003_1