

Jemalong Solar Farm

Environmental Management Strategy

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ABBREVIATIONS

CoC	Condition of Consent
Council	Forbes Shire Council
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EP&A Act	Environment Planning and Assessment Act 1979
EPC	Engineer Procure Construct
Heavy Vehicle	A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass of more than 4.5 tonnes
HSE	Health, Safety, Environment
HVNL	Heavy Vehicle National Law
Incident	A set of circumstances that causes or threatens to cause material harm to the environment
LEP	Local Environmental Plan
Material harm	<p>Is harm that:</p> <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
MW	Megawatt
NHVR	National Heavy Vehicle Regulator
NSW	New South Wales
O&M	Operation and Maintenance
OEMP	Operational Environmental Management Plan
OSOM	Oversize Overmass
Project Owner	Genex Power Limited (ABN 18 152 098 854)
RMM	Revised Mitigation Measure
RMS	Roads and Maritime Services
Secretary	Secretary of the DPIE (refers to the DPIE approval authority)
SEPP	State Environmental Planning Policy
Site	As shown in Appendix 1 of the Development Consent and Figure 1 of this EMS
SSD	State Significant Development
Upgrading	The augmentation and/or replacement of solar panels and ancillary infrastructure on site (excluding maintenance)
Vehicle movement	One vehicle entering and leaving the site (i.e. two-way)
WHSEMP	Work, Health, Safety and Environmental Management Plan for construction

1. INTRODUCTION

1.1. Purpose of this document

Development Consent has been granted by the NSW Department of Planning, Industry and Environment (DPIE) for the construction, operation and decommissioning of a 50 megawatt (MWac) solar farm and associated infrastructure at Jemalong, New South Wales (NSW) (referred to as the 'Project') (DA ref. SSD [8803](#)).

This Environmental Management Strategy (EMS) is the overarching environmental management document for the Project, relevant to all stages of the Project. It outlines the strategy for achieving full compliance with the Development Consent through the design, construction, operation and decommissioning of the Project.

This EMS addresses Schedule 4, Condition 1 of the Project Conditions of Consent (CoC), shown in Table 1. The CoC are also further discussed in Section 2.1.

Table 1 Condition of Consent relevant to this EMS

Condition of Consent (Schedule 4, Condition 1)	Where addressed
Prior to the commencement of construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:	This document
a) provide the strategic framework for environmental management of the development;	Section 3
b) identify the statutory approvals that apply to the development;	Section 2
c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 3.2
d) describe the procedures that would be implemented to: <ul style="list-style-type: none"> - keep the local community and relevant agencies informed about the operation and environmental performance of the development; - receive, handle, respond to, and record complaints; - resolve any disputes that may arise; - respond to any non-compliance; - respond to emergencies; and 	Section 6 Section 7 Section 7.3 Section 4.5 Section 5
e) include: <ul style="list-style-type: none"> - copies of any plans approved under the conditions of this consent; and - a clear plan depicting all the monitoring to be carried out in relation to the development. 	Section 3.3 Section 4.4 and Appendix A.
Following the Secretary's approval, the Applicant must implement the Environmental Management Strategy.	-

1.2. Project Overview

The Project involves the construction, operation and decommissioning of a 50 megawatt (MWac) solar farm and associated infrastructure. It is located around 35km west of Forbes, NSW. The key components of the Project include:

- photovoltaic solar modules (approximately 170,000 modules)
- single-axis tracking module framing system mounted on steel piles
- 20 containerised Power Conversion Units (PCUs)
- a substation containing transformers, associated switchgear and control and protection equipment
- operations and maintenance buildings with associated car parking
- road upgrade works on the site access route
- above ground and underground cabling
- internal all-weather access tracks
- security system and security fencing
- native vegetation plantings to provide visual screening
- meteorological station(s); and
- a 66kV transmission line (approximately 5km long) connecting the onsite substation to the existing Essential Energy West Jemalong substation.
- subdivision for the Project site and onsite substation (completed).

The Project layout is shown in Figure 1.

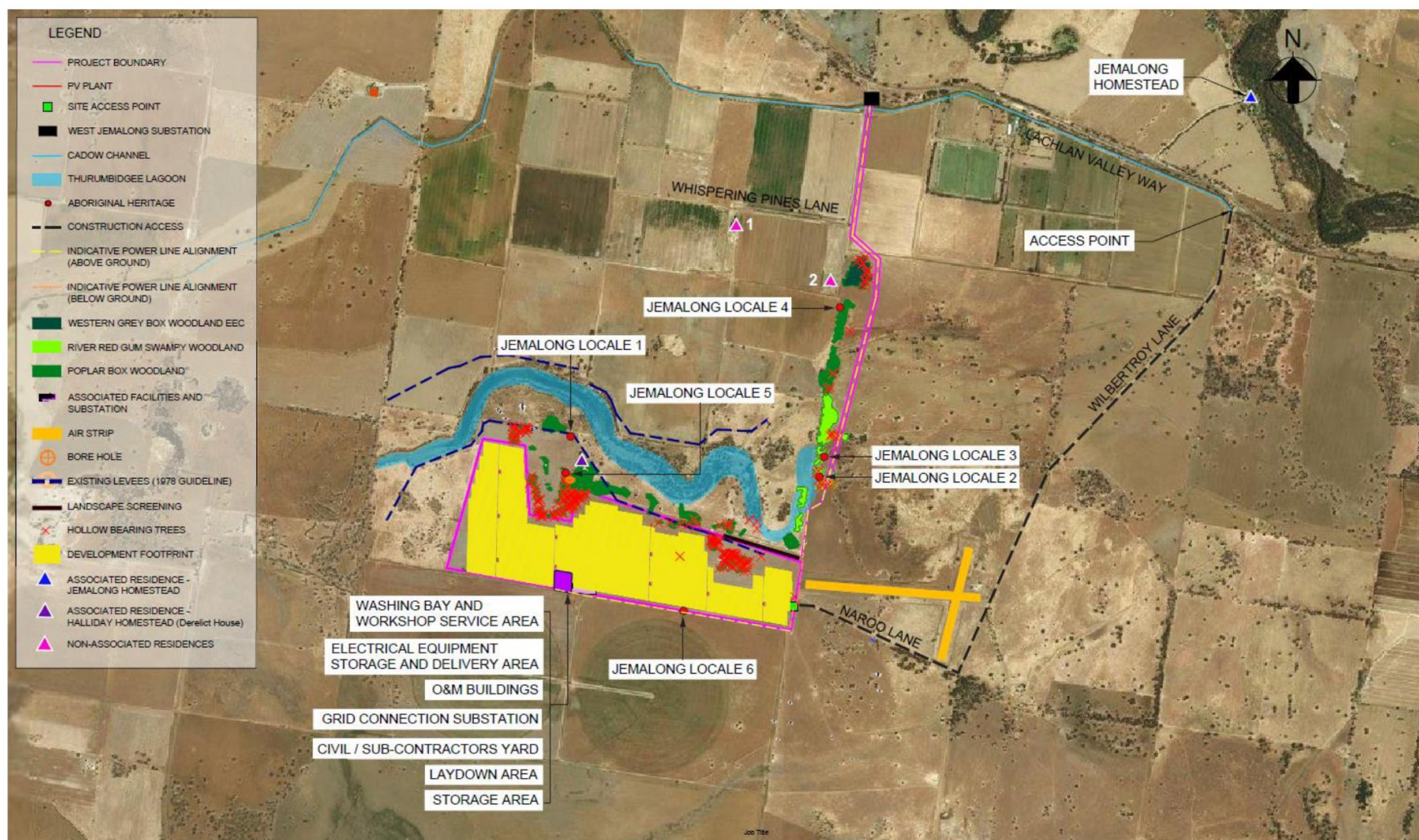


Figure 1 Project layout

2. STATUTORY REQUIREMENTS

This section describes the statutory requirements that are applicable to the Project. All statutory requirements are collectively referred to as the Project obligations hereafter.

2.1. Development Consent

The Project received Development Consent from the Minister of Planning on 18 May 2018. The statutory context of the consent is outlined below.

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and its associated regulations provide the framework for assessing environmental impacts and determining planning approvals for developments and activities in NSW. The need or otherwise for Development Consent is set out in environmental planning instruments – State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs).

Part 4 of the EP&A Act provides for the control of development that requires Development Consent. Depending on the circumstances of the proposal, the consent authority may be the local Council or the Minister for Planning.

Part 4, Division 4.1 of the EP&A Act establishes an approval regime for development that is declared to be State Significant Development by either a SEPP or Ministerial Order. The Project is considered to be 'State Significant Development' as it is of a type listed in Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP):

Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:

(a) has a capital investment value of more than \$30 million, or

(b) has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.

As the Project is for an electricity generating facility and has a capital investment of over \$30 million, it is State Significant Development.

In accordance with Section 89E of the EP&A Act, the Minister for Planning is the consent authority for State Significant Development, and the approval process is managed by the DPIE.

Pursuant to Clause 8A of Section 78A of the EP&A Act, an Environmental Impact Statement (EIS) is required to support a development application for State Significant Development.

An EIS was prepared for the Project by NGH Environmental (NGH). The EIS was prepared to address the Secretary's Environmental Assessment Requirements (SEARs) and the form and content requirements set out in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. The EIS was publicly exhibited from 21 November 2017 to 21 December 2017. During the exhibition period, the public and agencies were invited to make submissions.

Following the EIS exhibition period, NGH prepared a Response to Submissions Report (dated 14 February 2018) to address issues raised by the public and agencies. Following the

DPIE's review of the Response to Submissions Report, the Project received Development Consent from the Minister of Planning on 18 May 2018.

2.1.1. Modifications

Since the original approval of the Project on 18 May 2018, the Project has been subsequently modified by the following modification applications.

- Modification One – Revised subdivision: Approved 30 July 2018
- Modification Two – Revised Development Footprint: Approved 3 September 2019
- Modification Three – Revised transmission line: Approved 15 November 2019.

Details of the above modifications are available [online](#).

Amendments to the Conditions of Consent resulting from the above modifications are captured in a Consolidated Development Consent document which supersedes previous versions of the Development Consent.

2.1.2. Conditions of Consent and Revised Mitigation Measures

The Development Consent includes a number of Conditions of Consent (CoC) which must be complied with. CoC 2, Schedule 2 states:

The Applicant must carry out the development:

- a) *generally in accordance with the EIS; and*
- b) *in accordance with the conditions of this consent.*

The EIS comprises the following documents:

- Jemalong Hybrid Solar Park *Environmental Impact Statement* (NGH, 17 November 2018) as amended by:
 - Jemalong Hybrid Solar Park *Response to Submissions Report* (NGH, 14 February 2018) and the Applicant's letter dated 5th April 2018;
 - Jemalong Hybrid Solar Park *Modification Application* (NGH, 15 June 2018) (Modification One) and the Applicant's letters dated 2 and 12 July 2018;
 - *Jemalong Solar Modification Report* (RPS Group, July 2019) (Modification Two); and
 - Jemalong Solar Modification Report (RPS Group, September 2019) and the Applicant's letter dated 21 October 2019.

The Response to Submissions Report included a revised summary of mitigation measures (referred to as the Revised Mitigation Measures (RMM)), which supersede the mitigation measures proposed in the EIS document. These revised mitigation measures should generally be complied with.

Compliance with the CoC and RMM is further discussed in Section 4.

2.2. Other Permits Required

This section outlines any permits or approvals required for the Project that are addition to the Development Consent. Tracking the status and compliance of these permits is discussed in Section 4.1.

2.2.1. Consent under the Roads Act 1993

Under Section 138 of the *Roads Act 1993*, a person must not impact or carry out work on or over a public road without the consent of the appropriate roads authority.

The Project involves the following works within a public road:

- Upgrade of the intersection of the Lachlan Valley Way and Wilbertroy Lane to provide a Basic Right Turn (BAR) treatment and Basic Left Turn (BAL) treatment
- Upgrade of Wilbertroy Lane and Naroo Lane between Lachlan Valley Way and the project site access point, excluding the Cadow Channel crossing, to allow two-way construction traffic, including:
 - sealing Wilbertroy Lane a minimum of 50 metres from the edge of the Lachlan Valley Way travel lane;
 - widening both roads to a minimum width of 7 metres;
 - applying an all-weather gravel surface seal to both roads; and
 - upgrading the intersection of the Wilbertroy Lane and Naroo Lane;
- Construction of one site access point off Naroo Lane with a Rural Property Access type treatment to cater for the largest vehicle accessing the site; and
- Any maintenance work required on Wilbertroy Lane or Naroo Lane following dilapidation surveys).

Each of the above activities requires consent from the relevant road authority under Section 138 of the *Roads Act 1993*. The relevant road authority for the affected roads is as follows:

- Wilbertroy Lane (Local, unclassified road) – Council
- Naroo Lane (Local, unclassified road) – Council
- Lachlan Valley Way (Regional Classified road) – Council with RMS concurrence.

2.2.2. Activity Approval under Section 68 of the Local Government Act 1993

Section 68 of the Local Government Act 1993 specifies a range of activities where approvals are required to be obtained from Council. These are often in addition, or ancillary to, Development Consent requirements and are known as ‘Section 68 Activity Approvals’.

A person may carry out an activity specified in Section 68 only with the prior approval of Council.

The Project involves the following works which require a Section 68 Activity Approval.

- Operate a system of sewage management

An Activity Approval is required from Council for the above works under Section 68 of the *Local Government Act 1993*. The operation of a system of sewage management on the Project relates to the operation of septic systems.

2.2.3. Construction and Occupation Certificates under the EP&A Act

Part 6 of the *Environmental Planning and Assessment Act 1979* specifies when additional certification is required to be approved by Council for building and subdivision works.

Where a Development Consent has been issued for proposals involving building works, a Construction Certificate must be obtained prior to commencement of any building works. The Construction Certificate certifies that building work is being completed in accordance with specified plans and specifications or standards which comply with the requirements of relevant regulations.

Following the completion of construction, an Occupation Certificate is required which authorises that the use of the new building is in accordance with the Development Consent.

[2.2.4. Rural Fires Act 1997](#)

If proposed, prior to conducting any Hot Works in a Total Fire Ban an exemption under Section 99 of the Rural Fires Act 1997 must be obtained from the Commissioner of the NSW Rural Fire Service (RFS).

[2.2.5. Over-dimensional Vehicle Permits under Heavy Vehicle National Law](#)

The National Heavy Vehicle Regulator (NHVR) administers one set of laws (the Heavy Vehicle National Law (HVNL)) for heavy vehicles over 4.5 tonnes gross vehicle mass. The HVNL consists of the Heavy Vehicle National Law (the schedule to the *Heavy Vehicle National Law Act 2012*) and four sets of regulations. The HVNL commenced on 10 February 2014 in the Australian Capital Territory, New South Wales, Queensland, South Australia, Tasmania and Victoria. Each of them passed a law that either adopts or duplicates the HVNL (with some modifications) as a law of that State or Territory.

Any over-dimensional vehicles used for the Project must hold a permit from RMS or NHVR. Further information on this is provided in the Project Traffic Management Plan.

3. STRATEGIC FRAMEWORK

3.1. Overview

This EMS is the overarching environmental management document for the Project, relevant to all stages of the Project. It outlines the strategy for achieving full compliance with the Development Consent through the design, construction, operation and decommissioning of the Project.

3.2. Roles and Responsibilities

The owner of the Project (referred to as the Project Owner) has ultimate responsibility and accountability to ensure that the Project is designed, built, operated, upgraded and decommissioned in accordance with the Development Consent. However, all actions to achieve compliance with the Development Consent will be undertaken by the EPC contractor during construction, and O&M contractor during operation.

Figure 2 outlines the structure of organisations and key roles involved in the construction and operation of the Project. Table 2 and

Table 3 outline the responsibilities of the key roles relevant to health, safety and the environment (HSE).

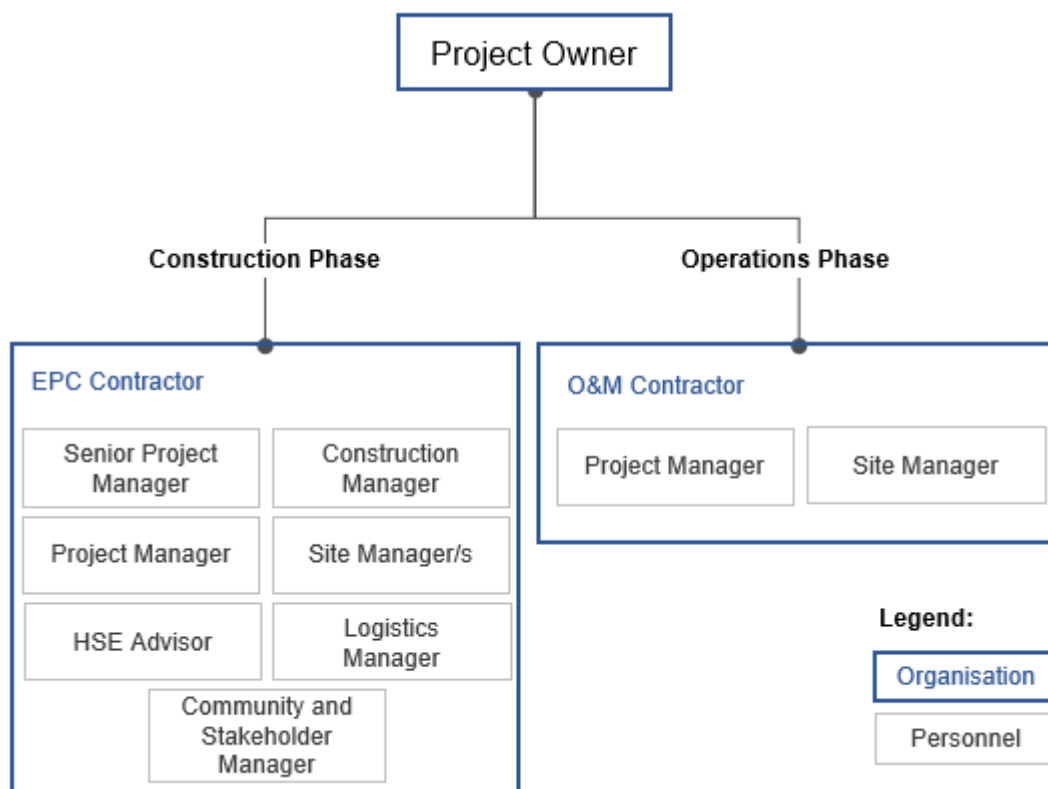


Figure 2 Structure of organisations and key roles

Table 2: EPC contractor key roles

EPC Contractor Role	Responsibilities
Senior Project Manager	<p>The Senior Project Manager has overall responsibility for environmental performance and compliance across the Project and is responsible for external communications to the Project Owner and regulatory stakeholders. The Senior Project Manager shall:</p> <ul style="list-style-type: none"> • Maintain a working knowledge of this EMS and all environmental management plans and be aware of all environmental legislative requirements • Ensure that the duties of the EPC Contractor are fulfilled • Ensure all required environmental management plans are prepared and approved prior to the relevant stage of works • Ensure specific conditions of regulatory authorities, or license and notice requirements, where applicable, are being complied with • Liaise with stakeholders, regulatory authorities, and the Project Owner on environment related matters • Ensure incident investigations are conducted and investigation reports prepared.
Project Manager	<p>The Project Manager is responsible for providing general support to site and HSE management. The Project Manager shall:</p> <ul style="list-style-type: none"> • Ensure that the duties of the EPC Contractor are fulfilled • Maintain a working knowledge of this EMS and all environmental management plans and be aware of all environmental legislative requirements • Fully understand the hazards, risks and potential environmental impacts associated with the work to be undertaken as part of this Project • Ensure the project HSE Risk Assessment is reviewed and updated at least monthly and after any incident to ensure controls are in place and working effectively • Ensure all required environmental management plans are prepared and approved prior to work commencing at the site • Ensure a Project Safety in Design risk assessment and/or HSE Risk Assessment are available and prepared prior to work commencing • Ensure the required environmental monitoring is undertaken • Ensure monthly HSE reporting is completed • Ensure all corrective actions for HSE non-compliances are implemented

EPC Contractor Role	Responsibilities
	<ul style="list-style-type: none"> • Ensure sub-contractor HSE assessments are completed prior to engagement • Ensure the workplace is safe and that all personnel on site adhere to the HSE management system requirements • Ensure incident investigations are conducted and investigation reports prepared.
Construction Manager / Site Manager	<p>The Site Manager/Construction Manager is responsible for the general supervision and day-to-day coordination of all activities at the Project site. The Site Manager/Construction Manager is responsible for ensuring all works and workers comply with this document and all environmental management plans.</p> <p>The Site Manager/Construction Manager shall:</p> <ul style="list-style-type: none"> • Maintain a working knowledge of this EMS and all environmental management plans, and be aware of all environmental legislative requirements • Fully understand the hazards, risks and potential environmental impacts associated with the work to be undertaken as part of this Project • In consultation with workers, prepare Safe Work Method Statements (SWMS) • Review and approve SWMSs supplied by contractors • Take part in the development of the HSE Risk Assessment • Where required, assist with the preparation of Job Safety and Environmental Risk Assessment (JSEAs) • Take part in daily pre-start meetings and scheduled toolbox meetings • Be aware of any fire restrictions and Total Fire Bans in the work area, and communicate to all personnel on site • Ensure that site inductions are provided for all workers and visitors • Maintain site induction and qualification records including records of all relevant licences and tickets • Communicate relevant HSE information to all workers on site • Complete inspections as per the Site Inspection Schedule • Maintain the Project HSE action register • Undertake Chief Warden Responsibilities in the event of an emergency or incident whilst on site and take part in any incident investigations • Ensure that all required site HSE documentation is maintained

EPC Contractor Role	Responsibilities
	<ul style="list-style-type: none"> • Monitor on site conditions to ensure potential nuisances, such as excessive dust generation, do not arise • Identify and provide environment protection measures to be installed on Project construction sites as works progress • Identify and record environmental non-compliances and notify the Project Manager • Recommend improvements to environmental management plans to enhance on site HSE performance • Ensure subcontractor environmental performance fulfils the requirements of this EMS and all environmental management plans.
HSE Advisor	<p>The HSE Advisor and support personnel are responsible for overseeing the HSE management on the Project. The HSE Advisor shall:</p> <ul style="list-style-type: none"> • Maintain a working knowledge of this EMS and all environmental management plans, and be aware of all environmental legislative requirements • Fully understand the hazards, risks and potential environmental impacts associated with the work to be undertaken as part of this Project • Facilitate initial HSE Risk Assessment for the Project • Collaborate with and support Project Team to develop the required environmental management plans • Carry out environmental monitoring through site inspections • Conduct audits on the Project to ensure compliance with all requirements of this EMS and all environmental management plans • Conduct audits on Project sub-contractors • Conduct and/or manage incident investigations (as required) and providing reports to the Project Manager • Provide support and advice to all Project delivery team members • Provide training and information sessions to work groups as required • Monitor legislation and industry guidelines to ensure continuing compliance • Manage the day-to-day operational activities of all Project HSE support staff • Provide general HSE advice as required • Consult with appropriate stakeholders in the development and implementation of all environmental management plans

EPC Contractor Role	Responsibilities
	<ul style="list-style-type: none"> • Ensure that all relevant parts of environmental management plans are included into the site induction • Develop and provide the audit and site inspection schedules • Assist with the resolution of Health and Safety issues • Assist in the preparation of SWMS where required • Advise the Project Manager regarding liaison with stakeholders, regulatory authorities, and the Project Owner on HSE matters where required.
Logistics Manager	The Logistic Manager manages the logistics of the transportation of materials and equipment to the site.
Community and Stakeholder Manager or their representative	<p>The Community and Stakeholder Manager or their representative shall:</p> <ul style="list-style-type: none"> • Coordinate community notifications • Coordinate complaints recording and investigation processes including associated reporting requirements • Communicate with affected landholders as required.

Table 3: O&M contractor key roles

O&M Contractor Role	Responsibilities
O&M Contractor Project Manager	<p>The O&M Contractor Project Manager shall:</p> <ul style="list-style-type: none"> • Ensure that the duties of the O&M Contractor are fulfilled • Overall responsibility for environmental performance across the Project • Maintain a working knowledge of this EMS and all environmental management plans, and be aware of all environmental legislative requirements • Fully understand the hazards, risks and potential environmental impacts associated with the work to be undertaken as part of this Project • Ensure the Project HSE Risk Assessment is reviewed and updated at least annually and after any incident to ensure controls are in place and working effectively

O&M Contractor Role	Responsibilities
	<ul style="list-style-type: none"> • Ensure all required environmental management plans are prepared and approved prior to operations commencing at the site • Ensure the required environmental monitoring is undertaken • Ensure incidents at the site are reported, managed and investigated in accordance with the organisation's Incident Reporting and Investigation processes • Ensure all corrective actions for HSE non-compliances are implemented • Ensure quarterly HSE reporting is completed • Ensure sub-contractor HSE assessments are completed prior to engagement • Ensure the workplace is safe and that all personnel on site adhere to the HSE management system requirements • Ensure incident investigations are conducted, and investigation reports prepared • Ensure specific conditions of Regulatory Authorities, or license and notice requirements, where applicable, are being complied with • Liaise with stakeholders, regulatory authorities, and the Project Owner on environment related matters.
O&M Contractor Site Manager / HSE Manager	<p>The O&M Contractor Site Manager will also fulfil the role of the HSE Manager during operations.</p> <p>The O&M Contractor Site Manager shall:</p> <ul style="list-style-type: none"> • Maintain a working knowledge of this EMS and all environmental management plans, and be aware of all environmental legislative requirements • Fully understand the hazards, risks and potential environmental impacts associated with the work to be undertaken as part of this Project • Consult with appropriate stakeholders in the development and implementation of all environmental management plans • In consultation with workers, prepare SWMS • Review and approve SWMSs supplied by contractors • Where required, assist with the preparation of JSEAs • Ensure that all relevant parts of environmental management plans are included into the site induction • Ensure that site inductions are provided for all workers and visitors

O&M Contractor Role	Responsibilities
	<ul style="list-style-type: none"> • Maintain site induction and qualification records including records of all relevant licences and tickets • Communicate relevant HSE information to all workers on site • Carry out the environmental monitoring through site inspections • Maintain the Project HSE action register • Undertake Chief Warden Responsibilities in the event of an emergency or incident whilst on site and take part in any incident investigations • Ensure that all required site HSE documentation is maintained • Monitor on site conditions to ensure potential nuisances, such as excessive dust generation, do not arise • Monitor legislation and industry guidelines to ensure continuing compliance • Identify and provide environment protection measures to be installed on Project construction sites as works progress • Identify and record environmental non-compliances and notify the Project Manager • Conduct audits on the Project to ensure compliance with all requirements of this EMS and all environmental management plans • Recommend improvements to environmental management plans to enhance on site HSE performance • Ensure subcontractor environmental performance fulfils the requirements of this EMS and all environmental management plans • Conduct audits on sub-contractors • Conduct and/or manage incident investigations (as required) and providing reports to the Project Manager <ul style="list-style-type: none"> • Advise the Project Manager regarding liaison with stakeholders, regulatory authorities, and the Project Owner on HSE matters where required • Advise the Project Manager regarding responses to community complaints about the project's construction activities, should they arise.

3.3. Environmental Management Plans

This section describes the framework of the suite of environmental management plans for the Project as required by the CoC and the RMM.

The management plans required by the CoC and RMM are listed in Table 4 and Table 5. The plans have been consolidated where practical. An overview of the suite of environmental management plans is illustrated in Figure 3.

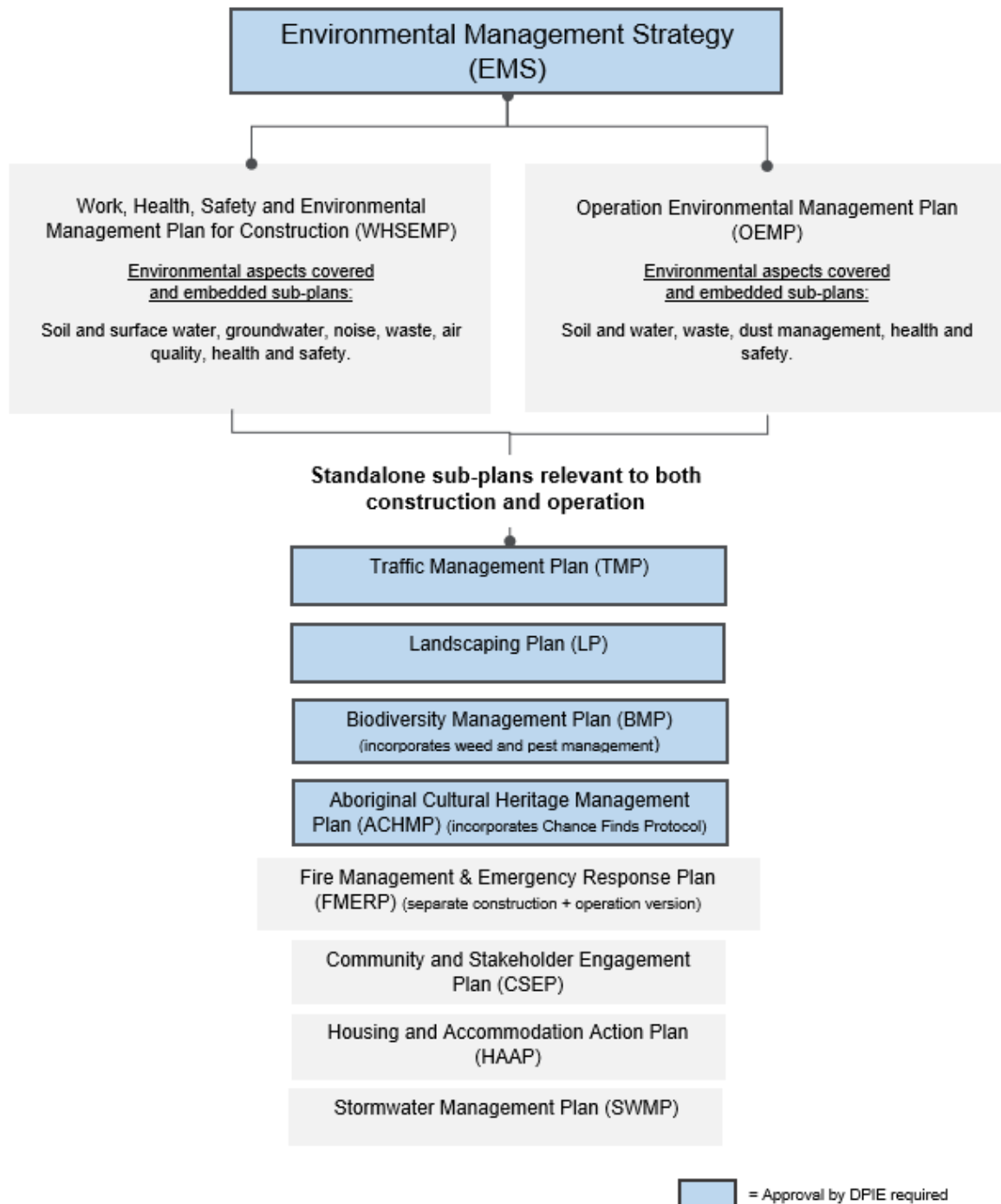


Figure 3 Framework for the suite of environmental management plans for the Project

Table 4 Management Plans required by the Conditions of Consent

Management Plan required by CoC	CoC ref.	Relevant Project Plan	Approval Status
Environmental Management Strategy	Schedule 4, Condition 1	Environmental Management Strategy	This document (refer to DPIE approval letter once approved).
Traffic Management Plan	Schedule 3, Condition 9	Traffic Management Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Landscaping Plan	Schedule 3, Condition 11	Landscaping Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Biodiversity Management Plan	Schedule 3, Condition 14	Biodiversity Management Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Chance Finds Protocol	Schedule 3, Condition 22	Cultural Heritage Management Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Fire Management & Emergency Response Plan	Schedule 3, Condition 27	Fire Management & Emergency Response Plan for Operation	Not yet reviewed by NSW Rural Fire Service and Fire and Rescue NSW as at 14/1/2020.
Final Layout Plans	Schedule 2, Condition 5	Final Layout Plans	Not yet approved by DPIE as at 14/1/2020.

Table 5 Management Plans required by the Revised Mitigation Measures

Management Plan required by RMM	RMM ref.	Relevant Project Plan	Approval Status
Construction Environmental Management Plan	General reference	Work, Health, Safety and Environmental Management Plan for Construction	No external approval required.
Operational Environmental Management Plan	General reference	Operation Environmental Management Plan	No external approval required.
Decommissioning Environmental Management Plan including a Site Rehabilitation Plan	RMM L7	Decommissioning Environmental Management Plan	No external approval required.
Cultural Heritage Management Plan	RMM A1	Cultural Heritage Management Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Soil and Water Management Plan incorporating a Site Drainage Plan and Erosion and Sediment Control Plan	RMM S3	Stormwater Management Plan	No external approval required.
Groundwater Management Plan	RMM W14	Work, Health, Safety and Environmental Management Plan for Construction	No external approval required.
Contamination Management Plan	RMM S5	Work, Health, Safety and Environmental Management Plan for Construction	No external approval required.
Waste Management Plan	WA14	Work, Health, Safety and Environmental Management Plan for Construction	No external approval required.

Management Plan required by RMM	RMM ref.	Relevant Project Plan	Approval Status
Traffic Management Plan	RMM T1	Traffic Management Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Fire Management Plan	RMM F1	Fire Management & Emergency Response Plan for Operation	Not yet reviewed by NSW Rural Fire Service and Fire and Rescue NSW as at 14/1/2020.
Offset Management Plan	RMM B3	Biodiversity Management Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Weed Management Plan	RMM B5	Biodiversity Management Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Site Rehabilitation Plan	RMM S8	Biodiversity Management Plan	Not yet approved by DPIE as at 14/1/2020. Refer to DPIE approval letter once approved.
Water Management Plan	RMM W15	Operation Environmental Management Plan	No external approval required.
Community Stakeholder and Engagement Plan	RMM SE1	Community Stakeholder and Engagement Plan	No external approval required.
Housing and Accommodation Action Plan	RMM SE6	Housing and Accommodation Action Plan	No external approval required.
Spill Management Plan	RMM S7	Fire Management & Emergency Response Plan for Construction	No external approval required.

Management Plan required by RMM	RMM ref.	Relevant Project Plan	Approval Status
Fire Management & Emergency Response Plan for Construction	N/A (project initiative)	Fire Management & Emergency Response Plan for Construction	No external approval required.

3.4. Revision of Strategies, Plans and Programs

In accordance with CoC 2 Schedule 4, the EPC contractor, O&M contractor or decommissioning contractor (as relevant to the stage of Project) must:

- a) update the strategies, plans or programs required under the Development Consent to the satisfaction of the Secretary prior to carrying out any upgrading¹ or decommissioning activities on site; and
- b) review and, if necessary, revise the strategies, plans or programs required under the Development Consent to the satisfaction of the Secretary within 1 month of the:
 - submission of an incident report under CoC 4 of Schedule 4;
 - submission of an audit report under CoC 7 of Schedule 4; or
 - any modification to the conditions of the Development Consent.

In accordance with CoC 3 Schedule 4, to ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval. With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant CoC.

3.5. Environmental Training

3.5.1. General site induction

All Project personnel and subcontractors are to complete a general site induction prior to commencing work on-site. The site induction will include an environmental awareness component, covering the following items:

- Brief overview of the Project's statutory context and the framework of environmental management plans to be complied with.
- Key roles and responsibilities relevant to health, safety and the environment.
- Overview of the site and immediate site surroundings.
- Environmentally sensitive areas within the site and any no go zones.

¹ Note 'upgrading' refers the augmentation and/or replacement of solar panels and ancillary infrastructure on site (excluding maintenance) as per the Development Consent definition, not road upgrade works.

- Environmental controls under the WHSEMP or OEMP (as relevant to the stage of the Project) to minimise environmental impacts.
- Aboriginal cultural heritage awareness.
- Emergency response.
- Incident management.
- Complaints management.

3.5.2. Visitor induction

A visitor is anyone who enters the site on a once off or infrequent occasion for purposes that do not involve any form of construction work activity.

All visitors accessing the Project work areas are to be accompanied at all times by a fully inducted EPC Contractor representative who is familiar with the Project and hazards present. The person receiving the visitor(s) is responsible for providing or arranging a visitor induction to each visitor with instructions on specific safety requirements and any notable hazards associated with the site.

3.5.3. Daily pre-start meetings

Daily pre-start meetings will be used during construction to inform the workforce of the day's/shift's activities, hazards and safe work practices, environmental controls, activities that may affect the works, site visits, coordination issues and other information that may be relevant to the day's work.

Pre-start meetings may be Project-wide and/or held for specific work areas. Pre-start meetings will be facilitated by the Site Manager/Construction Manager or delegate.

3.5.4. Toolbox talks

Tool-box talks will be used during construction to communicate with personnel on construction related Health, Safety and Environmental issues on a regular basis and in response to any specific concerns that arise during the construction process.

Tool-box talks will be managed by the HSE Advisor and delivered by the Site Manager, HSE Advisor or another member of the HSE team.

Tool-box talks will be tailored to Project specific environmental issues that are relevant at the time of talk. Examples of tool-box talk environmental topics include:

- Housekeeping and waste
- Erosion and sedimentation control
- Weed hygiene
- Plant and equipment maintenance
- Refuelling.

4. COMPLIANCE MANAGEMENT

4.1. Compliance Register

A compliance register will be maintained throughout the life of the Project, detailing all Project obligations and their status, including the CoC, RMM and any other permitting and approval requirements.

4.2. Compliance Report

In accordance with CoC 6 Schedule 4, prior to commencing the construction, upgrading and decommissioning stages of the development, a compliance report will be submitted to the DPIE in accordance with *Compliance Reporting Post Approval Requirements* (DPE 2018), or its latest version.

4.3. Independent Environmental Audit

In accordance with CoC 7, Schedule 4, within 6 months of the commencement of construction, or as directed by the Secretary, an Independent Environmental Audit must be commissioned. The audit must:

- a) be prepared in accordance with the relevant *Independent Audit Post Approval requirements* (DPE 2018);
- b) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
- c) be carried out in consultation with the relevant agencies;
- d) assess whether the development complies with the relevant requirements in this consent, and any strategy, plan or program required under this consent; and
- e) recommend appropriate measures or actions to improve the environmental performance of the development and any strategy, plan or program required under this consent.

Within 3 months of commencing an Independent Environmental Audit, or unless otherwise agreed by the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations.

The recommendations of the Independent Environmental Audit must be implemented to the satisfaction of the Secretary.

4.4. Environmental monitoring

The HSE Advisor during construction and Site Manager during operation will be responsible for carrying out environmental monitoring through site inspections as per the monitoring tables in Appendix A. The Project Manager during construction and operation will be responsible for ensuring that the environmental monitoring is carried out.

During the inspection the person undertaking the monitoring will complete a site inspection checklist form which will identify whether each monitored item is compliant, non-compliant, or there is an improvement opportunity. An improvement opportunity is where the effectiveness of environmental controls could be increased, but there is no associated non-compliance.

The site inspection checklist will detail actions to address identified improvement opportunities, or any other relevant observations and notes.

Non-compliance is defined in Section 4.5. If a non-compliance is identified, the corrective action protocol outlined in Section 4.5.1 will be followed, including completion of a HSE Non-Compliance Report.

4.5. Non-Compliances

A non-compliance, as defined in the Development Consent, is “an occurrence, set of circumstances or development that is a breach of the Development Consent, but is not an incident”. An incident is defined in the Development Consent as “a set of circumstances that causes or threatens to cause material harm to the environment” (refer to Section 5 Incident Management).

Any member of the Project team may raise a non-compliance.

A non-compliance may include:

- Failing to comply with the conditions of the Development Consent
- Activities that have impacted the environment not permitted by the Development Consent as covered in the environmental impact assessment documentation. Note: if the activity caused material harm to the environment it would be classified as an incident (see Section 5).
- Non-compliances raised by regulatory authorities.

4.5.1. Corrective Action Protocol

If a non-compliance is identified, a HSE Non-Compliance Report (NCR) shall be completed and issued to the HSE Advisor, or if the non-compliance is the responsibility of a subcontractor, the NCR is to be issued to the relevant subcontractor. In completing the NCR, the below will be undertaken:

1. Record the origination details (name and position of the originator) and the company which the NCR is issued to if the non-compliance is the responsibility of a subcontractor.

- Describe the non-compliance in detail and assign an Initial Risk Level using the following HSE Non-Compliance risk matrix:

HSE Non-Compliance Risk Matrix

			Potential or actual environmental impact			
			No Impact	Minor Impact	Moderate Impact	Major Impact
			No environmental impact	Minor environmental impact	Moderate environmental impact	Major environmental impact
Likelihood of environmental impact	Almost Certain	Has occurred / expected to occur regularly under normal circumstances	Medium	Medium	High	Critical
	Likely	Expected to occur at some time	Low	Medium	High	Critical
	Occasional	May occur at some time	Low	Low	Medium	High
	Unlikely	Not likely to occur in normal circumstances	Low	Low	Medium	Medium

- Identify and describe the cause of the non-compliance. The cause could be due to human error, process/procedure issue, equipment defect etc.
- List the required corrective actions that will address the non-compliance and its cause, to prevent reoccurrences. Appoint a deadline for implementation. The appointed timeframe to close out the non-compliance will take into consideration the Initial Risk Level. A higher risk will require a more urgent deadline than a lower risk.
Once the corrective actions are identified, assign a Residual Risk Level by assessing the resulting risk with the proposed corrective actions using the HSE Non-Compliance Risk Matrix.
- Provide the NCR report to the Project Manager to seek approval for the proposed corrective actions and timeframe.
- Issue the NCR to the HSE Advisor for coordination of the implementation of the corrective actions, or the relevant subcontractor if the non-compliance is the responsibility of a subcontractor.
- Notify the DPIE of the non-compliance and the proposed corrective actions in accordance with the following section.

4.5.2. Notification to DPIE

In accordance with CoC 5 Schedule 4 the DPIE must be notified in writing within 7 days after the Project Owner becomes aware of any non-compliance with the conditions of the Development Consent.

CoC 5 Schedule 4 states that this notification must be provided via email to compliance@planning.nsw.gov.au, however this process has since been superseded by DPIE. DPIE now require non-compliance notifications to be submitted online via the Major Projects Website - <https://www.planningportal.nsw.gov.au/major-projects/project/3486>.

The non-compliance notification submitted online must set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been done, or will be, undertaken to address the non-compliance.

5. INCIDENT MANAGEMENT

An incident is defined in the Development Consent as a set of circumstances that causes or threatens to cause material harm to the environment.

Material harm is defined in the Development Consent as harm that:

- involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
- results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

5.1. Incident Management Procedure

This procedure details the protocols to be followed in the event of an incident. Refer also to the Fire Management and Emergency Response Plan which includes additional measures to be taken in the event of an emergency.

Immediate Response

Following an incident, the personnel present at the incident site shall determine whether the area requires isolation. If isolation is required, the following steps should then be taken:

- Stop works around the area
- Implement containment measures to prevent the impact of the incident spreading
- Undertake internal notifications, and any external notifications as appropriate.

Internal Notifications

Any incident must be reported to the construction manager or delegate, and HSE manager immediately following the incident. Site inductions will emphasise this obligation to all contractors and personnel working on-site.

The notified construction manager or delegate and HSE manager will determine the next steps to be taken and undertake external notifications as appropriate.

The project manager, senior project manager and project owner are also to be notified as soon as possible and no later than 1 hour following the incident.

External Notifications

All incidents, whether they cause material harm or have the potential to cause material harm, must be notified in writing to the DPIE immediately. This is in accordance with Condition 4 of Schedule 4.

CoC 4 Schedule 4 states that this notification must be provided via email to compliance@planning.nsw.gov.au, however this process has since been superseded by DPIE. DPIE now require incident notifications to be submitted online via the Major Projects Website - <https://www.planningportal.nsw.gov.au/major-projects/project/3486>.

The incident notification submitted online must set out the nature and location of the incident. Depending on whether the incident resulted in material harm, additional agency notification may be required, as outlined below.

Incident with material harm

If it is determined that material harm has been caused, relevant external agencies will be immediately notified and provided the following relevant information:

- the time, date, nature, duration and location of the incident;
- if the incident involves pollution, the nature, the estimated quantity or volume and the concentration of pollutants;
- the circumstances in which the incident occurred (including the cause of the incident, if known); and
- the action taken or proposed to be taken to deal with the incident.

The agencies that may need to be notified include:

- Police, Fire or Ambulance **000** or for Mobiles Only **112**
- SES **13 25 00**
- NSW EPA **131 555**
- Safe Work NSW **13 10 50** (for notifiable incidents – written notification required within 48 hours)
- Forbes Shire Council **(02) 6850 2300** (day time hours) or **1300 978 633** (after hours)
- Roads and Maritime Services **13 22 13**
- Forbes Police Station **(02) 6853 9999**

For major traffic-related incidents, or incidents involving a member of the public, vehicles will not be moved and/or removed from the scene until the incident has been investigated. Drivers of any vehicle involved in a traffic-related incident will undertake a standard drug and alcohol testing.

Resuming Work

Work will only resume at an incident site once all of the steps below are in place:

- Affected parties have received full and appropriate first aid or medical treatment (if required)
- Any corrective actions to make the incident site safe are in place and/or safe systems of work have been implemented (deemed by Construction Manager and HSE Manager)
- If the incident is notifiable to Safework NSW and/or other external agencies, those agencies have deemed the incident site no longer requires preservation.

- There are no notices (e.g. Prohibition) in place from Safework NSW preventing work
- Appropriate communication to personnel on site of corrective actions.

The instruction to resume work will be given to construction personnel by the Construction Manager or HSE Manager.

5.2. Incident Investigation

As soon as the incident has been contained the HSE Advisor will then commence a incident investigation.

One purpose of the investigation will be to identify and understand the cause of the incident with a view to modifying procedures to avoid the potential for a recurrence. The types of preventative actions taken could include revision of work methods, management plans, or other procedures.

The other purpose of the incident investigation will be to define the appropriate remediation work required in order to address any environmental impact of the incident. The appropriate remediation work (if required) will be determined by the specific circumstances of the incident.

5.3. Incident Reporting

Within 24 hours of the incident, the incident will be initially recorded.

A preliminary investigation report will be prepared within 5 business days.

A draft detailed investigation report will be prepared within 10 business days, and final incident report prepared within 20 business days.

Each Incident Report will include details on:

- the time, date, nature, duration and location of the incident
- climatic conditions
- pollutants involved, if any
- circumstances in which the incident occurred
- the actions taken to deal with the incident
- external notifications undertaken
- remediation activities undertaken to address any environmental impacts
- preventative actions undertaken to avoid the potential for a recurrence.

Incident reports will be distributed to senior personnel and filed. Incident reports will be made available to external agencies on request. External agencies may request additional information on a case-by-case basis.

5.4. Summary of timeframes for incident notification, investigation and reporting

Internal notifications:

- Immediately to Construction Manager or delegate, HSE Advisor (who will determine next steps and undertake external notifications)
- Within 1 hour to Project Manager, Senior Project Manager and Project Owner (for information)

External notifications:

- Immediately to DPIE and other external agencies
- No later than 48 hours to SafeWork NSW

Investigations:

- To commence as soon as the incident has been contained

Reports:

- Initial recording within 24 hours
- Preliminary investigation report within 5 business days
- Draft detailed investigation report within 10 business days
- Final detailed investigation report within 20 business days.

6. COMMUNITY AND STAKEHOLDER ENGAGEMENT

6.1. Consultation during project planning

Community and stakeholder consultation was undertaken during the preparation of the EIS for the Project and responses were taken into consideration in the design of the Project and mitigation measures for environmental impacts.

Details of the consultation undertaken during the EIS stage are provided in Section 6.3 of the EIS.

6.2. Notifications to DPIE prior to key project stages

In accordance with CoC 8, Schedule 2, prior to the commencement of construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Project Owner will notify DPIE in writing of the date of commencement, or cessation, of the relevant phase.

If any of these phases of the development are to be staged, then the Project Owner will notify DPIE in writing prior to the commencement of the relevant stage, and clearly identify the development that would be carried out during the relevant stage.

6.3. Consultation during pre-construction

Prior to the commencement of construction, this document and various other plans required by the CoC will have been reviewed by the DPIE and approved by the Secretary.

Other government agencies will also be consulted during the development of certain management plans.

Prior to construction, consultation will also continue with the community through newsletters which provide an update on the status of the Project.

6.4. Consultation during construction

A Community and Stakeholder Engagement Plan will be prepared for the Project which outlines the consultation strategies and protocols to manage the concerns of stakeholders and any impacts on local landowners during construction of the Project.

The plan will include (but not be limited to) the following:

- protocols to keep the community and stakeholders updated about the progress of the project and its benefits
- protocols to inform relevant stakeholders of potential impacts of construction activities such as changes to traffic conditions and out of hours works (if Secretary approval for out of hours works are obtained)
- protocols to allow the community to make complaints or identify any concerns with the Project.

Information on how local businesses, contractors or service providers can express an interest in the project will be continually disseminated via various methods throughout the pre-construction and construction phases.

6.5. Consultation during operation

The Community and Stakeholder Engagement Plan will include protocols to manage the concerns of stakeholders and any impacts on local landowners during operation of the Project.

The Plan will include (but not be limited to) the following:

- protocols to keep the community and stakeholders updated about the operation of the project and its benefits
- protocols to inform relevant stakeholders of potential impacts of scheduled site activities outside of typical operation
- protocols to allow the community to make complaints or identify any concerns with the Project.

Information on how local workers, contractors or service providers can express an interest in the operation of the Project will be displayed on the Project website. Efforts will be made to engage with local schools and community groups who may be interested in visiting the site (where practical in terms of phases of construction and associated safety) or learning more about renewable energy.

6.6. Website

A website has been established for the Project (<https://www.genexpower.com.au/50mw-jemalong-solar-project.html>) and will be maintained by the Project Owner during operations.

In accordance with CoC 8 Schedule 4, the website will make the following information publicly available at minimum, as relevant to the stage of the development:

- Environmental Impact Statement and Response to Submissions
- Final layout plans for the development
- Current statutory approvals for the development
- Approved strategies, plans or programs required under the CoC
- How complaints about the Project can be made
- The Complaints Register (refer Section 7.2)
- Results of any independent environmental audits including the responses to the recommendations (refer Section 4.3).
- Any other matter required by the Secretary.

7. COMPLAINTS MANAGEMENT

7.1. Contact details for complaints

The following avenues are available for community complaints and enquiries:

Email: info@genexpower.com.au **Phone line:** (02) 9048 8850

Online contact form: <https://www.genexpower.com.au/contact.html>. The above email and phone number will be disclosed on the website along with the online contact form and included on all community notifications.

7.2. Complaints Management Protocol

In the event of a complaint from the community, the Community and Stakeholder Manager or their representative during construction and the Project Manager during operation will ensure the matter is recorded and will undertake further investigation. The details of the complaint will be recorded in a Complaints Register which will include the following:

- The date and time, where relevant, of the complaint.
- The means by which the complaint was made (telephone, mail or email).
- Any personal details of the complainant that were provided, or if no details were provided, a note to that effect.
- The nature of the complaint.
- Any action(s) taken in relation to the complaint, including timeframes for implementing the action.
- If no action was taken in relation to the complaint, the reason(s) why no action was taken.
- The status of the complaint (i.e. open/closed).

The Complaints Register will be managed and maintained by the Community and Stakeholder Manager or their representative during construction and the Project Manager during operations. They will be responsible for:

- Providing a response to the person complaining within 72 hours of the complaint being made.
- Ensuring that the complaint is addressed in a timely manner and that the complaint is addressed adequately.
- Logging all details of the complaint in the Complaints Register.
- Notifying the relevant management staff as appropriate.
- Ensuring the Complaints Register is made available on the Project website and updated regularly, in accordance with Condition 8, Schedule 4, with personal details kept private.

7.3. Dispute Resolution

In the event that the procedure for investigating and responding to a complaint, including the implementation of measures for avoiding a recurrence cannot be resolved and a dispute does arise, the Project Owner will do the following:

- Advise DPIE that there is a dispute.
- Provide DPIE with copies of the relevant complaint history.
- If determined necessary by DPIE, engage a specialist with expertise relevant to the issue at hand to investigate the dispute and provide recommendations for resolution.
- Advise the third party in dispute and DPIE in writing, as to when the dispute investigation will be completed.

Provide the third party and DPIE a copy of the dispute investigation report, inclusive of the Project Owner's intentions with regards to the implementation of the recommendations for resolution.

APPENDIX A ENVIRONMENTAL MONITORING

Traffic – Refer to monitoring prescribed within the Traffic Management Plan

Biodiversity – Refer to monitoring prescribed within the Biodiversity Management Plan

Landscaping – Refer to monitoring prescribed within the Landscaping Management Plan

Aboriginal heritage – Refer to monitoring prescribed within the Cultural Heritage Management Plan

Other environmental aspects (fuels, chemicals and hazardous substances, soil and water, waste, fire risk, construction noise, air quality) – refer table on following pages.

Fuels, chemicals and hazardous substances, soil and water, waste, fire risk, noise, air quality

Ref #	Type of monitoring	Timing	Frequency	Monitoring task	Person Responsible for control	Measurement criteria	Environmental control reference
Environmental Aspect: <u>Fuels, chemicals and hazardous substances</u> Objective: To minimise the risk of environmental contamination and impact to the health and safety of personnel. Target: No environmental spills or contamination or health and safety incidents.							
1F	Fuels, chemicals and hazardous substances	Construction Operation	Weekly during construction Monthly during operation	Inspect fuel/chemical/hazardous substance storage areas to ensure there are no spills, any waste storage drums are in good condition, and all materials are being stored in impervious bunded areas at least 50 metres away from waterways/drainage lines. All refuelling is to be undertaken in impervious bunded hardstand areas.	Construction Manager during construction Site Manager during operation	<ul style="list-style-type: none"> ▶ No spills ▶ Waste storage drums are in good condition ▶ All materials are stored in impervious bunded areas >50m away from waterways/drainage lines ▶ All refuelling is undertaken in impervious bunded hardstand areas 	WHSEMP

Ref #	Type of monitoring	Timing	Frequency	Monitoring task	Person Responsible for control	Measurement criteria	Environmental control reference
2F	Fuels, chemicals and hazardous substances	Construction	Daily	Inspect on-machinery plant for leaks.	Construction Manager	No leaks	WHSEMP
3F	Fuels, chemicals and hazardous substances	Construction Operation	Monthly	Inspect Safety Data Sheet (SDS) Register to ensure there are valid SDSs for all hazardous substances.	Construction Manager during construction Site Manager during operation	All hazardous substances on site have valid SDSs.	WHSEMP
Environmental Aspect: <u>Soil and Water</u> Objective: To minimise the risk of adverse impacts to soil or water resources and environmentally sensitive areas. Target: No impacts from erosion and sedimentation or contamination on environmentally sensitive areas on-site and off-site.							
1SW	Soil and water	Construction	Weekly	Inspect vehicles leaving the site to ensure they are leaving in a relatively clean condition.	Construction Manager	Vehicles leaving the site are relatively clean	WHSEMP

Ref #	Type of monitoring	Timing	Frequency	Monitoring task	Person Responsible for control	Measurement criteria	Environmental control reference
2SW	Soil and water	Construction	Weekly	Inspect Naroo Lane, Wilbertroy Lane and the Lachlan Valley Way for tracked soil and soil deposits.	Construction Manager	No significant tracked soil or soil deposits.	WHSEMP
3SW	Soil and water	Construction	<ul style="list-style-type: none"> ▸ Weekly, and ▸ Within the first two hours following a storm (during work hours) 	Inspect erosion and sediment controls to ensure they are implemented as per the SWMP, are in good condition, and are effective for controlling erosion and sedimentation on both the up and down stream sides of the controls.	Construction Manager	Erosion and sediment controls are as per the SWMP, in good condition and are effective.	SWMP, WHSEMP
4SW	Soil and water	Construction	Weekly	Inspect excavated areas and stockpiles to ensure topsoils have been separated from subsoils and long-term stockpiles are stabilised.	Construction Manager	Subsoils and topsoils are separated and long-term stockpiles are stabilised.	WHSEMP
5SW	Soil and water	Construction	Weekly	Inspect disturbed areas to ensure disturbance has been minimised where possible.	Construction Manager	No unnecessary soil disturbance	WHSEMP

Ref #	Type of monitoring	Timing	Frequency	Monitoring task	Person Responsible for control	Measurement criteria	Environmental control reference
6SW	Soil and water	Construction	Weekly	Inspect onsite vehicles and equipment to ensure they are utilising defined access tracks where possible.	Construction Manager	No unnecessary driving off internal access tracks	WHSEMP
Environmental Aspect: <u>Waste</u> Objective: To minimise the potential for environmental impact of wastes generated on site. Target: No contamination or environmental impact caused by wastes generated on site.							
1W	Waste	Construction	Weekly	Inspect site to ensure waste is being appropriately managed in accordance with its waste classification under the NSW EPA's Waste Classification Guidelines 2014.	Construction Manager	▶ Waste is stored and segregated appropriately.	WHSEMP
2W	Waste	Construction	Weekly	Inspect waste bins to ensure recyclable waste is separated into recycling bins.	Construction Manager	▶ Recyclable waste is stored in recycling bins.	WHSEMP
3W	Waste	Construction	Weekly	Inspect waste bins to ensure they are not overflowing	Construction Manager	Waste bins are not overflowing	WHSEMP

Ref #	Type of monitoring	Timing	Frequency	Monitoring task	Person Responsible for control	Measurement criteria	Environmental control reference
4W	Waste	Construction	Weekly	Inspect Waste Disposal Register to ensure it is up to date and records type, quantity and disposal details.	Construction Manager	Waste Disposal Register is up to date	WHSEMP
Environmental Aspect: <u>Fire risk</u> Objective: To minimise risk of fire spreading across the site and ignition on site. Target: No fire occurs on site.							
1FR	Fire risk	Construction Operation	Monthly	Inspect groundcover to ensure it is short within the solar array and 10m defendable space buffer.	Construction Manager during construction Site Manager during operation	Groundcover is short	FMERP

Ref #	Type of monitoring	Timing	Frequency	Monitoring task	Person Responsible for control	Measurement criteria	Environmental control reference
1FR2	Fire risk	Following grass cutting prior to and during the declared fire season	As required	Inspect groundcover to ensure grass clippings have not accumulated.	Construction Manager	No accumulated grass clippings on site	FMERP
1FR3	Fire risk	Construction Operation	Total Fire Ban days	Inspect construction activities to ensure no hot works are occurring without a hot works exemption from the NSW Rural Fire Service.	Construction Manager during construction Site Manager during operation	No hot works occurring.	FMERP
<p>Environmental Aspect: <u>Construction noise</u></p> <p>Objective: To minimise noise generated from construction activities.</p> <p>Target: No unauthorised noise emissions.</p>							

Ref #	Type of monitoring	Timing	Frequency	Monitoring task	Person Responsible for control	Measurement criteria	Environmental control reference
1N	Construction Noise	Construction	Weekly	Observe onsite activities to ensure unnecessary noise is not being generated.	Construction Manager	No unnecessary noise (e.g. unnecessarily loud radios, voices, equipment dropping, engine revving etc.)	WHSEMP
3N	Construction Noise	Construction	Weekly	<ul style="list-style-type: none"> Observe operating machinery to ensure no equipment is left idling for extended periods when not in use. 	Construction Manager	<ul style="list-style-type: none"> No open engine covers while machinery is operating. No machinery left idling for prolonged periods. 	WHSEMP
4N	Construction Noise	Construction	Weekly	Inspect machinery records to ensure all machinery onsite have been properly maintained.	Construction Manager	All machinery have up to date maintenance records	WHSEMP

Ref #	Type of monitoring	Timing	Frequency	Monitoring task	Person Responsible for control	Measurement criteria	Environmental control reference
Environmental Aspect: <u>Air Quality</u> Objective: To prevent the release of dust from the site. Target: No off-site dust deposits or complaints regarding dust.							
1AQ	Air Quality	Construction	Weekly	Undertake surveillance for visible dust generation and smoke emissions.	Construction Manager	<ul style="list-style-type: none"> ▸ No excessive airborne dust ▸ No smoke being emitted from vehicles for more than 10 seconds. 	WHSEMP
2AQ	Air Quality	Construction	Weekly	Inspect trucks leaving the site to ensure they are covered if transporting loose material such as soil and aggregate.	Construction Manager	No trucks transporting loose material leave the site uncovered.	WHSEMP
3AQ	Air Quality	Construction	Weekly	Observe site vehicle movements to ensure speed limits are being adhered to.	Construction Manager	No exceedance of speed limits.	WHSEMP

