



# Avonlie Solar Farm

# Operations Environmental Management Plan

# Document Authorisation

## Document Details

Document Title	Environmental Management Strategy
Version	1.0
Version Date	08 October 2024
Review Period	Annual

## Revision History

DATE	VERSION	PREPARED BY	CHECKED	APPROVED	REVISION NOTES
-- /03/2025	01	Iberdrola Site Operations Team		S. Kelly	Initial Issue

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# Document Control

The O&M Service Operations Manager is responsible for the revision and update of this Operations Environmental Management Plan (OEMP) for the Avonlie Solar Farm (Avonlie SF). A new revision date is required with any updates or revisions, and all major revisions will be circulated to those on the Email Distribution List once the revision has been approved by the Iberdrola Executive General Manager Operations & Projects.

## OEMP Review

This OEMP will be reviewed formally at least on an annual basis by the O&M Service Operations Manager in consultation with the O&M Service Health, Safety & Environment Advisor and the O&M Service Site Manager, and other stakeholders as required. Review will also take place immediately after any significant incident or change to the activities, products or services or material changes in the operating conditions.

This OEMP has been developed during construction of the solar farm. Therefore, this OEMP is subject to change throughout the life of the Avonlie SF as new or updated information about the maintenance and operational phase of the solar farm develop.

Version	Date	Description	Author	Reviewed	Approved
For review	29/09/2023	For Iberdrola's review.	Cynthia do Nascimento (Jacobs)	Damien Wagner	

## Distribution List

Company	Position / Role
Iberdrola	O&M Site Manager
Iberdrola	O&M GM Sustainable Generation
Iberdrola	O&M HSE Manager
NSW Department of Planning and Environment (cc OEH, EPA)	Representative
Narrandera Shire Council	Representative
Water NSW	Representative

## Key Emergency Service Contact Details

Organisation	Telephone Number
All Emergencies (fire, ambulance, police)	000
Bushfire information line	1800 679 737
HAZMAT (Chemical Spills)	000
NSW State Emergency Services (storms, floods and tsunamis)	13 25 00
NSW Rural Fire Service (bush fire related incidents)	1800 679 737
Injured wildlife – WIRES	1300 094 737
Narrandera District Hospital – 54 Adams Street (24 hour)	000 (Accident & Emergency (02) 6951 0200)
Poisons Information Centre	13 11 26
Wagga Wagga Snake Service	0419 448 350 (Anthony Davis)
Water NSW	1300 662 077

## Other Key Environmental Contact Details

Organisation	Telephone Number	To be notified when
NSW Department of Planning and Environment	Planning 1300 420 596  Environment and Heritage 1300 361 967	Any enquiries, requests or non-compliance with approval conditions or any proposed departure from the conditions of Project Approval.
Environment Protection Authority NSW	13 15 55	Any enquiries, requests or non-compliance (including notifiable incidents) with approval conditions or any proposed departure from the conditions of Environmental Protection Licence.
Narrandera Shire Council	(02) 6959 5510	Major hazardous substance spills or erosion events, especially those that impact upon waterways within Narrandera local government area.



# Executive Summary

This OEMP has been prepared by Iberdrola Australia Limited (Iberdrola) to establish the management framework for environment issues relating to the operation phase of the Avonlie SF.

Iberdrola will comply with conditions listed within the NSW Minister for Planning's Project Approval (SSD 9031) issued on 8 August 2019. Details of modifications (to date) to these conditions are as follows:

- Mod 1 – determined on 01 November 2020 – Disturbance footprint and intersection change (update of project layout, redesign internal road network and site access, remove the Basic Left Turn at Muntz and Sandigo Roads intersection); and
- Mod 2 – determined on 02 May 2021 – Changes to battery storage system (move from a centralised to decentralised and increase the capacity of the battery energy storage system).

In general terms, these conditions are required to (see page 1 of the Project Approval):

- prevent and/or minimise any adverse environmental impacts of the development;
- set standards and performance measures for acceptable environmental performance; and
- provide for the ongoing environmental management of the development.

This OEMP has been developed in accordance with Schedule 4 Condition 1 of the Project Approval conditions. The Project Approval conditions listed in the table below require some activity, responsibility or awareness of the operational environmental requirements.

CONDITION OF APPROVAL	SUMMARY OF CONDITION	WHERE IS ADDRESSED IN THIS OEMP
Schedule 2		
Condition 1	Obligation to minimise harm to the environment	All document
Conditions 2 to 4	Terms of consent	All document
Condition 7	Work as executed plans	Section 2.16
Condition 8	Notification of Department	Section 2.5
Condition 12	Operation of plant and equipment	Section 5 and 10
Schedule 3		
Conditions 2 to 4	Transport	Section 6
Condition 6	Transport	Section 6
Condition 10	Biodiversity Offsets	Section 2.17
Condition 11	Biodiversity Management Plan	Addressed in the Avonlie SF Biodiversity Management Plan (NGH, 2021) or its latest approved version. A subplan is provided in Section 4 of this OEMP.

Conditions 12 to 16	Amenity management	Section 9
Condition 18	Heritage Management Plan	Addressed in the Avonlie SF Cultural Heritage Management Plan (NGH, 2022) or its latest approved version. A subplan is provided in Section 12 of this OEMP.
Conditions 19 to 20	Water management	Section 11
Condition 22	Stormwater Management Plan	Addressed in the Avonlie SF Stormwater Management Plan (Jacobs, 28 June 2021) or its latest approved version.
Condition 24	Storage and handling of dangerous goods	Section 10
Condition 25	Operating conditions	Section 3
Condition 26	Emergency Plan	Addressed in the Avonlie SF Emergency Management Plan (Iberdrola, 08 September 2023) or its latest approved version.
Condition 27	Waste management	Section 8
Condition 28	Accommodation and employment strategy	Addressed in the Avonlie SF Accommodation and Employment Strategy (Jacobs, 29 June 2021) or its latest approved version.
Schedule 4		
Conditions 1 to 3	Environmental Management Strategy	Addressed in the Avonlie SF Environmental Management Strategy (RES, 29 June 2021) or its latest approved version.
Condition 4	Incident notification	Section 2.9
Condition 5	Non-compliance notification	Section 2.10
Condition 7	Independent environmental audit	Section 2.14
Condition 8	Access to information	Section 2.4

It is noted that under Section 48 the *Protection of the Environment Operations Act 1997 (NSW)*, the operation of solar farms is not classified as a scheduled activity and, therefore, an Environmental Protection Licence (EPL) is not required to carry out operational activities.

All persons involved in the operation phase of Avonlie SF shall undertake their respective activities in accordance with the relevant requirements of this OEMP, this includes employees, contractors and sub-contractors. Awareness of relevant requirements shall be included within a site-specific health, safety and environment induction and / or through other appropriate forums such as toolbox talks.

This OEMP shall be read in conjunction with all related Avonlie SF Health, Safety, and Environmental documents as well as other associated Avonlie SF management plans implemented by Iberdrola.

The environmental impacts addressed in this reflect the scope and level of environmental protection and care and authorisations obtained during the operation phase of the project. It formalises the processes and procedures which will ensure compliance with the obligations

set out in these documents, and that the appropriate levels of environmental standards are achieved.

## Definitions

TERM	MEANING
Avonlie SF or “the Project”	Avonlie Solar Farm
BMP	Biodiversity Management Plan
CoA	Conditions of Approval
DPE or “the Department”	NSW Department of Planning and Environment which can modify its name from time to time.
EIS	The Environmental Impact Statement for Avonlie Solar Farm dated June 2018, the amended development application letter dated 21 February 2019, the Response to Submissions dated June 2019 and the subdivision plan, as amended by: <ul style="list-style-type: none"> <li>• Avonlie Solar Farm Modification Report dated 8 October 2020 and additional information dated 5 November 2020; and</li> <li>• Avonlie Solar Farm Modification Report 2 dated 10 March 2021.</li> </ul>
Feasible	Feasible relates to engineering considerations and what is practical to build or implement.
FRNSW	Fire and Rescue NSW
Heavy vehicle (as per conditions of consent)	A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass of more than 4.5 tonnes
HSE	Health, Safety and Environment.
Incident (as per conditions of consent)	A set of circumstances that causes or threatens to cause material harm to the environment.
Iberdrola	Iberdrola Australia Limited, the Proponent of the Project.
Material harm to the environment (as per conditions of consent)	Is harm that: <ul style="list-style-type: none"> <li>• involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or</li> <li>• 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)</li> </ul>
Non-compliance (as per conditions of consent)	An occurrence, set of circumstances or development that is a breach of the consent but is not an incident.
NSW	New South Wales

OEH	NSW Office of Environment and Heritage
OEMP	Operation Environmental Management Plan
O&M	Operations and Maintenance
Reasonable (as per conditions of consent)	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
RFS	Rural Fire Service
SoC	Statement of Commitments.
Site	The area defined for the Avonlie Solar Farm.
Subcontractor	Any company, body or person who is contracted to AVONLIE SF, for the purpose of supplying goods and/or services.
VIA	Visual Impact Assessment
WHSMP	Work, Health and Safety Management Plan

# 1. Introduction

The Avonlie SF comprises 455,868 solar modules distributed in 16,281 strings on approximately 571 hectares (Ha) located approximately 20 kilometers (km) south of Narrandera NSW, within the Narrandera Local Government Area (LGA). The Project is expected to operate for about 30 years, after which it would be reconditioned or decommissioned.

The development site is zoned RU1 land for primary production. The land surrounding the development site is RU1 (primary production), RU3 (forestry) and RU4 (primary production small lots). Surrounding agricultural land consists of cropping and grazing. Buckingbong State Forest is within 5 km of the site. The Avonlie SF locality map is illustrated in Figure 1-1.

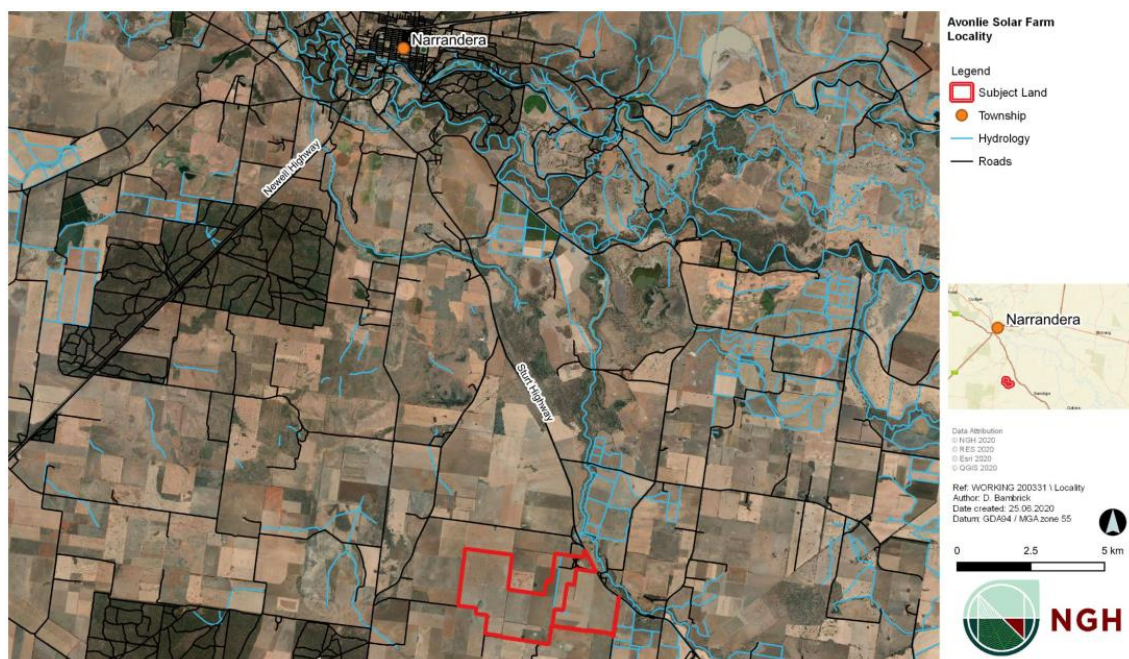


Figure 1-1: Avonlie SF locality map

### 1.1. Project Description

### 1.1.1. Project Approval

The solar farm was approved by the NSW Government on 8 August 2019. The Project Approval has been modified two times since originally being granted as follows:

- Mod 1 – determined on 01 November 2020 – Disturbance footprint and intersection change (update of project layout, redesign internal road network and site access, remove the Basic Left Turn at Muntz and Sandigo Roads intersection); and
- Mod 2 – determined on 02 May 2021 – Changes to battery storage system (move from a centralised to decentralised and increase the capacity of the battery energy storage system).

The Consolidated Consent SSD 9031 includes all the modifications to the original determination instrument and associated Conditions of Approval.

The CoA applicable to the operational phase of the Project are detailed in the Table 1-1:

CONDITION OF APPROVAL	SUMMARY OF CONDITION	WHERE IS ADDRESSED IN THIS OEMP
Schedule 2		
Condition 1	Obligation to minimise harm to the environment	All document
Conditions 2 to 4	Terms of consent	All document
Condition 7	Work as executed plans	Section 2.16
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Condition 24	Storage and handling of dangerous goods	Section 10
Condition 25	Operating conditions	Section 3
Condition 26	Emergency Plan	Addressed in the Avonlie SF Emergency Management Plan (Iberdrola, 08 September 2023) or its latest approved version.
Condition 27	Waste management	Section 8
Condition 28	Accommodation and employment strategy	Addressed in the Avonlie SF Accommodation and Employment

		Strategy (Jacobs, 29 June 2021) or its latest approved version.
Schedule 4		
Conditions 1 to 3	Environmental Management Strategy	Addressed in the Avonlie SF Environmental Management Strategy (RES, 29 June 2021)) or its latest approved version.
Condition 4	Incident notification	Section 2.9
Condition 5	Non-compliance notification	Section 2.10
Condition 7	Independent environmental Audit	Section 2.14
Condition 8	Access to information	Section 2.4

Table 1-1: Conditions of Project Approval (SSD 9031)

### 1.1.2. Site Layout and Components

The Site as-built layout is provided in Appendix A and consists of the following components:

- Solar arrays consisting of 138,684 solar modules of 535 W and 317,184 solar modules of 540 W supported by piles, driven into the ground to support the solar array's mounting system. The photovoltaic solar arrays are ground-mounted on a single-axis tracking system
- 35 inverter stations
- A substation including an elevated busbar, switch room, a lightning protection system, and current and voltage transformers and a dual connection into two existing transgrid overhead transmission lines
- 132 kv overhead line (around 0.6km) to connect the substation into an existing transgrid overhead transmission line to the west of the substation location.
- 132 kv overhead line (around 1.2km) to connect the substation into the second existing transgrid overhead transmission lines to the north of the substation location.
- 33 kv AC cables
- DC/ AC LV power cables and control cables (above ground and underground)
- Met stations
- 35 Ring Main Units (RMU)
- 70 step-up transformers
- 781 DC Combiner Boxes (DCIB)
- Operations and maintenance buildings with associated car parking

- Internal access tracks
- Emergency lighting and other auxiliary equipment

### 1.1.3. Operational Activities

The solar farm will be monitored and operated remotely and requires a small number of maintenance personnel (3 full time equivalent staff) to be based at the site. Operation activities would include:

- Routine visual inspections, general maintenance and cleaning operations of the solar arrays and the substation
- Groundcover vegetation management to minimise erosion, dust and weeds (subject to climatic conditions). Groundcover will be monitored and remediation (such as reseeding or soil protection) undertaken as required
- Site security response (24hr) if required
- Site operational response (24hr) if required
- Replacement of equipment and infrastructure as required
- Maintenance of landscaping and screening plantings as required
- Pest plant and animal control as required.

Water for solar panel cleaning is expected to be delivered to the site, requiring around 142 tanker visits per year, based on one wash per season using 0.8 litres/panel. Panel washing may not be required as frequently once groundcover has been established at the site.

All vehicles associated with the development will travel to and from the site via the Sturt Highway, Sandigo Road, Muntz Road and the site access point on Muntz Road. Operational traffic within the panel area is expected to be minimal with approximately 2-5 vehicles based permanently at the site.

Daily operations and maintenance by site staff will be undertaken indicatively during standard working hours of:

- Monday to Friday: from 7 am to 6 pm
- Saturday: from 8 am to 1 pm.

Night works or work on Sundays or public holidays would be avoided, except in the event of emergencies or major asset inspection or maintenance programs. During summer months, the PV panels would produce electricity prior to 7 am and after 6 pm. Tracker units would similarly operate outside standard hours in summer.

## 1.2. Iberdrola

Any Iberdrola management systems, policies or procedures that are referred to in this document apply equally to Avonlie SF for the purposes of this OEMP.



### 1.3. Purpose and Objectives

The purpose of this OEMP is to:

- Provide a management framework that aims to control potential operational impacts on the environment. It includes practical and achievable performance requirements; mitigation strategies; a system of monitoring, reporting and auditing; and process for implementation of corrective action;
- Ensure all operation staff are made aware of the potential operational impacts on the environment, and the associated management strategies within which they are expected to conduct their activities;
- Provide evidence of compliance with our development conditions of consent, relevant legislation, policies, guidelines and requirements to Local, State and Commonwealth Authorities; and
- Provide stakeholders with the assurance that the operation of the site is being managed in an environmentally acceptable manner.

The objectives of this OEMP are to:

- Provide for the effective management of the environmental concerns and potential adverse environmental effects arising from Avonlie SF;
- Assign management responsibilities and to define reporting requirements;
- Identify appropriate impact mitigation measures and management strategies in response to potential adverse environmental effects; and
- Establish a system to test the effectiveness of environmental management actions implementation, by way of audits and inspections.

The scope of the development and its environmental management will be undertaken in accordance with the CoA listed within the Planning Approval SSD 9031 as modified. Key references that contributed to the contents of this plan are:

- Avonlie SF Project Approval SSD 9031
- EIS submitted as part of the Project Approval and modifications
- Environmental risk analysis

This OEMP has been developed in accordance with Schedule 4 Condition 1 of the Project Approval conditions, which requires the description of the strategic framework for environmental management of the development. This OEMP must be read in conjunction with the following documents prepared for Avonlie SF:

- Accommodation and Employment Strategy (Jacobs, 29 June 2021) or its latest approved version

- Biodiversity Management Plan (NGH, 2021) or its latest approved version
- Cultural Heritage Management Plan (NGH, 2022) or its latest approved version
- Emergency Management Plan (Iberdrola, 08 September 2023) or its latest approved version
- Stormwater Management Plan (Jacobs, 28 June 2021) or its latest approved version
- Work Health and Safety Management Plan (Iberdrola, 8 August 2023)

The OEMP has been prepared considering the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004) and is subject to review and written approval by the Secretary of DPE prior to commencement of operations.

The OEMP will be made publicly available on the Avonlie SF website as soon as practicable.

## 2. Environmental Management

### 2.1. Environmental Policy

Iberdrola Australia is guided by the Group's Environment Policy. To implement the Group's commitment to the environment and boost environmental sustainability, the following principles apply to all its activities:

- Develop a sustainable model that is respectful of nature, biodiversity, and historical and cultural heritage;
- Meeting or exceeding legal and applicable environmental standards;
- Apply the principles of avoid, mitigate, or offset in all activities;
- Promote innovation through research and support for the development of new technologies and best environmental practices;
- Use natural capital sustainably; and
- Conserve, protect and promote the development and growth of natural heritage.

All personnel are required to comply with all environmental requirements as outlined in this OEMP, including, but not limited to, site employees, subcontractors and suppliers.

### 2.2. Environmental Management Strategy

Condition 1 of Schedule 4 of the Project Approval requires the development of an Environmental Management Strategy (EMS) for the Avonlie SF to the satisfaction of the Secretary.

The Avonlie SF Environmental Management Strategy (RES, 29 June 2021) was approved by the Secretary and provides the strategic framework for environmental management of the solar farm, which includes the implementation of an OEMP (this document).

## 2.3. Structure and Responsibility

The Project Approval has been granted for Avonlie SFPL with ultimate responsibility for the project implementation resting with Iberdrola. Figure 2-1 below displays the Project environmental management organisation structure as predicted at the time of developing this OEMP.

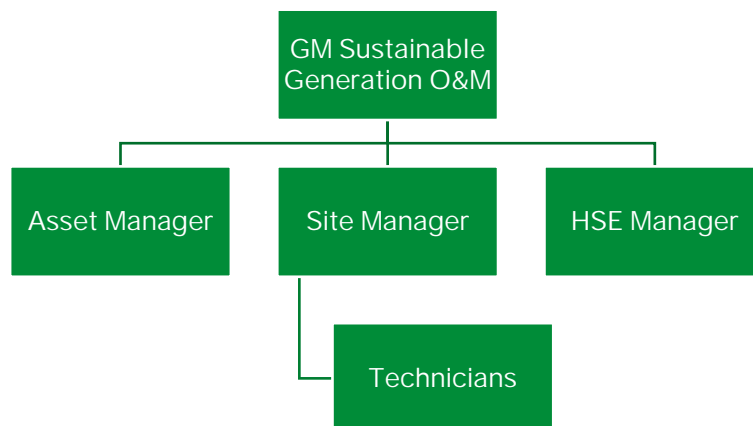


Figure 2-1: Environmental organisation structure

All personnel on site have responsibilities and obligations to minimise impacts on the environment, and to work safely and maintain a healthy working environment for themselves, fellow workmates and the public. The responsibilities of key Iberdrola personnel include, but are not necessarily limited to, the following:

### 2.3.1. O&M GM Sustainable Generation (off-site)

It is the responsibility of the O&M GM Sustainable Generation (hereafter referred to as 'Operations Manager') to ensure that sufficient resources are available to implement, develop and maintain this OEMP throughout the life of the solar farm. This role will ensure actions and delegations have been completed to introduce and manage systems to meet Iberdrola's project and corporate requirements. The Operations Manager reports to the Project Owner.

- The role of the Operations Manager is to:
- Ensure that adequate resources are available for the implementation of this OEMP;
- Assist in setting, defining and communicating the environmental goals and targets;
- Ensure that environmental matters relating to the solar farm are reported to relevant personnel and are included in the agenda of management meetings;
- Define, document and communicate roles, responsibilities and authorities of all personnel involved in the environmental system in order to facilitate effective HSE management;

- Oversee the development, approval, implementation and review of this OEMP;
- Ensure Contractors are fully aware of their environmental obligations prior to entering into construction contracts;
- Implement stop work procedures where they believe a work activity to be an actual or potential cause of pollution to the environment; and
- Ensure that key personnel for the solar farm are inducted into this framework.

### 2.3.2. O&M HSE Manager (off-site)

The O&M Service HSE Advisor (hereafter referred to as 'HSE Advisor') reports to the Operations Manager. The role of the HSE Advisor is to:

- Provide environmental management advice and support the Site Manager;
- Assist with environmental monitoring, reviews and audits as required;
- Monitors environmental performance at the site;
- Assist with environmental incident investigations; and
- Direct construction teams and personnel to take reasonable measures to prevent or minimise any material harm to the environment.

### 2.3.3. O&M Site Manager (on-site)

The O&M Site Service Manager (hereafter referred to as 'Site Manager') is responsible for the practical day-to-day implementation of this plan and reports to the Operations Manager. The Site Manager will:

- Plan and organise operations to reduce the risk of adverse environmental impacts;
- Ensure operations comply with all relevant regulatory and project requirements;
- Notify the Operations Manager of any required operations or changes to site conditions outside the limits of the applicable project approvals/permits/plans to seek the necessary approvals;
- Report all environmental incidents and near misses with significant potential to the Operations Manager;
- Direct construction teams and personnel to take reasonable measures to prevent or minimise any material harm to the environment;
- Conduct or participate in regular site environment inspections;
- Participate in incident/hazard investigations where appropriate;
- Foster a continuous improvement approach to all HSE matters; and

- Implement stop work procedures where they believe a work activity to be an actual or potential cause of pollution to the environment.

#### 2.3.4. O&M Site Technicians (on-site)

The O&M Site Technicians (hereafter referred to as 'Site Team') report to the Site Manager. The role of the O&M Site Technicians is to:

- Identify and treat environmental risks before commencing works each day and prevent any material harm to the environment;
- Participate in environmental reviews and audits as required for relevant service areas;
- Ensure servicing comply with all relevant regulatory and project requirements;
- Provide environmental documentation and records for relevant service areas;
- Implement and comply with the applicable environmental management measures;
- Report on environmental performance at the site for relevant service areas; and
- Report any environmental incidents (potential and/or actual) in a timely manner.

#### 2.3.5. All Personnel

All personnel must carry out their work in a manner consistent with Iberdrola's HSE Policy. All personnel are responsible for the environmental impacts of their own actions and have a duty to carry out their work in a manner which does not present a risk to the environment. All personnel are required to report any deviation from the conditions anticipated in this OEMP and report environmental incidents and risks to the Site Manager.

No personnel may interfere, intentionally or recklessly, with environmental controls at the site. This includes interference by way of practical jokes and skylarking. Any such interference will not be tolerated and may lead to counselling or other actions including and up to removal from the site.

### 2.4. Environment Protection Licence

Under Section 48 the Protection of the Environment Operations Act 1997 (NSW), the operation of solar farms is not classified as scheduled activity and, therefore, an Environmental Protection Licence (EPL) with the regulatory authority is not required to carry out the AVONLIE SF's operational activities.

### 2.5. Notification to Department

Condition 8 of Schedule 2 requires that prior to the commencement of the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Applicant must notify the Department in writing of the date of commencement, or cessation, of the relevant phase. Iberdrola will notify the DPE the date of commencement of operations of the solar farm in writing prior to the commencement of the operational phase.

## 2.6. Notification of Emergency Management Committee

Condition 25 of Schedule 3 requires the notification to relevant Local Emergency Management Committee (LEMC) following construction of the development, and prior to commencing operations.

The Chair of the Narrandera LEMC (Shane Wilson) was notified via email on 1st July 2023 by Avonlie SF's Principal Contractor (BEON) on the completion of the construction works and commencement of Avonlie SF entering the operation phase. The Chair of the Narrandera LEMC acknowledged receipt of the notification on 25th July 2023.

The notification issued to the Narrandera LEMC is available in Appendix E.

## 2.7. Information for the local community and relevant agencies

To keep the local Narrandera community and relevant agencies informed about the environmental performance of the Avonlie SF, the Iberdrola will proceed to regularly publish news about the Project at <http://www.avonlie-solarfarm.com/news/>.

In addition to the above, the Iberdrola will proceed to make the following information publicly available on the Avonlie SF website as relevant to the stage of the Project and keep this information up to date:

- the EIS;
- the final layout plans for the development;
- current statutory approvals for the development;
- approved strategies, plans or programs required under the conditions of this consent;
- the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
- how complaints about the development can be made;
- the complaints register;
- compliance reports;
- any independent environmental audit, and the Applicant's response to the recommendations in any audit; and
- any other matter required by the Secretary.

## 2.8. Complaints

Complaints may come from several avenues, for example the complaints line, direct contact with Iberdrola or Iberdrola's contractors, direct to the site manager by phone (the telephone

number is displayed on the site notice board) or by personal contact with Iberdrola employees. Any complaints received shall be treated seriously and with respect.

Iberdrola is committed to dealing with complaints in a reasonable timeframe and commits to ensuring that people who make complaints will be:

- provided with acceptable ways to make complaints;
- provided with information about the complaint handling process;
- listened to, treated with respect and actively involved in the complaint process; and
- provided with reasons for and decisions and any options for redress or review.

All reasonable steps will be taken to ensure that people making complaints are not adversely affected because a complaint has been made by them or on their behalf. The identity of complainants will be protected where practical and appropriate, and personal information that identifies individuals will only be disclosed or used by the Avonlie SF as permitted under the relevant, secrecy provisions and privacy laws, secrecy provisions and any relevant confidentiality obligations.

Complainants will be able to submit anonymous complaints and Iberdrola will carry out an investigation of the issues raised where there is enough information provided. If a person prefers or needs another person/organisation to assist or represent them in making their complaint, the Iberdrola will communicate with them through their representative.

Iberdrola will acknowledge the receipt of any complaint within 1 business day from receiving the complaint and will ensure that the person handling the complaint is different from any project person whose conduct or service is being complained about. A detailed response to the complaint will be provided within 2 businesses days.

### 2.8.1. Raising a Complaint

The Project's website (<https://www.iberdrola.com.au/home/contact/>) provides the contact details to be used by a person seeking to make a complaint:

- Phone: 1800 917 372 (24 hours, free within Australia)
- Email: [complaints@iberdrola.com.au](mailto:complaints@iberdrola.com.au)
- Post: Level 22 Governor Phillip Tower, 1 Farrer Place, Sydney, NSW 2000

In addition, information on how to lodge a complaint will be available onsite via signage for the site personnel, contractors and visitors.

### 2.8.2. Making a complaint to the Department

Complainants may opt to lodge a complaint about the Project with the DPE. Upon the receipt of the complaint, the Department commences an investigation which can take up to 12 months to conclude, depending on the nature and complexity of the complaint.

### 2.8.3. Complaints Register

Details of complaints received will be documented in the Complaints Register and recorded and managed via Iberdrola's Complaint Handling Standard.

## 2.9. Environmental Incidents

### 2.9.1. Incident Notification, Reporting, Investigation and Recording

All incidents, including all near misses, injuries, plant damage etc., are to be reported and managed in accordance with procedures outlined in the Avonlie SF Work Health and Safety Management Plan (Iberdrola, 8 August 2023) or its latest version.

### 2.9.2. Notification to the Planning Secretary

Condition 4 of Schedule 4 states that the Planning Secretary must be notified in writing via the Major Projects website immediately after Iberdrola becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 6 of the Project Approval, as compiled below:

- A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after Iberdrola becomes aware of an incident. Notification is required to be given under this condition even if the Iberdrola fails to give the notification required under Condition 4 of Schedule 4 or, having given such notification, subsequently forms the view that an incident has not occurred.
- The written notification of an incident must:
  - identify the development and application number;
  - provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
  - identify how the incident was detected;
  - identify when the applicant became aware of the incident;
  - identify any actual or potential non-compliance with conditions of consent;
  - describe what immediate steps were taken in relation to the incident;
  - identify further action(s) that will be taken in relation to the incident; and
  - identify a project contact for further communication regarding the incident.
- Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, Iberdrola must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.



- The Incident Report must include:
  - a summary of the incident;
  - outcomes of an incident investigation, including identification of the cause of the incident;
  - details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
  - details of any communication with other stakeholders regarding the incident

The Table below summarises the incident notification requirements to the Planning Secretary:

REQUIREMENT	TIMEFRAME	METHOD	RESPONSIBILITY
Notify the incident to the Planning Secretary in writing.	Immediately after Iberdrola becomes aware of an incident.	Major Projects website ( <a href="https://www.planningportal.nsw.gov.au/major-projects">https://www.planningportal.nsw.gov.au/major-projects</a> )	HSE Advisor
Written notification of the incident addressing the requirements 2(a) to 2(h) outlined in the Appendix 6 of the Planning Approval	Within seven days after Iberdrola becomes aware of an incident	Major Projects website ( <a href="https://www.planningportal.nsw.gov.au/major-projects">https://www.planningportal.nsw.gov.au/major-projects</a> )	HSE Advisor
Provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing the requirements 4(a) to 4(d) outlined in the Appendix 6 of the Planning Approval	Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary	Major Projects website ( <a href="https://www.planningportal.nsw.gov.au/major-projects">https://www.planningportal.nsw.gov.au/major-projects</a> )	HSE Advisor

Table 2-1: Environmental incident notification requirements

## 2.10. Non-Compliances

The operation of Avonlie SF shall be undertaken to avoid instances of non-compliance with this OEMP and the Project Approval requirements. In the event that a non-compliance involving failure to implement or adhere to the identified requirements of the Project Approval, OEMP or its Sub Plans does occur, the incident will be notified to the Site Manager immediately. Iberdrola will manage the non-compliance including undertaking an appropriate investigation into the matter.

Condition 5 of Schedule 4 states that the Department of Planning must be notified in writing within seven days after Iberdrola becomes aware of any non-compliance of the Project Approval.

The non-compliance notification must identify the Project and respective application number, the condition of consent that the Project 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, or will be, undertaken to address the non-compliance. It is noted that a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

As part of the non-compliance investigation, site inspections and interviews with the site personnel will be conducted, and all relevant information, including site records, will be identified and recorded as per Iberdrola's recording procedures. An independent third party may be engaged to undertake a specific inspection or conduct an audit to inform the investigation and appropriate any actions to address the non-compliance.

## 2.11. Disputes

Iberdrola is committed to being accessible and responsive in addressing the local community's feedback and concerns throughout the lifetime of the development and this includes resolving any disputes in a timely manner.

During the operation of the Project, should a dispute arise with the local community that is unable to be resolved by Iberdrola, the matter will be referred to the DPE for resolution or advice.

## 2.12. Environmental Risk Assessment

An Environmental Risk Assessment workshop was held on the 25 July 2023 with Iberdrola Operations' key representatives to assess the environmental risks associated to the activities to be performed through the operational phase of the solar farm, and reasonable and feasible measures to eliminate or mitigate the risks identified. The relevant and applicable outcomes of this analysis have been included in this OEMP.

The risk assessment was conducted in accordance with the methodology outlined in Iberdrola's Risk Assessment Procedure and compiled into the Site-Specific HSE Risk Register, which provides a detailed list of all identified site hazards and the control measures implemented to eliminate or minimise HSE risks. The risk register will be administered by Iberdrola and communicated to site personnel during site HSE inductions as they are relevant to the work they will be undertaking.

The risk register is an agenda item on the Monthly site HSE meetings and will be formally reviewed and updated (as required) on a regular basis upon new information, changes to legislation, changes to the working environment and / or after an incident. See Appendix C for the site-specific risk analysis applicable to the operational phase of the Project.

## 2.13. Inspections

Iberdrola site technicians will report all environmental hazards they identify as part of their normal day-to-day operations to the Site Manager. Inspections of site activities and environmental performance will be undertaken bi - weekly using the Environmental Inspection Checklist provided in Appendix B.

Where necessary, Iberdrola may review the level, scope and timing of inspections to ensure continuous improvement through the life of the solar farm.

## 2.14. Audits

Iberdrola will conduct annual audits in accordance with the Audit, Inspection, Review & Improvement Standard to assess compliance with the OEMP and its sub plans. Any non-compliances will be managed in accordance with the procedures outlined in Section 2.10. Iberdrola may procure the services of a third-party independent auditor to undertake audits of compliance with this OEMP.

Additional audits may be conducted where deemed appropriate and approved by the HSE Advisor. This may include:

- Where changes occur resulting to a significant change to the site's risk profile;
- When indicated by the results of a previous audit;
- Depending on the type of incidents or increased frequency of incidents; or
- When circumstances indicate that an audit is required

Audit outcomes will be communicated by the HSE Manager in accordance with the WHS Policy, Planning, Objectives and Reporting Standard. At a minimum the auditing findings will be summarised and communicated in the following:

- Quarterly HSE Meetings (attended by the Executive Team)
- Quarterly HSE Board Reports

The audit outcomes may also be reported to the Audit, Risk and Compliance committee if and as appropriate.

Government authorities such as the Department of Planning and the local council are also able to undertake audits of project compliance with approval conditions and relevant legislation at any time.

The Schedule 4 Condition 7 of the Project Approval requires that within 3 months of commencement of operations an Independent Audit of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020). Further details on how this audit is to take place is detailed in Conditions 7A to 7E. This audit will be conducted by Iberdrola in accordance with the conditions of consent.

## 2.15. Training

Site personnel will be inducted to this OEMP. This induction will generally take place at a site "Kick off" meeting, or similar meeting for the commencement of operations at Avonlie SF.

The Training, Competency & Verification Standard describes Iberdrola's general requirements for ensuring staff and contractors are trained and competent.

### 2.15.1. Iberdrola's Induction & Training

Iberdrola will ensure appropriate HSE training is given to all employees commensurate with their role, work activities and level of risk. The Induction will be conducted on the commencement of employment, for job transfers, for contractors and visitors to all sites.

Iberdrola's related training for employees may include the following training courses:

- HSE Responsibilities for Senior Leaders; and
- HSE Management and Risk Management systems.

### 2.15.2. Site Specific Training

Minimum needs will be identified for all operational/maintenance job roles within Iberdrola in the Avonlie SF Training Matrix. This will identify and make clear which training, licensing, certificates of competence and qualifications are Mandatory, Preferred and Optional for each role. All competencies required for a role (as per the Position Description) will be included on the Training Matrix including internal induction and training programs and requirements for refresher training. The training matrix will be reviewed and updated at least every 12 months by the Site Manager.

Contractors will refer to their environment management plans, and environmental risk register for the project and conduct a training needs analysis to identify the induction and training requirements for site personnel working or visiting within the site they control or the work they are undertaking. Contractors are responsible for keeping appropriate records of certification and training attendance.

### 2.15.3. Site Specific Induction

Iberdrola Site Manager will ensure that all employees, contractors and visitor undertake a site-specific induction, which will be developed based on the outcomes of the risks analysis for Avonlie SF. The induction will comprise (as a minimum):

- Any sensitive / no-go locations within the Project area;
- The importance of management of spills, leaks, illegal dumping and surface water quality within the Project area to prevent possible impacts to groundwater;
- Any areas that contain remnant vegetation that supports distinct vegetation community types – including any identified as threatened ecological communities and the location of these threatened ecological communities;
- Threatened fauna species under the Biodiversity Conservation Act 2016 Act within the Project area;
- Processes to be followed in the event of discovery of previously unidentified Aboriginal or Non-Aboriginal artefacts;
- Incident reporting requirements and methods;

- Site emergency procedures;
- Site specific rules and procedures;
- Operation activities, associated risks and controls; and
- Regulatory and Relevant Authority requirements relevant to the work.

Records will be maintained in accordance with the Iberdrola Contractor Management and Document Control and Records Management standards.

## 2.16. Works as Executed Plans

Condition 7 of Schedule 2 requires that prior to commencing operations or following the upgrades of any solar panels or ancillary infrastructure, the Applicant must submit work as executed plans of the development to the Department. The As-Built layout of the Development will be submitted to the DPE prior to commencing operations.

## 2.17. Biodiversity Offsets

The Project Approval Schedule 3 Condition 10, requires that within two years of commencing the development under this consent, the Applicant must retire biodiversity credits of a number and class specified in the Table 2-2 and Table 2-3 below. The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Scheme and can be achieved by:

- acquiring or retiring 'biodiversity credits' within the meaning of the Biodiversity Conservation Act 2016;
- making payments into an offset fund that has been developed by the NSW Government; or
- funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the biodiversity offset scheme.

VEGETATION COMMUNITY	PCT ID	CREDITS REQUIRED
Western Grey Box- White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion	80	76

Table 2-2: Ecosystem Credit Requirements (extracted from the Project Approval SSD 9031)

SPECIES CREDIT SPECIES	CREDITS REQUIRED
Sand-hill Spider Orchid ( <i>Caladenia Arenaria</i> )	40
Oaklands Diuris ( <i>Diuris</i> sp.)	40
Pine Donkey Orchid ( <i>diuris tricolor</i> )	21

A Spear Grass ( <i>Austrostipa wakoolica</i> )	27
Superb Parrot ( <i>Polytelis swainsonii</i> )	6
Major Mitchell Cockatoo ( <i>Lophochroa leadbeateri</i> )	6

Table 2-3: Species Credit Requirements (extracted from the Project Approval SSD 9031)

Iberdrola has engaged Niche Environment and Heritage to source biodiversity credits from open market. The preliminary search indicated availability of PCT 80 Western Grey Box. Direct payment to the Biodiversity Conservation Trust will be required for the shortfall.

The Project development commenced on the 6th of December 2021. The current status of the biodiversity offsets is detailed in Table 2-4:

Table 2-4: Biodiversity Offset Status

CREDIT TYPE	CREDITS REQUIRED	CREDIT SUPPLIER	ACTION
PCT 80	76	1 supplier – 3,868 credits available. CR-7940. These credits are owned by Aurelia metals so Supplier has been contacted for availability and price.	To follow up with supplier.
Sandhill spider orchid	40	No known or potential suppliers	Payment to the BCF
Oaklands Diuris	40	No known or potential suppliers	Payment to the BCF
Pine Donkey orchid	21	2 sites with expression of interest; same supplier. Supplier has been contacted for availability and price.	To follow up with supplier.
A Spear grass	27	No known or potential suppliers	Payment to the BCF
Superb Parrot	6	1 supplier with credits issued and 1 site in expression of interest. Both suppliers have been contacted for availability and price.	To follow up with supplier.
Major Mitchell Cockatoo	6	No known or potential suppliers	Payment to the BCF

## 3. Bush Fire Risk Management Plan

### 3.1. Introduction

Conditions 25 and 26 of Schedule 3 outline the requirements to manage the risk of fire associated to the solar farm, including management of vegetation fuel loads on-site and the development and implementation of a comprehensive Emergency Plan and detailed emergency procedures for the development, to the satisfaction of FRNSW and the RFS.

The Avonlie SF Emergency Management Plan (Iberdrola, 08 September 2023) was approved by the FRNSW and the RFS and will be implemented throughout the operations of the solar

farm. Relevant bushfire management measures are highlighted in the following subsections; however, this OEMP shall be read in conjunction with the Avonlie SF Emergency Management Plan (Iberdrola, 08 September 2023) or its latest version to ensure compliance with the CoA.

## 3.2. Performance Criteria

- Ensure full compliance with the relevant legislative requirements.
- Ensure full compliance with relevant requirements of the EIS, RTS and CoC.

## 3.3. Potential Impacts and Mitigation Measures

The operation of the solar farm including repairs and maintenance activities, and connection infrastructure has the potential to increase bush fire risk. However, bush fire risks can be minimised with the implementation of the mitigation measures below.

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
BF1	A 20,000L water supply tank fitted with a 65mm Storz and a FRNSW compatible fitting is located adjacent to the internal access road and will be maintained throughout operations.	Throughout operation	Site Manager	SH3COA25
BF2	A trailer with 1,500L skid mount water tank will be installed and maintained throughout operations.	Throughout operation	Site Manager	Avonlie SF Emergency Management Plan (SH3COA26 SoC HA7)
BF3	A comprehensive Emergency Management Plan was developed to the satisfaction of FRNSW and the RFS as part of the WHSEMP. The Emergency Management Plan include the list of works that will not be carried out during a total fire ban.	Prior to the commencement of operation	HSE Manager / Site Manager	SH3COA26 SoC HA7
BF4	Two copies of the Emergency Plan will be available in a prominent position adjacent to the site entry points at all times.	Throughout operation	Site Manager	SH3COA26 SoC HA1
BF5	10 metre asset protection zone (APZ) will be maintained around the perimeter of the	Throughout operation	Site Manager	SH3COA25 SoC HA8

	solar array to allow for unobstructed vehicle access.			
BF6	Overhead powerlines will be managed by maintaining appropriate vegetation clearances to minimise potential ignition risks, in accordance with the ISSC 3 Guideline for Managing Vegetation Near Power Lines.	Throughout operation	Site Manager	Avonlie SF Emergency Management Plan (SH3COA26 SoC HA7)
BF7	Dangerous or hazardous materials will be transported, stored and handled in accordance with AS 1940:2017 The storage and handling of flammable and combustible liquids and the ADG Code where relevant.	Throughout operation	Site Manager	SoC HA2

## 4. Biodiversity (Fauna and Flora) Sub Plan

### 4.1. Introduction

The CoA Schedule 3 Condition 11 requires the development of a Biodiversity Management Plan (BMP) in consultation with the Biodiversity, Conservation and Science Directorate (BCS) and to the satisfaction of the DPE. Following DPE's approval, the BMP must be implemented.

The Avonlie SF Biodiversity Management Plan (NGH, 30 May 2023) was approved by the DPE on 15 July 2021 and will be implemented throughout the operations of the solar farm. Relevant biodiversity management measures are highlighted in the following subsections; however, this OEMP shall be read in conjunction with the Avonlie SF Biodiversity Management Plan (NGH, 30 May 2023) or its latest version to ensure compliance with the CoA.

### 4.2. Performance Criteria

- Minimum of 70% of revegetation groundcover across 85% of the site.
- Failed patches in revegetated areas less than 20 m<sup>2</sup>.
- Priority weed populations less than 5% of the site.
- No dead trees within screening plantings.
- No fauna mortalities.



## 4.3. Potential Impacts

### 4.3.1. Weed Infestation

As outlined in the BMP, 34 species of exotic plant were recorded within the project area. High threat exotic plant cover recorded includes *Paspalum dilatatum* (Paspalum), *Xanthium spinosum* (Bathurst Burr), and *Carthamus lanatus* (Saffron Thistle), as illustrated in the pictures below. Weeds may ingress along the boundary of the development site or transported to and from the site through vehicle movements or staff clothing.



Figure 4-1: High threat exotic plant cover recorded (pictures extracted from NSW WeedWise website)

Weeds grow and reproduce rapidly, forming dense areas of vegetation. As they compete with native plants for nutrients, water, sunlight and space, weed infestation can reduce the diversity and abundance of native species and alter the balance of natural ecosystems, including threatening animals that rely on native flora for food and shelter.

A Pest and Weed Management Protocol is encompassed within the BMP and will be implemented throughout the operational phase of the Project. As noted in the procedure, intensive infestations of weeds may require the use of selective herbicides to prevent seed set and promote weed control. The advice of an ecologist or agronomist will be sought to advise on the control of weed infestations.

Where possible weed and pest management would be integrated with adjoining landowners.

### 4.3.2. Management of grassland biomass by mowing

The following indirect impacts were identified for mowing activities:

- Potential degradation of native grassland by increased biomass reducing native species germination; and

- Potential degradation of native grassland by producing nutrient-rich patches from sheep waste under shaded panels. Nutrient enrichment may favour exotic annuals over natives.

#### 4.3.3. Shading by solar infrastructure

- Shading by solar infrastructure may result in the following indirect impacts:
- Changes in soil moisture;
- Modification of habitat beneath array (mostly non-native);
- Potential loss of ground cover resulting in unstable ground surfaces and sedimentation of adjacent waterways; and
- Modification of native fauna habitat.

#### 4.3.4. Fauna

The solar farm infrastructure may reduce fauna movements across the landscape and displace resident fauna. Fauna mortalities and decline in local fauna populations were also identified as an operational risk due to the potential for birds and microbats colliding with solar panels and perimeter fence and fauna strike by vehicles.

### 4.4. Mitigation Measures

Mitigation measures to address potential biodiversity impacts are outlined below:

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
Pest and weed management				
BD1	Plant and vehicles will be inspected as per the Vehicle, Plant and Equipment Movement Procedures outlined in the BMP to prevent the spread of weed material.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12 SoC LU4)
BD2	Should weed material is identified in plant, vehicles and equipment (i.e., soil, seed and plant material) the Vehicle, Plant and Equipment Movement Procedures outlined in the BMP will be implemented, including washing down machinery, and washing down equipment and vehicles before entering and leaving the site.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12 SoC LU4)
BD3	Feral animals and weed control surveys will be conducted in a seasonal basis. If surveys indicate that the priority weed populations are greater than	Six Monthly	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10)

	5% of the site, and/or feral animals are identified on site, the Pest Weed Management Protocol outlined in the BMP will be implemented.			SoC BD12 SoC LU4)
Perimeter fence				
BD4	A perimeter fence has been installed to prevent large mammal pests such as feral cats, foxes and rabbits, entering the site. Regular inspections will be conducted to ensure the perimeter fence is fit for purposes. Should damages are identified, the fence will be rectified as soon as possible.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD5	Plain wire is to be used instead of barbed wire on all fencing including livestock fencing, vegetation exclusion fencing and security fencing to prevent fauna injuries and mortalities.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD6	Metal Flashers will be installed and maintained along substation fence at 5m intervals.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD7	Monitoring of the substation fencing will be completed at least once per week for the first two years following construction.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD8	All fauna caught on the substation fencing will be identified to species level and recorded.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD9	If a threatened species listed under the Biodiversity Conservation Act 2016 or Environment Protection and Biodiversity Conservation Act 1999 is recorded, the Biodiversity and Conservation Division of the Department of Planning and Environment will be notified via the BCD South West Planning mailbox (rog.southwest@environment.nsw.gov.au).	Throughout operation	HSE Manager / Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)

BD10	A report summarising fauna caught on the substation fencing will be provided to BCD every six months via the BCD South West Planning mailbox (rog.southwest@environment.nsw.gov.au)	Six Monthly	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
Groundcover				
BD11	Quantitative assessment of groundcover will be conducted 6 months upon completion of groundcover reseeding. If the assessment indicates that the revegetation groundcover is less than 70% across 85% of the site, corrective actions will be implemented considering the soil conditions (e.g. compaction, frequency of traffic movements, low seedbank storage, lack of soil moisture and nutrient imbalance). If soil chemistry is the growth limiting factor, soil testing will be used to determine any need for amelioration.	6 months upon completion of groundcover reseeding	HSE Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD12	Ground conditions and percentage of grass cover within the solar infrastructure will be weekly monitored in accordance with the Environmental Inspection Checklist. Hand seeding will be undertaken in areas identified for remediation.	Weekly	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD13	Inspection of revegetated areas will be conducted annually during operations. If inspections identify failed patches larger than 20 m <sup>2</sup> , or that the revegetation groundcover is less than 70% across 85% of the site, the Rehabilitation and Revegetation Protocol outlined in the BMP will be implemented.	Annually	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
Training				
BD14	All employees, subcontractors and personnel working on site will undergo induction training covering procedures and protocols included within this OEMP and the BMP.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10)
BD15	Site speed limits will be enforced, and operations personnel will drive carefully and below the designated speed limit.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11

				SoC BD10 SoC BD14)
BD16	Operational staff will remain on designated internal access tracks.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10)

## 5. Noise Management Plan

### 5.1. Introduction

Potential noise emission sources associated to the operational phase of the solar farm include:

- inverter and transformer components of the substation;
- light vehicle movements on site;
- maintenance of equipment; and
- road traffic associated with the transportation of equipment to site.

A Noise Assessment was developed as part of the EIS to quantify potential noise emissions associated with the operation of the solar farm. According to the assessment (Muller Acoustic Consulting, 30 April 2018), operational noise predictions meet the relevant criteria at all residential receptors.

The Condition 12 of the Schedule 2 requires that all plant and equipment used on site, or in connection with the development, is maintained in a proper and efficient condition; and operated in a proper and efficient manner.

### 5.2. Performance Criteria

The Project Noise Trigger Levels (PNTLs) are the levels above which noise management measures are required to be considered. The PNTLs adopted for the operational phase are detailed in Table 5-1.

CATCHMENT	ASSESSMENT PERIOD	PNTL (DB LAEQ,15MIN)
Residential Receivers (Rural)	Day	40
	Evening	35
	Night	35

Table 5-1: Noise Trigger Levels

Note: 'Day' means the period from 7am to 6pm Monday to Saturday, or 8am to 6pm on Sundays and public holidays; 'Evening' means the period from 6pm to 10pm; and 'Night' means the remaining periods.

### 5.3. Sensitive Receptors

Sensitive receptors that may be affected by noise from operation or construction activities and related road traffic were identified in the Noise Assessment (Muller Acoustic Consulting, 30 April 2018), and are provided in Table 5-2 below:

ID	ADDRESS	COORDINATES (MGA 55)		ASSOCIATED TO AVONLIE SF
		Easting	Northing	
R1	218 Muntz Road (derelict)	463936	6135243	Yes
R2	303 Muntz Road (derelict)	465895	6134726	No
R3	2025 Sandigo Road	465456	6134145	Yes
R4	1895 Sandigo Road	465589	6132877	No
R5	1777 Sandigo Road	463199	6131715	No
R6	441 Birrego Road	461002	6132410	No
R7	838 Birrego Road	458731	6131227	No
R8	2358 Strontian Road	459586	6133006	No
R9	2794 Strontian Road	460858	6136946	No
R10	456 Quilters Road	463373	6139277	Yes
R11	204 Quilters Road	465166	6138728	Yes
R12	7781 Sturt Highway	465484	6137623	Yes
R13	7715 Sturt Highway	466237	6137285	Yes
R14	7662 Sturt Highway	467564	6136908	Yes
R15	7481 Sturt Highway	468073	6135674	No
R16	Settlers Road	468608	6136294	No
R17	7259 Sturt Highway	461574	6134096	No
R18	838 Birrego Road	457347	6130508	No
R19	2195 Strontian Road	463936	6131514	No

Table 5-2: Noise Sensitive Receptors

### 5.4. Potential Impacts and Mitigation Measures

The following mitigation measures will be implemented to ensure noise emissions associated to operations activities meet the relevant criteria.

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
NM1	A one-off noise validation monitoring assessment will be conducted to quantify noise emissions and confirm whether they meet the relevant criteria.	Within 3 months of commencement of operations	HSE Manager / Site Manager	SoC NS7
NM2	Plant will be operated in a conservative manner to minimise noise emissions, which includes:	Throughout operation	Site Manager	SoC NS3

	<ul style="list-style-type: none"> <li>- Selection of the quietest suitable machinery.</li> <li>- Avoidance of noisy plant working simultaneously where practical.</li> <li>- Utilise broadband reverse alarm in lieu of high frequency type.</li> </ul>			
NM3	All staff on-site will be informed of procedures to operate plant and equipment in a quiet and efficient manner.	Throughout operation	Site Manager	SoC NS4
NM4	Vehicles, plant and equipment will be regularly inspected and maintained to ensure they are in good condition.	Throughout operation	Site Manager	SH2COA12 SoC NS6
NM5	Activities will be undertaken during standard working hours and night works will be avoided.	Throughout operation	Site Manager	
NM6	In the event work is required to be undertaken outside the standard working hours, an Out of Hours Work Protocol will be developed and implemented. The Protocol will include (but will not be limited to) noise mitigation measures and notification requirements to relevant regulatory authority and/or nearby residents	Throughout operation	Site Manager	SoC NS2
NM7	A complaints management system will be established and maintained to respond to noise complaints from the community. Should a complaint be received in relation to noise, the complaint will be processed in accordance with the Complaints Procedure (Section 2.8)	Throughout operation	HSE Manager	SH4COA1



## 6. Traffic and Transport Management Plan

### 6.1. Introduction

Activities undertaken during the operation phase will include travelling to the site office or maintenance building and carrying out maintenance activities on the solar farm infrastructure. During major maintenance activities, the number of vehicles will increase to up to 10 vehicles for a limited period.

Operational traffic within the panel area is expected to be minimal with approximately 3-5 vehicles based permanently at the site.

The Condition 4 of Schedule 3 requires all vehicles associated with the development to travel to and from the site via the Sturt Highway, Sandigo Road, Muntz Road and the site access point on Muntz Road, as illustrated in the Figure 6-1 (extracted from the Appendix 1 of the Project Approval):

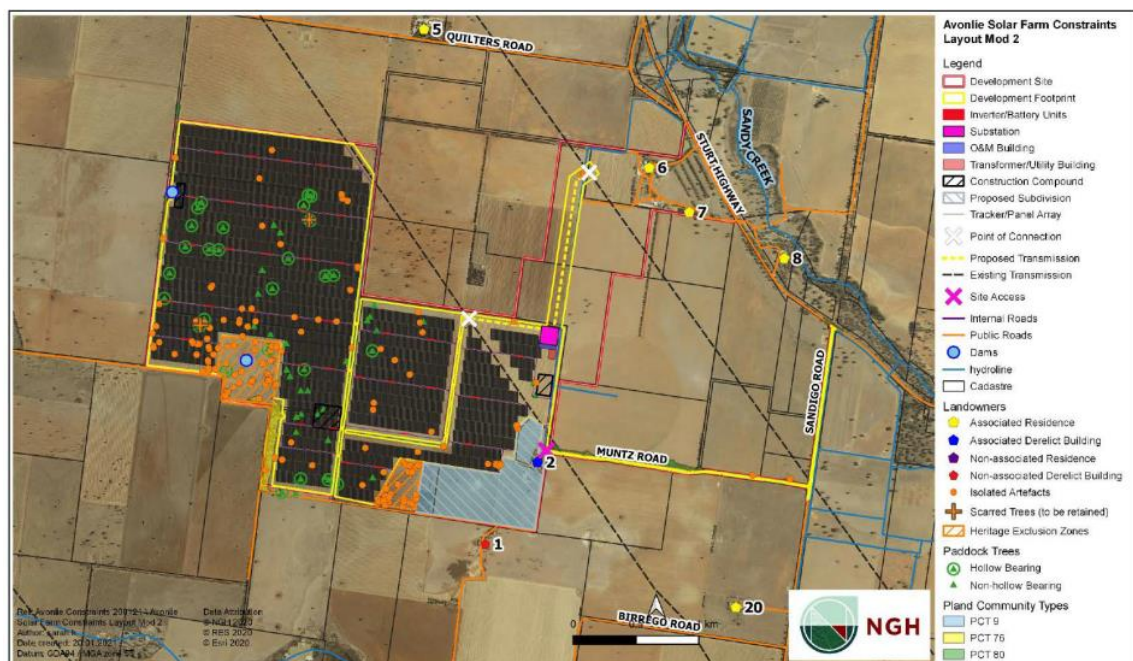


Figure 6-1: Access route to the site

Furthermore, the Condition 6 of Schedule 3 requires the Applicant to ensure that no parking occurs on the public road network in the vicinity of the site. All vehicles must be loaded and unloaded on site and enter and leave the site in a forward direction. Vehicles leaving the site must be in a clean condition to minimise dirt being tracked onto the sealed public road network.



## 6.2. Heavy Vehicles

Aligned with Condition 2 of Schedule 3, heavy vehicles movements on the public road network will be limited to 2 movements each day during operations. In addition, all vehicles utilised for operations will not exceed 19 metres.

Any requirement for additional number of heavy vehicle movements per day and/or use of vehicle exceeding 19 metres of length shall be notified to the Operations Manager. No activities shall be undertaken contrary to the Project Approval Condition unless a written authorisation is obtained from the DPE.

## 6.3. Potential Impacts and Mitigation Measures

It is considered unlikely that the low levels of operational traffic would obstruct public or private local access or be above the background noise levels. Additional risks to road safety from operational traffic would be minimal.

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
TT1	Awareness training regarding enforcing site speed limits to minimise fauna strike will be delivered during site inductions.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD14)
TT2	Operations personnel will drive carefully and below the designated speed limit to minimise dust generation and disturbance to livestock.	Throughout operation	Site Team	
TT3	All vehicles associated with the development will travel to and from the site via the Sturt Highway, Sandigo Road, Muntz Road and the site access point on Muntz Road.	Throughout operation	Site Manager	SH3COA4
TT4	Heavy vehicles movements on the public road network will be limited to 2 movements each day during operations.	Throughout operation	Site Manager	SH3COA2
TT5	A Daily Transport Movements Register will be developed and implemented to consolidate the accurate records of the number of heavy vehicles entering or leaving the site each day for the duration of the	Throughout operation	Site Manager	SH3COA3

	operational life of the solar farm.			
TT6	All vehicles associated to the Avonlie SF will park on site. Vehicles will be loaded and unloaded on site and enter and leave the site in a forward direction.	Throughout operation	Site Manager	SH3COA6
TT7	Measures will be implemented to minimise dirt being tracked onto the sealed public road network by vehicles leaving the site.	Throughout operation	Site Manager	SH3COA6
TT8	A complaints management system will be established and maintained to respond to traffic complaints from the community. Should a complaint be received in relation to traffic and transport, the complaint will be processed in accordance with the Complaints Procedure (Section 2.8).	Throughout operation	HSE Manager	SH4COA1

## 7. Air Quality Impacts Management Plan

### 7.1. Introduction

Air quality impacts associated to the operation of the Avonlie SF are expected to be minor. The main air emission sources will be associated to the operation of light and heavy vehicles, and the operation of the temporary power generation in the event of an unplanned outage.

Regular maintenance activities using vehicles will result in minor combustion emissions and potentially dust emissions from vehicles travelling on unsealed access roads. During major maintenance activities, emissions associates to the use of vehicles will increase for a limited period.

The Condition 12 of the Schedule 2 requires that all plant and equipment used on site, or in connection with the development, is maintained in a proper and efficient condition; and operated in a proper and efficient manner.

## 7.2. Performance Criteria

- Vehicles will be maintained as per scheduled servicing requirements; and
- No visible dust emissions.

## 7.3. Potential Impacts and Mitigation Measures

Air quality impacts associated to the operation of the Avonlie SF are expected to be minor due to the nature of the activities. Nevertheless, the measures outlined below will be implemented to prevent any unlikely air quality impacts.

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
AQ1	All plant and equipment used on site, or in connection with the development, will be operated in a proper and efficient manner.	Throughout operation	Site Team	SH2COA12
AQ2	Operation activities will be undertaken with the objective of preventing visible emissions of dust from the site.	Throughout operation	Site Team	SH3COA14 SoC BD19
AQ3	Dust generated by operational activities will be monitored daily, in accordance with the Environmental Inspection Checklist.	Daily	Site Manager	SoC AQ3
AQ4	Operations personnel will drive carefully and below the designated speed limit to minimise dust generation and disturbance to livestock.	Throughout operation	Site Team	SoC LU5
AQ5	Vehicles, plant and equipment will be regularly inspected and maintained to ensure they are in good condition.	Throughout operation	Site Team	Best Practice
AQ6	Should visible dust emissions occur at any time associated to the Avonlie SF operations, appropriate dust suppression controls will be implemented, including (but not limited to): - cessation of relevant works as appropriate until visible emissions from the Site have ceased; and	Throughout operation	Site Manager	SH3COA14 SoC BD19

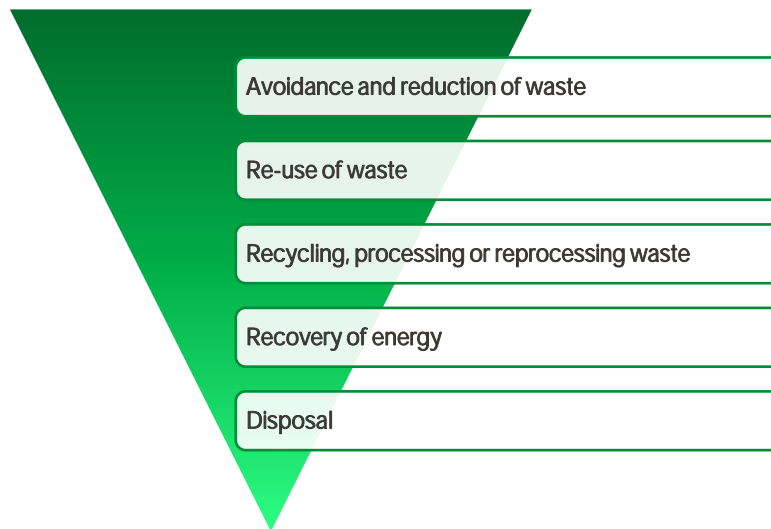
	- use of approved wetting agent to exposed soil/unsealed roads during dry and windy periods			
AQ7	A complaints management system will be established and maintained to respond to air quality complaints from the community. Should a complaint be received in relation to air quality, the complaint will be processed in accordance with the Complaints Procedure (Section 2.8).	Throughout operation	HSE Manager	SH4COA1 SoC AQ1
AQ8	Protocols to guide vehicle to minimise emissions will be developed and implemented. The Protocol will include (but will not be limited to) the Australian Standards and the POEO Act requirements.	Throughout operation	HSE Manager	SoC AQ2

## 8. Waste Management Plan

### 8.1. Introduction

During operation the solid waste streams would be associated with maintenance activities and presence of employees. Some materials, such as fuels, lubricants and metals may require replacement over the operational life of the project.

Legal requirements for the management of waste are established under the POEO Act and the Protection of the Environment Operations (Waste) Regulation 2014. Furthermore, the Waste Avoidance and Resource Recovery Act 2001 (WARRA) aims to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development. The WARRA outlines the following waste management hierarchy:



This Waste Management Plan has been developed to address the commitments made in the EIS and to ensure compliance with the CoA Schedule 3 Condition 27, which requires the Applicant to:

- minimise the waste generated by the development;
- classify all waste generated on site in accordance with the EPA's Waste Classification Guidelines 2014 (or its latest version);
- store and handle all waste on site in accordance with its classification;
- not receive or dispose of any waste on site; and
- remove all waste from the site as soon as practicable, and ensure it is sent to an appropriately licensed waste facility for disposal.

## 8.2. Performance Criteria

- Appointment of appropriately qualified waste contractors;
- Correct design and placement of waste storage areas;
- The waste register is accurate and kept up to date;
- Maximise the reuse or recycling of materials on the site;
- No litter on the site; and
- Compliance with applicable legislation.

## 8.3. Potential Impacts and Mitigation Measures

Operational waste streams are expected to be low given the low maintenance requirements of the solar farm. It is likely that some electrical components, such as inverters, transformers and electrical cabling, would need replacement over the proposed life of the solar farm. This would require further use of metal and plastic based products.

Repair or replacement of infrastructure components would result in some waste generation. However, these activities would occur very infrequently and there would be a high potential for recycling or reuse of the waste.

Disposal will be viewed as the last option in the management of waste if avoidance/ re-use or recycling is not practical. Waste materials, which cannot be either re-used or recycled, will be removed from site by a suitably qualified and experienced waste contractor and disposed of to a facility lawfully permitted to accept that category of waste.

Sewerage and effluent from the O&M building will be discharged into underground septic and effluent holding tanks respectively. The system will meet local authority regulatory requirements.

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
WM1	Wherever possible the following measures will be implemented on site to avoid/reduce the generation of waste: Plan to source materials in correct quantities and size; Plan to purchase materials in quantities that reduce packaging; and Organise to return packaging to supplier or re-use packing wherever possible.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM2	All waste generated on site will be classified in accordance with the EPA's Waste Classification Guidelines 2014 or its latest version. Where chemical assessment is required to classify the waste, sampling and classification results will be available onsite.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM3	Waste will not be received or disposed of on site. Waste stored on site will be limited to the waste generated from Avonlie SF operations.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM4	Waste will be disposed off-site only at appropriate EPA-approved facilities in compliance with relevant legislation.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM5	Waste containers (e.g., bins) will be available at	Throughout operation	Site Manager	SH3COA27 SoC WM1

	appropriate locations on site and clearly labelled to ensure the efficient segregation of waste as: non-recyclable waste; paper and cardboard; glass and recyclable plastics; scrap metal and tins; hydrocarbons and oily rags and timber. Containers will be provided with secure lids which are kept closed. Hydrocarbons and oily rags will be stored in sealed containers in a covered and bunded area.			
WM6	Waste will be regularly removed from the site or as soon as practicable. Bins and skips will not be overfilled.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM7	A Waste Register will detail the type of waste removed from site and the quantity, the contractor who removed the waste, and the destination of the waste. All recording of waste disposal, including receipts/notification issued by the waste management facility will be kept onsite.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM8	Trackable waste will be managed using the EPA online trackable waste system. All recordings of trackable waste will be kept on site for at least 4 years, including copies of each consignment authorisation issued to the consignor; and copies of each waste transport certificate required to be completed by the consignor.	Throughout operation	Site Manager	SH3COA27 SoC WM1

## 8.4. Waste Register

The Waste Register data will be used to monitor and evaluate the success of the waste management system implemented on the site, and to identify any areas that require further action. The document will encompass as a minimum the following data:

- Waste classification;
- Quantity of waste removed from the site;
- Date of removal;
- Waste transporter;
- Waste transporter EPL;
- Waste Receiver (disposal location);
- Waste Receiver EPL; and
- Documentation received.

## 9. Land Use Management Plan

### 9.1. Introduction

The Condition 15 of Schedule 3 requires the minimisation of the off-site visual impacts of the solar farm, including the potential for any glare or reflection. The visual appearance of all ancillary infrastructure, including paint colours, must be maintained to blend in as far as possible with the surrounding landscape, and no advertising or logos must be mounted on site, except where this is required for identification or safety purposes.

The Condition 16 of Schedule 3 requires external lighting associated with the solar farm to be installed as low intensity lighting (except where required for safety or emergency purposes). The lighting must not shine above the horizontal and must comply with the Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting.

The Condition 28 of Schedule 3 requires the development an Accommodation and Employment Strategy in consultation with the Narrandera Shire Council and to the satisfaction of the Secretary. The strategy must investigate options for prioritising the employment of local workers for the operation of the development, where feasible, and include a program to monitor and review the effectiveness of the strategy over the life of the solar farm. The Avonlie SF Accommodation and Employment Strategy (Jacobs, 29 June 2021 Revision E) was approved by the Secretary and will be implemented through the operation of the solar farm.

### 9.2. Performance Criteria

- 100% compliance with the Project Approval
- No complaints associated to off site visual impacts of the solar farm, including glare, reflection, appearance of ancillary infrastructure and lighting.



### 9.3. Potential Impacts and Mitigation Measures

The landscape character surrounding the AVONLIE SF is predominantly agricultural and some infrastructure including power lines, and infrastructure associated with agricultural land use (i.e. fencing, irrigation infrastructure, farm buildings). As outlined in the EIS, the proposed mitigation measures will allow the operation of the solar farm whilst maintaining the core landscape character of the area and having very low visual impact on the surrounding visual landscape.

Additional accommodation, traffic and healthcare impacts of operational staff are not likely to be noticeable given the low number of staff required for the solar farm activities and maintenance.

All potential land use conflicts resulting from the operations of the solar farm can be adequately managed through the implementation of mitigation measures.

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
LU1	Screen planting will be maintained, including the O&M building. Any loss of screening vegetation will be rectified.	Through operations	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11)
LU2	Screening plantings will be surveyed in a seasonal basis. Dead trees will be replaced in winter the following year.	Six Monthly	HSE Manager	Avonlie SF Biodiversity Management Plan (SH3COA11)
LU3	Visual appearance of all ancillary infrastructure (including paint colours) will be maintained to blends in as far as possible with the surrounding landscape.	Through operations	HSE Manager	SH3COA15
LU4	Advertising signs or logos will not be mounted onsite, except where this is required for identification or safety purposes.	Through operations	HSE Manager	SH3COA15
LU5	External lights are installed as low intensity lighting (except where required for safety or emergency purposes)	Through operations	Site Manager	SH3COA16
LU6	External lights will not shine above horizontal.	Through operations	Site Manager	SH3COA16
LU7	Lights will be directed away from vegetation.	Through operations	Site Manager	SoC BD8
LU8	Consultation with adjacent landholders will be ongoing to manage interactions	Through operations	Site Manager	SoC LU1

	between the solar farm and other properties.			
LU9	Implementation of the Avonlie SF Accommodation and Employment Strategy (Jacobs, 29 June 2021 Revision E) or its latest version. This will include liaison with local industry representatives to maximise the use of local contractors, manufacturing facilities and materials; and procuring from local suppliers when feasible and viable.	Through operations	Site Manager	SH3COA28
LU10	If possible and practical, sheep grazing will be used as a preferred option to control weeds and grass growth and to maintain agricultural production at the site.	Through operations	Site Manager	SoC LU7

## 10. Hazardous Chemicals Management Plan

### 10.1. Introduction

Condition 24 of the Schedule 3 requires the Applicant to store and handle all chemicals, fuels and oils used on-site in accordance with the requirements of all relevant Australian Standards and the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook if the chemicals are liquids.

Operation and maintenance activities will include the storage and handling of chemicals such as fuels, lubricants and herbicides.

### 10.2. Performance Criteria

- 100% compliance with the Project Approval; and
- No contamination of soil, surface water or groundwater.

### 10.3. Potential Impacts and Mitigation Measures

The use of fuels and other chemicals onsite poses a risk of soil contamination in the event of a spill, which can alter the soil health and affect its ability to support plant growth. When mobilised, such as in a rain event or flooding, the substances may spread via local drainage lines, affecting larger areas. Overall, these risks are low and considered readily manageable.

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
HC1	Chemicals, fuels and oils will be stored and handled in accordance with the requirements of all relevant Australian Standards. If chemicals are liquid the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook will also be adhered to. In the event of an inconsistency between the requirements above, the most stringent requirement will prevail to the extent of the inconsistency.	Through operations	Site Manager	SH3COA24
HC2	All staff would be appropriately trained for the minimisation and management of accidental spills.	Through operations	Site Manager	SoC WA1
HC3	All fuels, chemicals and liquids will be stored at least 50 m away from any waterways or drainage lines and would be stored in an impervious bunded areas.	Through operations	Site Manager	SoC WA2 SoC WA4
HC4	Refuelling of plant and maintenance of machinery will be undertaken using a transportable bunding (2.8m x 2.8m). Procedures for using the transportable bunding will be developed and implemented.	Through operations	Site Manager	Best Practice
HC5	Two transportable spill control kits will be available at the O&M Warehouse to manage accidental spills: 1 x larger transportable kit for fuel/oil with capacity to absorb up to 100 L; and 1 x smaller transportable kit with capacity to absorb 20 L of fuel/oil.	Through operations	Site Manager	Avonlie SF Emergency Management Plan (SH3COA26 SoC HA7)

## 10.4. Spill Response Procedures

Sources of chemical contamination at the site and decontamination actions are detailed in the Avonlie SF Emergency Management Plan V1.3 (Iberdrola, 08 September 2023) or its latest version and the Avonlie SF Stormwater Management Plan (Jacobs, 28 June 2021) or its latest version.

# 11. Soil and Water Management Plan

## 11.1. Introduction

During operation, non-potable water will be required for cleaning panels, landscaping and animal care. According to the EIA, approximately 1.7 ML per year will be stored in tank onsite and used for cleaning. Water for animal care and landscaping would be sourced from irrigation channels under the landowner's existing farm rights.

Water requirements are considered minor except for cleaning which is fully dependant on weather conditions. Some solar plants are never cleaned, others require more than two cleanings per year. Should water be required, it would be sourced from existing dams on the development site or trucked in from the Narrandera Shire Depot standpipe. A licence under the Water Management (WM) Act is not required to draw water from onsite dams, and a water use approval under section 89 of the WM Act is not required for SSD.

The site is characterised by uniformly flat topography, with the difference in ground elevation expected to be less than 5 m across the entire site, with a low elevation of approximately 150m AHD (Berembed Weir 1:50,000 Topographic map sheet (8228-S)). The site geology is distributed over one unit: Cainozoic alluvium and the landform.

Two soil landscapes have been identified within the development site, classified as Chromosols and Sodosols (DM McMahon Pty Ltd, 2018). Sodosols onsite are typically associated with underlying subsoils and once disturbed, are prone to high levels of erodibility moderate salinity risk and waterlogging. Sodosols are dispersible soils with extremely high risks of erosion, associated impacts includes gully and streambank erosion have been noted along some drainage lines at the development site Sodosols (DM McMahon Pty Ltd, 2018).

Golders (2019) noted localised dispersive features typically associated with grey soil clay pans and topographic low points predominately observed in the western and southern sections of the site. The depth of the observed erosion/dispersion features was generally observed at up to 500 mm from surrounding surface levels. Soil structures in these areas may have undergone partial collapse and may be susceptible to dispersion and tunnel erosion when exposed to flowing fresh water.

## 11.2. Performance Criteria

- 100% compliance with the Project Approval; and
- No contamination of soil, surface water or groundwater

## 11.3. Potential Impacts

### 11.3.1. Concentrated runoff from the panels

The primary risk of erosion during operation is from concentrated runoff from the panels. Such runoff could lead to increased soil erosion below the solar array modules during significant rain events and could be influenced by seasonal droughts. The soils have a moderate to severe erosion risk and retaining vegetation underneath the panels will assist in reducing erosion from rainfall run-off. During high rainfall events panels would be placed in a vertical position to decrease the concentrated surface runoff and increase the exposure of ground surface roughness.

### 11.3.2. Flooding

Sandy Creek is ephemeral stream located immediately north-east of the Site across the Sturt Highway, which drains into the central southern section of the Murrumbidgee River. An existing irrigation along the eastern boundary of the development site connects the site to Sandy Creek.

The site does not occur within a Flooding planning zone under the Narrandera LEP (NSW Government, 2013). The extent of modelled overland and riverine flooding for the Site has been mapped under the predevelopment scenario (Water Modelling Solutions, 2019), which indicated shallow overland flooding across most of the southern and western sections of the site, with floodwater depths typically in the order of 300-600mm. Shallow riverine flooding likely associated with overflow from Sandy Creek is observed in the north-eastern corner of the site with peak depths typically in the below 300mm.

### 11.3.3. Surface water

During operation, there likelihood of impact to surface water quality is low. Appropriate drainage features were constructed along internal access roads to minimise the risk of dirty water leaving the site or entering waterways. Except for internal roads, parking areas and areas around site offices, the site will be maintained with grass cover.

### 11.3.4. Groundwater

The use of fuels and other chemicals on site during operations pose a low risk of groundwater contamination in the event of a spill. All spills will be managed through the implementation of the Spill Response Procedures as outlined in the Avonlie SF Emergency Management Plan V1.3 (Iberdrola, 08 September 2023) or its latest version.

### 11.3.5. Aquatic Biodiversity

Operational activities are not expected to impact aquatic biodiversity.

## 11.4. Mitigation Measures

Safeguards and mitigation measures for soil and water quality impacts are outlined below.

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
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SW1	Drainage controls were implemented in the solar farm and will be maintained during operations.	Through operations	Site Manager	SoC WA7
SW2	Erosion and sediment control measures will be implemented to mitigate any impacts and in accordance with Managing Urban Stormwater: Soils & Construction (Landcom 2004) or its latest version.	Through operations	Site Manager	SoC WA7
SW3	A comprehensive Emergency Response Plan will be developed for the site and specifically, address foreseeable on-site and off-site emergency incidents in consultation with Narrandera Shire Council in accordance with the NSW Government's Flood Prone Land Policy and the Floodplain Development Manual.	Through operations	Site Manager	SoC WA6 SoC WA8
SW4	A Flood Response Plan will be developed and implemented as part of the WHSMP and will include an access contingency plan in times of flooding when the Sturt Highway could be closed.	Through operations	Iberdrola	SoC TT6

## 12. Cultural Heritage Sub Plan

### 12.1. Introduction

The Condition 17 of Schedule 3 requires the Applicant must ensure the development does not cause any direct or indirect impacts on the Aboriginal heritage items identified in the Project Approval or located outside the approved development footprint. Furthermore, the Condition 18 requires the development of a Heritage Management Plan to the satisfaction of the Secretary.

The Avonlie SF Cultural Heritage Management Plan V1.4 (NGH, 25 May 2022) (CHMP) was approved by the Secretary and forms part of the Project's Environmental Management Strategy, describing how impacts on Aboriginal heritage will be minimised and managed during the operation of the solar farm.

This OEMP shall be read in conjunction with the Avonlie SF Cultural Heritage Management Plan V1.4 (NGH, 25 May 2022) or its latest version to ensure compliance with the CoA and the Environmental Management Strategy. Relevant mitigation measures are compiled in the subsections below.

## 12.2. Performance Criteria

- Full compliance with the relevant legislative requirements;
- Full compliance with relevant requirements of the CHMP, EIS and CoC; and
- Minimise or avoid impacts, including inadvertent impacts, on known Aboriginal heritage.

## 12.3. Potential Impacts and Mitigation Measures

Aboriginal sites and heritage exclusion zones were identified marked by fencing to ensure there are no inadvertent impacts during the operation of the Project. Inspection of the sites and heritage exclusion zones will occur monthly.

Artefacts collected during the salvage program were reburied at a safe location outside the development footprint within the Project area. The reburial location of the salvaged stone artefacts was fenced off and will be monitored and inspected monthly during operations to ensure there are no inadvertent impacts.

The Figure 12-1 illustrates the aboriginal Sites remaining in situ following the salvage programme of works as noted to be avoided in the CoC. Relevant mitigation measures to be implemented during operations are outlined in the table below.

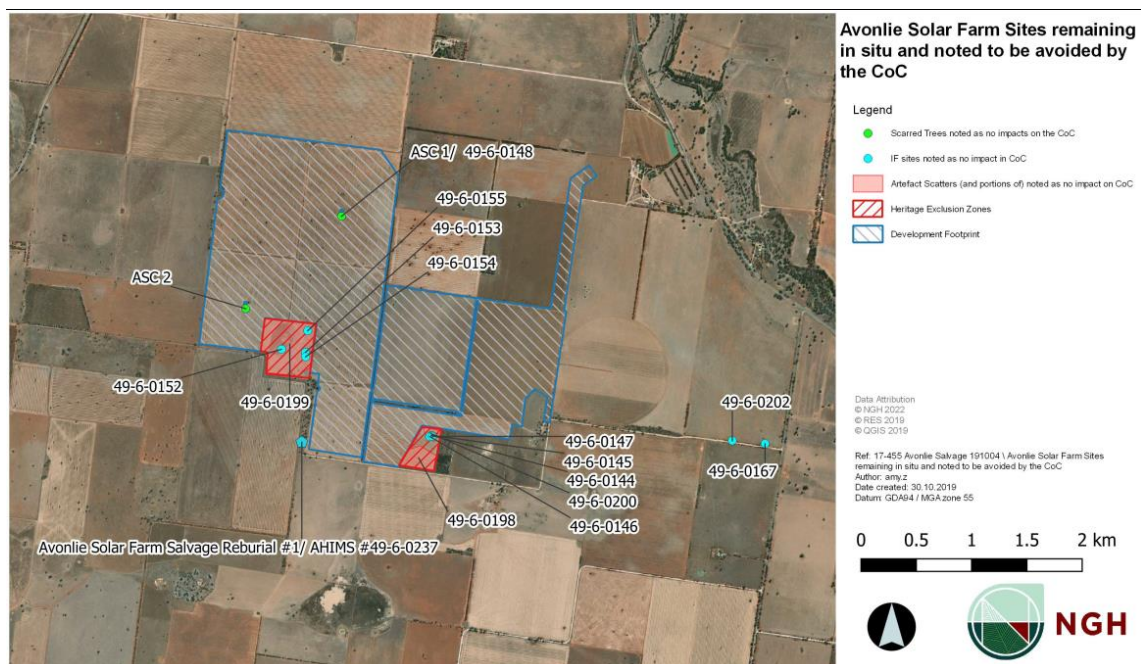


Figure 12-1: Sites remaining in situ following the salvage programme of work (extracted from the CHMP)



ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
CH1	In the event that any unexpected Aboriginal heritage places or objects or any substantial intact historic archaeological relics that may be of State or local significance are unexpectedly discovered during the Project, the Unexpected Finds Protocol will be implemented. The Unexpected Finds Protocol is outlined in the Avonlie SF Cultural Heritage Management Plan V1.4 (NGH, 25 May 2022) or its latest version.	Through operations	Site Manager	SH3COA18 SoC HH1
CH2	All operational staff to be project inducted on existing heritage sites within and adjacent to the solar farm and cultural awareness.	Through operations	Site Manager	SH3COA18
CH3	Appropriate exclusion signage and fencing installed on existing heritage sites and reburial location. Monthly inspections of these areas will be carried out to ensure there are no inadvertent impacts during operations.	Monthly	Site Manager	Avonlie SF Cultural Heritage Management Plan (SH3COA18)
CH4	Implementation of approved Avonlie SF Cultural Heritage Management Plan (CHMP).	Through operations	Site Manager	SH3COA18
CH5	A copy of the brief salvage report will be kept on site with a copy of the CHMP.	Through operations	Site Manager	SH3COA18



## Appendix A – Management Measures

ID	MITIGATION MEASURE	TIMING	RESPONSIBILITY	REFERENCE
Bushfire Management				
BF1	A 20,000L water supply tank fitted with a 65mm Storz and a FRNSW compatible fitting is located adjacent to the internal access road and will be maintained throughout operations.	Throughout operation	Site Manager	SH3COA25
BF2	A trailer with 1,500L skid mount water tank will be installed and maintained throughout operations.	Throughout operation	Site Manager	Avonlie SF Emergency Management Plan (SH3COA26 SoC HA7)
BF3	A comprehensive Emergency Management Plan was developed to the satisfaction of FRNSW and the RFS as part of the WHSEMP. The Emergency Management Plan include the list of works that will not be carried out during a total fire ban.	Prior to the commencement of operation	HSE Manager / Site Manager	SH3COA26 SoC HA7
BF4	Two copies of the Emergency Plan will be available in a prominent position adjacent to the site entry points at all times.	Throughout operation	Site Manager	SH3COA26 SoC HA1
BF5	10 metre asset protection zone (APZ) will be maintained around the perimeter of the solar array to allow for unobstructed vehicle access.	Throughout operation	Site Manager	SH3COA25 SoC HA8
BF6	Overhead powerlines will be managed by maintaining appropriate vegetation clearances to minimise potential ignition risks, in accordance with the ISSC 3 Guideline for Managing Vegetation Near Power Lines.	Throughout operation	Site Manager	Avonlie SF Emergency Management Plan (SH3COA26 SoC HA7)
BF7	Dangerous or hazardous materials will be transported, stored and handled in accordance with AS	Throughout operation	Site Manager	SoC HA2

	1940:2017 The storage and handling of flammable and combustible liquids and the ADG Code where relevant.			
Biodiversity Management				
BD1	Plant and vehicles will be inspected as per the Vehicle, Plant and Equipment Movement Procedures outlined in the BMP to prevent the spread of weed material.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12 SoC LU4)
BD2	Should weed material is identified in plant, vehicles and equipment (i.e., soil, seed and plant material) the Vehicle, Plant and Equipment Movement Procedures outlined in the BMP will be implemented, including washing down machinery, and washing down equipment and vehicles before entering and leaving the site.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12 SoC LU4)
BD3	Feral animals and weed control surveys will be conducted in a seasonal basis. If surveys indicate that the priority weed populations are greater than 5% of the site, and/or feral animals are identified on site, the Pest Weed Management Protocol outlined in the BMP will be implemented.	Six Monthly	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12 SoC LU4)
BD4	A perimeter fence has been installed to prevent large mammal pests such as feral cats, foxes and rabbits, entering the site. Regular inspections will be conducted to ensure the perimeter fence is fit for purposes. Should damages are identified, the fence will be rectified as soon as possible.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD5	Plain wire is to be used instead of barbed wire on all	Throughout operation	Site Manager	Avonlie SF Biodiversity

	fencing including livestock fencing, vegetation exclusion fencing and security fencing to prevent fauna injuries and mortalities.			Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD6	Metal Flashers will be installed and maintained along substation fence at 5m intervals.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD7	Monitoring of the substation fencing will be completed at least once per week for the first two years following construction.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD8	All fauna caught on the substation fencing will be identified to species level and recorded.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD9	If a threatened species listed under the Biodiversity Conservation Act 2016 or Environment Protection and Biodiversity Conservation Act 1999 is recorded, the Biodiversity and Conservation Division of the Department of Planning and Environment will be notified via the BCD South West Planning mailbox (rog.southwest@environment.nsw.gov.au).	Throughout operation	HSE Manager / Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD10	A report summarising fauna caught on the substation fencing will be provided to BCD every six months via the BCD South West Planning mailbox (rog.southwest@environment.nsw.gov.au)	Six Monthly	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD11	Quantitative assessment of groundcover will be conducted 6 months upon	6 months upon completion of	HSE Manager	Avonlie SF Biodiversity Management Plan

	completion of groundcover reseeded. If the assessment indicates that the revegetation groundcover is less than 70% across 85% of the site, corrective actions will be implemented considering the soil conditions (e.g. compaction, frequency of traffic movements, low seedbank storage, lack of soil moisture and nutrient imbalance). If soil chemistry is the growth limiting factor, soil testing will be used to determine any need for amelioration.	groundcover reseeded		(SH3COA11 SoC BD10 SoC BD12)
BD12	Ground conditions and percentage of grass cover within the solar infrastructure will be weekly monitored in accordance with the Environmental Inspection Checklist. Hand seeding will be undertaken in areas identified for remediation.	Weekly	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD13	Inspection of revegetated areas will be conducted annually during operations. If inspections identify failed patches larger than 20 m <sup>2</sup> , or that the revegetation groundcover is less than 70% across 85% of the site, the Rehabilitation and Revegetation Protocol outlined in the BMP will be implemented.	Annually	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD12)
BD14	All employees, subcontractors and personnel working on site will undergo induction training covering procedures and protocols included within this OEMP and the BMP.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10)
BD15	Site speed limits will be enforced, and operations personnel will drive carefully	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan

	and below the designated speed limit.			(SH3COA11 SoC BD10 SoC BD14)
BD16	Operational staff will remain on designated internal access tracks.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10)
Noise Management				
NM1	A one-off noise validation monitoring assessment will be conducted to quantify noise emissions and confirm whether they meet the relevant criteria.	Within 3 months of commencement of operations	HSE Manager / Site Manager	SoC NS7
NM2	Plant will be operated in a conservative manner to minimise noise emissions, which includes: - Selection of the quietest suitable machinery. - Avoidance of noisy plant working simultaneously where practical. - Utilise broadband reverse alarm in lieu of high frequency type.	Throughout operation	Site Manager	SoC NS3
NM3	All staff on-site will be informed of procedures to operate plant and equipment in a quiet and efficient manner.	Throughout operation	Site Manager	SoC NS4
NM4	Vehicles, plant and equipment will be regularly inspected and maintained to ensure they are in good condition.	Throughout operation	Site Manager	SH2COA12 SoC NS6
NM5	Activities will be undertaken during standard working hours and night works will be avoided.	Throughout operation	Site Manager	
NM6	In the event work is required to be undertaking outside the standard working hours, an Out of Hours Work Protocol will be developed and implemented. The Protocol will include (but will not be limited to) noise mitigation measures and notification	Throughout operation	Site Manager	SoC NS2

	requirements to relevant regulatory authority and/or nearby residents			
NM7	A complaints management system will be established and maintained to respond to noise complaints from the community. Should a complaint be received in relation to noise, the complaint will be processed in accordance with the Complaints Procedure (Section 2.8)	Throughout operation	HSE Manager	SH4COA1
Traffic and Transport Management				
TT1	Awareness training regarding enforcing site speed limits to minimise fauna strike will be delivered during site inductions.	Throughout operation	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11 SoC BD10 SoC BD14)
TT2	Operations personnel will drive carefully and below the designated speed limit to minimise dust generation and disturbance to livestock.	Throughout operation	Site Team	
TT3	All vehicles associated with the development will travel to and from the site via the Sturt Highway, Sandigo Road, Muntz Road and the site access point on Muntz Road.	Throughout operation	Site Manager	SH3COA4
TT4	Heavy vehicles movements on the public road network will be limited to 2 movements each day during operations.	Throughout operation	Site Manager	SH3COA2
TT5	A Daily Transport Movements Register will be developed and implemented to consolidate the accurate records of the number of heavy vehicles entering or leaving the site each day for the duration of the operational life of the solar farm.	Throughout operation	Site Manager	SH3COA3
TT6	All vehicles associated to the Avonlie SF will park on site. Vehicles will be loaded and	Throughout operation	Site Manager	SH3COA6

	unloaded on site and enter and leave the site in a forward direction.			
TT7	Measures will be implemented to minimise dirt being tracked onto the sealed public road network by vehicles leaving the site.	Throughout operation	Site Manager	SH3COA6
TT8	A complaints management system will be established and maintained to respond to traffic complaints from the community. Should a complaint be received in relation to traffic and transport, the complaint will be processed in accordance with the Complaints Procedure (Section 2.8).	Throughout operation	HSE Manager	SH4COA1
Air Quality Management				
AQ1	All plant and equipment used on site, or in connection with the development, will be operated in a proper and efficient manner.	Throughout operation	Site Team	SH2COA12
AQ2	Operation activities will be undertaken with the objective of preventing visible emissions of dust from the site.	Throughout operation	Site Team	SH3COA14 SoC BD19
AQ3	Dust generated by operational activities will be monitored daily, in accordance with the Environmental Inspection Checklist.	Daily	Site Manager	SoC AQ3
AQ4	Operations personnel will drive carefully and below the designated speed limit to minimise dust generation and disturbance to livestock.	Throughout operation	Site Team	SoC LU5
AQ5	Vehicles, plant and equipment will be regularly inspected and maintained to ensure they are in good condition.	Throughout operation	Site Team	Best Practice
AQ6	Should visible dust emissions occur at any time associated to the Avonlie SF operations, appropriate dust suppression	Throughout operation	Site Manager	SH3COA14 SoC BD19

	controls will be implemented, including (but not limited to): - cessation of relevant works as appropriate until visible emissions from the Site have ceased; and - use of approved wetting agent to exposed soil/unsealed roads during dry and windy periods			
AQ7	A complaints management system will be established and maintained to respond to air quality complaints from the community. Should a complaint be received in relation to air quality, the complaint will be processed in accordance with the Complaints Procedure (Section 2.8).	Throughout operation	HSE Manager	SH4COA1 SoC AQ1
AQ8	Protocols to guide vehicle to minimise emissions will be developed and implemented. The Protocol will include (but will not be limited to) the Australian Standards and the POEO Act requirements.	Throughout operation	HSE Manager	SoC AQ2
Waste Management				
WM1	Wherever possible the following measures will be implemented on site to avoid/reduce the generation of waste: Plan to source materials in correct quantities and size; Plan to purchase materials in quantities that reduce packaging; and Organise to return packaging to supplier or re-use packing wherever possible.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM2	All waste generated on site will be classified in accordance with the EPA's Waste Classification Guidelines 2014 or its latest version. Where chemical assessment is required to classify the waste, sampling and	Throughout operation	Site Manager	SH3COA27 SoC WM1



	classification results will be available onsite.			
WM3	Waste will not be received or disposed of on site. Waste stored on site will be limited to the waste generated from Avonlie SF operations.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM4	Waste will be disposed off-site only at appropriate EPA-approved facilities in compliance with relevant legislation.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM5	Waste containers (e.g., bins) will be available at appropriate locations on site and clearly labelled to ensure the efficient segregation of waste as: non-recyclable waste; paper and cardboard; glass and recyclable plastics; scrap metal and tins; hydrocarbons and oily rags and timber. Containers will be provided with secure lids which are kept closed. Hydrocarbons and oily rags will be stored in sealed containers in a covered and bunded area.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM6	Waste will be regularly removed from the site or as soon as practicable. Bins and skips will not be overfilled.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM7	A Waste Register will detail the type of waste removed from site and the quantity, the contractor who removed the waste, and the destination of the waste. All recording of waste disposal, including receipts/notification issued by the waste management facility will be kept onsite.	Throughout operation	Site Manager	SH3COA27 SoC WM1
WM8	Trackable waste will be managed using the EPA online trackable waste system. All recordings of trackable waste will be kept on site for	Throughout operation	Site Manager	SH3COA27 SoC WM1

	at least 4 years, including copies of each consignment authorisation issued to the consignor; and copies of each waste transport certificate required to be completed by the consignor.			
Land Use Management				
LU1	Screen planting will be maintained, including the O&M building. Any loss of screening vegetation will be rectified.	Through operations	Site Manager	Avonlie SF Biodiversity Management Plan (SH3COA11)
LU2	Screening plantings will be surveyed in a seasonal basis. Dead trees will be replaced in winter the following year.	Six Monthly	HSE Manager	Avonlie SF Biodiversity Management Plan (SH3COA11)
LU3	Visual appearance of all ancillary infrastructure (including paint colours) will be maintained to blends in as far as possible with the surrounding landscape.	Through operations	HSE Manager	SH3COA15
LU4	Advertising signs or logos will not be mounted onsite, except where this is required for identification or safety purposes.	Through operations	HSE Manager	SH3COA15
LU5	External lights are installed as low intensity lighting (except where required for safety or emergency purposes)	Through operations	Site Manager	SH3COA16
LU6	External lights will not shine above horizontal.	Through operations	Site Manager	SH3COA16
LU7	Lights will be directed away from vegetation.	Through operations	Site Manager	SoC BD8
LU8	Consultation with adjacent landholders will be ongoing to manage interactions between the solar farm and other properties.	Through operations	Site Manager	SoC LU1
LU9	Implementation of the Avonlie SF Accommodation and Employment Strategy (Jacobs, 29 June 2021 Revision E) or its latest version. This will include liaison with local industry representatives to maximise the use of local contractors,	Through operations	Site Manager	SH3COA28

	manufacturing facilities and materials; and procuring from local suppliers when feasible and viable.			
LU10	If possible and practical, sheep grazing will be used as a preferred option to control weeds and grass growth and to maintain agricultural production at the site.	Through operations	Site Manager	SoC LU7
Hazardous Chemicals Management				
HC1	Chemicals, fuels and oils will be stored and handled in accordance with the requirements of all relevant Australian Standards. If chemicals are liquid the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook will also be adhered to. In the event of an inconsistency between the requirements above, the most stringent requirement will prevail to the extent of the inconsistency.	Through operations	Site Manager	SH3COA24
HC2	All staff would be appropriately trained for the minimisation and management of accidental spills.	Through operations	Site Manager	SoC WA1
HC3	All fuels, chemicals and liquids will be stored at least 50 m away from any waterways or drainage lines and would be stored in an impervious bunded areas.	Through operations	Site Manager	SoC WA2 SoC WA4
HC4	Refuelling of plant and maintenance of machinery will be undertaken using a transportable bunding (2.8m x 2.8m). Procedures for using the transportable bunding will be developed and implemented.	Through operations	Site Manager	Best Practice
HC5	Two transportable spill control kits will be available at the O&M Warehouse to manage accidental spills:	Through operations	Site Manager	Avonlie SF Emergency Management Plan

	1 x larger transportable kit for fuel/oil with capacity to absorb up to 100 L; and 1 x smaller transportable kit with capacity to absorb 20 L of fuel/oil.			(SH3COA26 SoC HA7)
Soil and Water Management				
SW1	Drainage controls were implemented in the solar farm and will be maintained during operations.	Through operations	Site Manager	SoC WA7
SW2	Erosion and sediment control measures will be implemented to mitigate any impacts and in accordance with Managing Urban Stormwater: Soils & Construction (Landcom 2004) or its latest version.	Through operations	Site Manager	SoC WA7
SW3	A comprehensive Emergency Response Plan will be developed for the site and specifically, address foreseeable on-site and off-site emergency incidents in consultation with Narrandera Shire Council in accordance with the NSW Government's Flood Prone Land Policy and the Floodplain Development Manual.	Through operations	Site Manager	SoC WA6 SoC WA8
SW4	A Flood Response Plan will be developed and implemented as part of the WHSMP and will include an access contingency plan in times of flooding when the Sturt Highway could be closed.	Through operations	Iberdrola	SoC TT6
Cultural Heritage Management				
CH1	In the event that any unexpected Aboriginal heritage places or objects or any substantial intact historic archaeological relics that may be of State or local significance are unexpectedly discovered during the Project, the Unexpected Finds Protocol will be implemented.	Through operations	Site Manager	SH3COA18 SoC HH1

	The Unexpected Finds Protocol is outlined in the Avonlie SF Cultural Heritage Management Plan V1.4 (NGH, 25 May 2022) or its latest version.			
CH2	All operational staff to be project inducted on existing heritage sites within and adjacent to the solar farm and cultural awareness.	Through operations	Site Manager	SH3COA18
CH3	Appropriate exclusion signage and fencing installed on existing heritage sites and reburial location. Monthly inspections of these areas will be carried out to ensure there are no inadvertent impacts during operations.	Monthly	Site Manager	Avonlie SF Cultural Heritage Management Plan (SH3COA18)
CH4	Implementation of approved Avonlie SF Cultural Heritage Management Plan (CHMP).	Through operations	Site Manager	SH3COA18
CH5	A copy of the brief salvage report will be kept on site with a copy of the CHMP.	Through operations	Site Manager	SH3COA18

## Appendix B – Environmental Inspection Checklist

## Appendix C – Environmental Risk Register

Risk classification matrix (as per EIS):

Probability	Description
Remote	Could happen but only in extreme circumstances
Unlikely	Unlikely to happen but may occur
Possible	Could happen and has occurred elsewhere
Likely	Could easily happen and would probably occur
Almost certain / inevitable	Happens often and is expected to occur

Consequence	Description
Negligible	Nil or temporary impacts on the environment; small or isolated impact area; not reportable incident; no operational constraints; uncontroversial project no community interest.
Minor	Minor detrimental impacts on the environment; small impact area; reportable incident internally; no operational constraints; some local community interest.
Moderate	Substantial temporary or minor long-term detrimental impacts on the environment; moderate impact area; reportable incident to external agency; action required by reportable agency; community interested
Major	Permanent and detrimental impacts on the environment; large impact area; reportable incident to external agency; may result in large fines and prosecution; operational constraints; high level of community concern.
Catastrophic	Permanent and catastrophic impacts on the environment; large impact area; reportable incident to external agency; large fines and prosecution; operational constraints; substantial community concern.

Probability	Consequence				
	Negligible	Minor	Moderate	Major	Catastrophic
Remote	Low	Low	Low	Medium	Medium
Unlikely	Low	Low	Medium	High	High

Possible	Low	Medium	High	Very High	Very High
Likely	Medium	High	Very High	Very High	Extreme
Almost certain / inevitable	Medium	High	Very High	Extreme	Extreme



Risk Assessment:

[illegible]

AE1	Air emissions	<p>Reduced viability of adjacent habitat</p> <p>Health and safety impacts to employees and nearby community</p> <p>Sedimentation (i.e. dust emissions)</p>	Possible	Moderate	High	<p>1. Required in CoA: all plant and equipment used on site, or in connection with the development, will be operated in a proper and efficient manner.</p> <p>2. Required in CoA/SoC: All activities will be undertaken with the objective of preventing visible dust emissions from the development site.</p> <p>3. Required in SoC: Daily monitoring of dust generated by operation activities.</p> <p>4. Required in SoC: Operations personnel will drive carefully and below the designated speed limit to minimise dust generation and disturbance to livestock.</p> <p>5. Required in CoA/SoC: Regular inspection and maintenance of all plant and equipment used on site or in connection with the development to ensure that plant is in in a proper and efficient condition.</p> <p>6. Required in SoC: Protocols to guide vehicle to minimise emissions will be included in operational environmental management plans. This would include but not be limited to Australian Standards and POEO Act requirements.</p> <p>7. Appropriate dust suppression controls will be implemented should visible dust emissions occur.</p>	Unlikely	Minor	Low	<p>SH3COA14</p> <p>SH2COA12</p>	<p>AQ3</p> <p>BD9</p> <p>LU5</p>
Biodiversity											
BD1	Transport of weeds and pathogens from the site to adjacent vegetation	<p>Degradation of Inland Grey Box Woodland EEC</p> <p>Weed encroachment</p>	Possible	Moderate	High	<p>1. Required in BMP/SoC: Implementation of the Pest and Weed Management Protocol outlined in the BMP.</p> <p>2. Required in BMP: Implementation of the Vehicle, Plant and Equipment Movement Procedures outlined in the BMP, including washing down machinery, equipment and vehicles are to be washed down before entering and leaving the site.</p>	Unlikely	Minor	Low	SH3COA11 (BMP)	LU4

BD2	Edge and barrier effects	Colonisation by weeds, non-native plants and pest animals.	Possible	Minor	Medium	1. Required in CoA/BMP: Implementation of the Pest and Weed Management Protocol outlined in the BMP.	Unlikely	Minor	Low	SH3COA11 (BMP)	
BD3	Perimeter fencing	Reduced fauna movements across landscape due to fencing  Collision risks to birds and microbats.	Possible	Minor	Medium	<p>1. Required in BMP: Plain wire is to be used instead of barbed wire on all fencing including livestock fencing, vegetation exclusion fencing and security fencing.</p> <p>2. Required in BMP (updated): Metal Flashers to be installed along substation fence at 5m intervals (Not implemented yet)</p> <p>3. Monitoring of the substation fencing will be completed at least once per week for the first two years following construction.</p> <p>4. All fauna caught on the substation fencing will be identified to species level.</p> <p>5. If a threatened species listed under the Biodiversity Conservation Act 2016 or Environment Protection and Biodiversity Conservation Act 1999 is recorded, the Biodiversity and Conservation Division (BCD) of the Department of Planning and Environment is to be notified via the BCD South West Planning mailbox (rog.southwest@environment.nsw.gov.au).</p> <p>6. A report summarising fauna caught on the substation fencing will be provided to BCD every six months via the BCD South West Planning mailbox (rog.southwest@environment.nsw.gov.au)"</p>	Unlikely	Minor	Low	SH3COA11 (BMP)	
BD4	Displacement of resident fauna	Direct loss of native fauna  Decline in local fauna populations	Possible	Minor	Medium	<p>1. Required in BMP:</p> <p>2. Awareness training for all operational staff.</p> <p>3. Awareness training during site inductions regarding enforcing site speed limits.</p> <p>4. Record incidents of fauna mortalities and report threatened species encounters to BCS (OEH).</p>	Unlikely	Minor	Low		

BD5	Shading by solar infrastructure	<p>Changes in soil moisture.</p> <p>Modification of habitat beneath array (mostly non-native)</p> <p>Potential loss of ground cover resulting in unstable ground surfaces and sedimentation of adjacent waterways.</p> <p>Modification of native fauna habitat</p>	Unlikely	Moderate	Medium	<p>1. Monitoring of ground conditions including percentage of grass cover in weekly HSE inspection form (reference)</p> <p>2. Hand seeding to be undertaken in areas identified for remediation</p>	Unlikely	Minor	Low		
BD6	Trampling of threatened flora species	Loss of threatened species and genetic diversity (source: EIS)	Unlikely	Moderate	Medium	<p>1. Awareness training for all operational staff.</p> <p>2. Operational staff to remain to designated internal access tracks</p>	Unlikely	Minor	Low		
BD7	Management of grassland biomass by mowing	<p>Potential degradation of native grassland by increased biomass reducing native species germination.</p> <p>Potential degradation of native grassland by producing nutrient-rich patches from sheep waste under shaded panels. Nutrient enrichment may favour exotic annuals over natives.</p>	Possible	Minor	Medium	1. Implementation of BMP including the Weed Management Procedure.	Possible	Negligible	Low		
Bushfire											

BF1	Bushfire	Degradation of native flora Fauna injuries/mortalities Health and safety impacts Operational impacts	Possible	Major	Very High	<p>1. Required in CoA: a 20,000 litre water supply tank fitted with a 65mm Storz and a FRNSW compatible fitting is located adjacent to the internal access road.</p> <p>2. Required in CoA/SoC: 10 metre APZ will be maintained around the perimeter of the solar array to allow for unobstructed vehicle access.</p> <p>3. Required in CoA: a comprehensive Emergency Plan and detailed emergency procedures will be developed to the satisfaction of FRNSW and the RFS as part of the WHSMP</p> <p>4. Required in EIS: overhead powerlines will be managed by maintaining appropriate vegetation clearances to minimise potential ignition risks, in accordance with the ISSC 3 Guideline for Managing Vegetation Near Power Lines. Check with Transgird responsibility</p> <p>5. Required in SoC: Dangerous or hazardous materials would be transported, stored and handled in accordance with AS1940-2004: The storage and handling of flammable and combustible liquids, and the ADG Code where relevant.</p>	Unlikely	Moderate	Medium	SH3COA25 SH3COA26	HA8 HA7 (BFMP) HA2
BF2	Asset Protection Zone maintenance	Impact on ground-dwelling fauna.	Possible	Minor	Medium	1. Implentatation of BMP including the Weed Management Procedure.	Unlikely	Negligible	Low		
Hazardous chemicals											
HC1	Accidental spills and contamination	Pollution of soil and/or waterways.	Possible	Moderate	High	<p>1. Required in SoC: Implementation of the Spill Management Procedures to be outlined in the OEMP.</p> <p>2. Required in SoC: All staff would be appropriately trained for the minimisation and management of accidental spills.</p> <p>3. Required in SoC: Dangerous or hazardous materials would be</p>	Unlikely	Minor	Low		SO3 WA1

						transported, stored and handled in accordance with AS1940-2004: The storage and handling of flammable and combustible liquids, and the ADG Code where relevant.					
HC2	Use of chemicals, fuels and oils	Soil and/or waterways contamination in the event of spills.	Possible	Moderate	High	<p>1. Required in CoA: chemicals, fuels and oils will be stored and handled in accordance with the requirements of all relevant Australian Standards; and the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook if the chemicals are liquids.</p> <p>2. Required in SoC: implementation of the Spill and Contamination Response Plan to be outlined in the OEMP.</p> <p>3. Required in SoC: All staff would be appropriately trained for the minimisation and management of accidental spills.</p> <p>4. Required in SoC: All fuels, chemicals and liquids will be stored at least 50 m away from any waterways or drainage lines and would be stored in an impervious bunded area.</p> <p>5. Required in SoC: refuelling of plant and maintenance of machinery will be undertaken using a portable bund.</p> <p>6. Spill control kits will be available at appropriate locations to manage accidental spills.</p>	Unlikely	Minor	Low	SH3COA24	SO3 WA1 WA2 WA4
Land Use											

LU1	Visibility of the solar farm infrastructure from publicly accessible viewing locations.	Change in appearance of the landscape  Community complaints  Non-compliance with Project Approval	Possible	Minor	Medium	<p>1. Required in BMP: Screen planting will be maintained throughout the operational phase of the Project. Will also include the O&amp;M building.</p> <p>2. Required in CoA: any loss of vegetation will be rectified.</p> <p>3. Required in CoA: Visual appearance of all ancillary infrastructure (including paint colours) will be maintained to blends in as far as possible with the surrounding landscape.</p> <p>4. Required in CoA: Advertising signs or logos on site will not be mounted onsite, except where this is required for identification or safety purposes.</p>	Unlikely	Minor	Low	SH3COA11 (BMP)  SH3COA15	
LU2	Light and glare emissions	Impacts to aerial spraying activities due of the solar farm infrastructure.  Impacts to local fauna  Disturbance to the community  Reduced viability of adjacent habitat	Possible	Minor	Medium	<p>1. Required in CoA: External lights are installed as low intensity lighting (except where required for safety or emergency purposes)</p> <p>2. Required in CoA: External lights does not shine above horizontal</p> <p>3. Required in CoA: External lights complies with Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting</p> <p>4. Required in SoC: Lights will be directed away from vegetation. Minimal lighting required (2x spotlights on substation)</p>	Unlikely	Minor	Low	SH3COA16	BD8
LU3	Land use conflicts	Socioeconomic and community impacts.  Disturbance to farming operations and livestock (according to the EIS, it is unlikely that traffic movements associated with the proposal activities would generate a land use conflict with	Unlikely	Moderate	Medium	<p>1. Required on SoC: Consultation with adjacent landholders will be ongoing to manage interactions between the solar farm and other properties.</p> <p>2. Required in SoC: Liaison with local industry representatives to maximise the use of local contractors, manufacturing facilities and materials. Procuring from local supplies.</p> <p>3. Required in SoC: If possible and practical, sheep grazing will be used as a</p>	Unlikely	Minor	Low	SH3COA28	LU1  SE6  LU7

		movement of local stock)				preferred option to control weeds and grass growth and to maintain agricultural production at the site.					
Noise											
NO1	Noise emissions	Disturbance to community	Possible	Minor	Medium	<p>1. Required in SoC: a Construction and Operational Noise Management Protocol to minimise noise emissions, manage out of hours works (minor) to be inaudible and response to community concern will be developed as part of the OEMP.</p> <p>2. Required in SoC: All staff on-site will be informed of procedures to operate plant and equipment in a quiet and efficient manner. Plant will be operated in a conservative manner.</p> <p>3. Required in SoC: Regular inspection and maintenance of plant and equipment will be undertaken to ensure that they are in good condition.</p> <p>4. Required in SoC: a one-off noise validation monitoring assessment will be conducted to quantify emissions and confirm emissions meet relevant criteria.</p> <p>5. Activities will be undertaken during standard working hours and night works will be avoided Monday to Friday onsite.</p>	Unlikely	Minor	Low		NS2 NS3 NS4 NS6 NS7
Soil and Water											



SA1	Flooding	Soil erosion and sedimentation  Maintenance of revegetated areas is not successful	Possible	Moderate	High	<p>1. Required in CoA: drainage controls were implemented in the solar farm, as per Stormwater Management Plan. [TO BE CONFIRMED]</p> <p>2. Required in SoC: a Flood Response Plan will be developed and implemented that will include an access contingency plan in times of flooding when the Sturt Highway could be closed.</p> <p>3. Required in SoC: Erosion and sediment control measures will be implemented to mitigate any impacts in accordance with Managing Urban Stormwater: Soils &amp; Construction (Landcom 2004). [TO BE CONFIRMED]</p> <p>4. Required in SoC: A comprehensive Emergency Response Plan will be developed for the site and specifically, address foreseeable on-site and off-site emergency incidents in consultation with Narrandera Shire Council in accordance with the NSW Government's Flood Prone Land Policy and the Floodplain Development Manual.</p>	Unlikely	Minor	Low	SH3COA22 (SMP)	TT6 BD13 WA7 SO6 WA8 HA1
SA2	Concentrated runoff from the panels	Soil erosion below the solar array modules during significant rain events	Possible	Moderate	High	<p>1. Required in EIS: panels will be placed in a vertical position to decrease the concentrated surface runoff and increase the exposure of ground surface roughness.</p>	Unlikely	Minor	Low		
Traffic and Transport											
TR1	Vehicle movements onsite	Soil erosion / patches of bare ground created by repeated tyre movements.  Weeds spread  Fauna strike  Air emissions	Possible	Moderate	High	<p>1. Required in BMP: Implementation of the Vehicle, Plant and Equipment Movement Procedures outlined in the BMP, including washing down machinery, equipment and vehicles are to be washed down before entering and leaving the site.</p> <p>2. Required in SoC: Awareness training during site inductions regarding enforcing site speed limits to minimise fauna strike.</p> <p>3. Required in EIS: operational maintenance activities and vehicles will</p>	Unlikely	Minor	Low	SH3COA11 (BMP)	BD14

						generally be confined to the formalised access tracks.					
TR2	Heavy vehicles traffic on public roads	<p>Increased safety risks due to heavy vehicles travelling on public roads</p> <p>Land use conflict with movement of local stock. Travelling Stock Reserves located nearby the solar farm are listed as having moderate to high conservation value.</p>	Possible	Moderate	High	<p>1. Required in CoA: Heavy vehicles movements on the public road network will be limited to 2 movements each day during operations.</p> <p>2. Required in CoA: Accurate records of the number of heavy vehicles entering or leaving the site each day will be maintained for the duration of the project. Report to be issued at end of construction.</p> <p>3. Required in CoA: All vehicles associated with the development will travel to and from the site via the Sturt Highway, Sandigo Road, Muntz Road and the site access point on Muntz Road.</p> <p>4. Required on SoC: Consultation with adjacent landholders will be ongoing to manage interactions between the solar farm and other properties.</p>	Unlikely	Moderate	Medium	SH3COA2 SH3COA3 SH3COA4	LU1
Waste											
WA1	Generation of waste	<p>Uncontrolled waste leaving site.</p> <p>Degradation of native flora</p> <p>Degradation of soil and/or waterways</p> <p>Fauna injuries/diseases</p>	Possible	Minor	Medium	1. Required in CoA/SoC: a Waste Management Plan will be developed and implemented during operation. 1500l general waste skip and another 1500L recycling bin	Unlikely	Minor	Low	SH3COA27	WM1

Avonlie SF environmental risk assessment workshop attendance:

ASF | WHSE Risk Assessment Workshop

ChatFilesDetailsScheduling AssistantRecapAttendanceMeeting WhiteboardBreakout roomsQ&A+

Tuesday, 25 July 2023 10:58:05 am

Summary

10  
Attended

10:58 am - 12:27 pm  
Start and end time

1h 29m 24s  
Meeting duration

1h 14m 15s  
Average attendance time

Participants

Name	First join	Last leave	In-meeting duration	Role
<div>do Nascimento, Cynthia</div> <div>Cynthia.doNascimento@jacobs.com</div>	10:58 am	12:27 pm	1h 28m 48s	Organiser
<div>BB</div> <div>Brown, Barry</div> <div>Barry.Brown@jacobs.com</div>	10:58 am	12:27 pm	1h 28m 53s	Presenter
<div>Tuppin, Baz</div> <div>Baz.Tuppin@jacobs.com</div>	10:58 am	12:27 pm	1h 28m 45s	Presenter
<div>LD</div> <div>DENTON, LEIGH</div> <div>leigh.denton@iberdrola.com.au</div>	10:58 am	12:27 pm	1h 28m 34s	Presenter
<div>VK</div> <div>KALPATHY, VAIDEESWARAN</div> <div>Vaidee.Kalpathy@iberdrola.com.au</div>	10:59 am	11:16 am	17m 47s	Presenter
<div>DW</div> <div>Wagner, Damien</div> <div>Damien.Wagner@jacobs.com</div>	10:59 am	12:27 pm	1h 27m 59s	Presenter
<div>RR</div> <div>Ravani, Robert</div> <div>Robert.Ravani@jacobs.com</div>	11:00 am	11:45 am	44m 53s	Presenter
<div>KS</div> <div>STEELE, KAHLIA</div> <div>kahlia.steele@iberdrola.com.au</div>	11:01 am	12:27 pm	1h 26m 5s	Presenter
<div>GN</div> <div>Greg Needham</div> <div>greg.needham@iberdrola.com.au</div>	11:01 am	12:06 pm	1h 4m 54s	Presenter
<div>BH</div> <div>HUBATKA, BEN</div> <div>ben.hubatka@iberdrola.com.au</div>	11:01 am	12:27 pm	1h 25m 55s	Presenter

## Appendix D – Reference Documents

Avonlie SF's documents relevant to the operational phase includes:

- Accommodation and Employment Strategy (Jacobs, 29 June 2021) or its latest approved version
- Biodiversity Management Plan (NGH, 2021) or its latest approved version
- Cultural Heritage Management Plan (NGH, 2022) or its latest approved version
- Emergency Management Plan (Iberdrola, 08 September 2023) or its latest approved version
- Environmental Management Strategy (RES, 29 June 2021) or its latest approved version
- Stormwater Management Plan (Jacobs, 28 June 2021) or its latest approved version
- Work Health and Safety Management Plan (Iberdrola, 8 August 2023) or its latest approved version
- Legislation relevant to the operational phase includes:
  - Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)
  - Biodiversity Conservation Act NSW
  - Biosecurity Act NSW
  - Environmental Planning and Assessment Act
  - Environment Protection and Biodiversity Conservation Act (Commonwealth)
  - Fisheries Management Act NSW
  - National Parks and Wildlife Act, 1974 NSW
  - National Parks and Wildlife Amendment (Aboriginal Objects and Places) Regulation 2010
  - Protection of the Environmental Operations Act NSW
  - Soil Conservation Act NSW
  - Water Act NSW
  - Water Management Act NSW
- Guidelines, standards and policy documents relevant to the operational phase include:
  - AS 4373-2007 Pruning of Amenity Trees.

- AS 4970 – 2009 Protection of Trees.
- AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting
- NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook
- RFS's Planning for Bushfire Protection 2006 (or equivalent)
- RFS's Standards for Asset Protection Zones
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)

## Appendix E – Notification to the Narrandera Local Emergency Management Committee

**do Nascimento, Cynthia**

**From:** Whitehouse, Mark  
**Sent:** Tuesday, 25 July 2023 4:39 PM  
**To:** Pop, Delia; Lee, Kirsten  
**Subject:** FW: Avonlie Solar Farm

See below confirmation from emergency management committee

Thanks

**Mark Whitehouse**  
Team Lead  
Construction Management



11 Tavistock Place, Melbourne VIC 3000  
M. 0467551855  
E. [mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)  
W [beon-es.com.au](http://beon-es.com.au)



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**From:** Wilson, Shane <[Shane.Wilson@Narrandera.nsw.gov.au](mailto:Shane.Wilson@Narrandera.nsw.gov.au)>  
**Sent:** Tuesday, 25 July 2023 10:11 AM  
**To:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>  
**Subject:** RE: Avonlie Solar Farm

Hi Mark

Thanks for your email.

As Chair of the Narrandera LEMC I acknowledge that your Solar farm is about to commence full operations. I will table this with our next LEMC meeting.

I have no knowledge of any other outstanding matter at this time.

Regards

**Shane Wilson**

Deputy General Manager - Infrastructure

PH: (02) 6959 5503 | Fax: (02) 6959 1884 | Email: [shane.wilson@narrandera.nsw.gov.au](mailto:shane.wilson@narrandera.nsw.gov.au)



Narrandera Shire Council acknowledges the traditional owners of the lands of Narrandera Shire, the Wiradjuri people.

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**From:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>

**Sent:** Monday, 24 July 2023 5:44 PM

**To:** Wilson, Shane <[Shane.Wilson@Narrandera.nsw.gov.au](mailto:Shane.Wilson@Narrandera.nsw.gov.au)>

**Subject:** RE: Avonlie Solar Farm

Hi Shane

Just following up on email below

Thanks

**Mark Whitehouse**  
Team Lead  
Construction Management



11 Tavistock Place, Melbourne VIC 3000

M. 0467551855

E. [mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)

W [beon-es.com.au](http://beon-es.com.au)



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**From:** Whitehouse, Mark  
**Sent:** Saturday, 1 July 2023 11:53 AM  
**To:** 'Wilson, Shane' <[Shane.Wilson@Narrandera.nsw.gov.au](mailto:Shane.Wilson@Narrandera.nsw.gov.au)>; Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>  
**Subject:** RE: Avonlie Solar Farm

Thanks for that

It is part of the compliance requirements that I inform you that we are nearing completion of construction and the Solar farm will be due to go into operation.

Is there anything that needs to be done from my point of view that we are still missing

Thanks

**Mark Whitehouse**  
Team Lead  
Construction Management



11 Tavistock Place, Melbourne VIC 3000  
M. 0467551855  
E. [mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)  
W [beon-es.com.au](http://beon-es.com.au)



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**From:** Wilson, Shane <[Shane.Wilson@Narrandera.nsw.gov.au](mailto:Shane.Wilson@Narrandera.nsw.gov.au)>  
**Sent:** Saturday, 1 July 2023 10:20 AM  
**To:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>; Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>  
**Subject:** Re: Avonlie Solar Farm

Hi Mark

Im the chair for the Narrandera LEMC.

Regards,  
Shane

Shane Wilson  
Deputy General Manager Infrastructure



Narrandera Shire Council

---

**From:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>  
**Sent:** Saturday, July 1, 2023 9:36:38 AM  
**To:** Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>; Wilson, Shane <[shane.wilson@narrandera.nsw.gov.au](mailto:shane.wilson@narrandera.nsw.gov.au)>  
**Subject:** RE: Avonlie Solar Farm

Hi Issac/Shane

Do either of you know the contact details of the Local Emergency management committee.

Thanks

**Mark Whitehouse**  
Team Lead  
Construction Management



11 Tavistock Place, Melbourne VIC 3000  
M. 0467551855  
E. [mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)  
W [beon-es.com.au](http://beon-es.com.au)



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**From:** Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>  
**Sent:** Friday, 2 June 2023 4:38 PM  
**To:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>  
**Subject:** RE: Avonlie Solar Farm

10am?



**Issac Lee** | Operational Officer Level 1 | MIA District |  
**NSW RURAL FIRE SERVICE**  
200 Wakaden street Griffith NSW 2680  
P 02 6966 7800 M 0460 041 134 E [Issac.lee@rfs.nsw.gov.au](mailto:Issac.lee@rfs.nsw.gov.au)  
[www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au) | [www.facebook.com/nswrfs](https://www.facebook.com/nswrfs) | [www.twitter.com/nswrfs](https://www.twitter.com/nswrfs)  
**PREPARE. ACT. SURVIVE.**

---

**From:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>  
**Sent:** Friday, 2 June 2023 3:01 PM  
**To:** Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>  
**Subject:** RE: Avonlie Solar Farm

Sorry I missed your call Issac but the 14<sup>th</sup> is good

**Mark Whitehouse**  
Construction Manager



11 Tavistock Place, Melbourne VIC 3000  
M. 0467551855  
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**From:** Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>  
**Sent:** Friday, 2 June 2023 2:34 PM  
**To:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>  
**Subject:** RE: Avonlie Solar Farm

Hi Mark,

Would 14/06/23 work for you?

Kind regards,



**Issac Lee** | Operational Officer Level 1 | MIA District |  
**NSW RURAL FIRE SERVICE**  
200 Wakaden street Griffith NSW 2680  
**P** 02 6966 7800 **M** 0460 041 134 **E** [Issac.lee@rfs.nsw.gov.au](mailto:Issac.lee@rfs.nsw.gov.au)  
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---

**From:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>  
**Sent:** Wednesday, 31 May 2023 8:34 AM

**To:** Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>  
**Subject:** RE: Avonlie Solar Farm

Hi Issac

Monday, Tuesday or Wednesday morning is good just let me know

Thanks

**Mark Whitehouse**  
Construction Manager



11 Tavistock Place, Melbourne VIC 3000  
M. 0467551855  
E [mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)  
W [beon-es.com.au](http://beon-es.com.au)



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**From:** Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>  
**Sent:** Monday, 29 May 2023 11:23 AM  
**To:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>  
**Subject:** RE: Avonlie Solar Farm

Hi Mark,

Apologies for the delay in my response, I have been on leave and only just got back into the office.

Is there any chance of conducting this site visit with the volunteers next week of the week after?

Kind regards,



**Issac Lee** | Operational Officer Level 1 | MIA District |  
**NSW RURAL FIRE SERVICE**  
200 Wakaden street Griffith NSW 2680  
P 02 6966 7800 M 0460 041 134 E [Issac.lee@rfs.nsw.gov.au](mailto:Issac.lee@rfs.nsw.gov.au)  
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---

**From:** Whitehouse, Mark <[mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)>

**Sent:** Thursday, 18 May 2023 5:18 PM

**To:** Issac Lee <[Issac.Lee@rfs.nsw.gov.au](mailto:Issac.Lee@rfs.nsw.gov.au)>

**Subject:** Avonlie Solar Farm

Hi Issac

Just an update to let you know that construction of the Avonlie Solar Farm is now complete and we are starting to energise the facility. You indicated you would like to bring your team to site for an introduction and tour.

Please let me know your availability for a visit week beginning 29<sup>th</sup> May

Thanks

**Mark Whitehouse**  
Construction Manager



11 Tavistock Place, Melbourne VIC 3000

M. 0467551855

E. [mwhitehouse@beon-es.com.au](mailto:mwhitehouse@beon-es.com.au)

W. [beon-es.com.au](http://beon-es.com.au)



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