SMOKY CREEK SOLAR POWER STATION CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Edify Energy

202104

Smoky Creek Solar Power Station Construction Environmental Management Plan

25/11/2022

Terra SOLUTIONS

Document status

Project No	Version	Document name	Client	Author	Reviewer	Review date
202104	2.0	Smoky Creek Solar Power Station Construction Environmental Management Plan	Edify Energy	A. Fitzgerald	L. Liessmann	25/11/2022

Approval for issue

Approver	Signature	Approval date
A. Fitzgerald		25/11/2022

This report was prepared by Terra Solutions Pty Ltd (Terra Solutions) within the terms of Terra Solutions' engagement with its client and in direct response to a scope of services. This report is supplied for the sole and specific purpose for use by Terra Solutions' client. The report does not account for any changes relating the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. Terra Solutions does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report.

Prepared by:	Prepared for:
Terra Solutions Pty Ltd	Edify Energy Pty Ltd
Anton Fitzgerald Environmental Scientist	Claire Driessen Project Manager
44 Hindley Street Currajong QLD 4812	Level 1 33-35 Palmer Street South Townsville QLD 4810
T +61 435 752 239 E enquiries@biomonitoring.com.au	T +61 408 084 900 E claire.driessen@edifyenergy.com

Contents

Tables

Figures

Appendices

1 INTRODUCTION

This Construction Environmental Management Plan (CEMP) was produced by Terra Solutions for Edify Energy Pty Ltd for the proposed Smoky Creek Solar Power Station (SPS) to be located on land located at Tomlins Road, Dodsons Road and Hibbs Road in the Goovigen, Dixalea and Ulogie area (Figure 1).

The provision of this CEMP has been prepared as an interim measure to ensure a full assessment of impacts on Matters of National Environmental Significance can be undertaken by the Department of Climate Change, Energy, the Environment and Water.

A finalised CEMP is a requirement under Condition 51 of the Development Permit (Appendix A) for Material Change of Use for a Public Facility – Other (Solar PV Power Station (Solar Farm) and Associated Facility Switchyard and Electrical Transmission Lines) and Reconfiguring a Lot for Subdivision by Agreements (10 Lease Areas) issued 15 September 2020.

The finalised CEMP is to be submitted to Council for approval within 40 days of operations commencing on each stage of the solar farm facility.

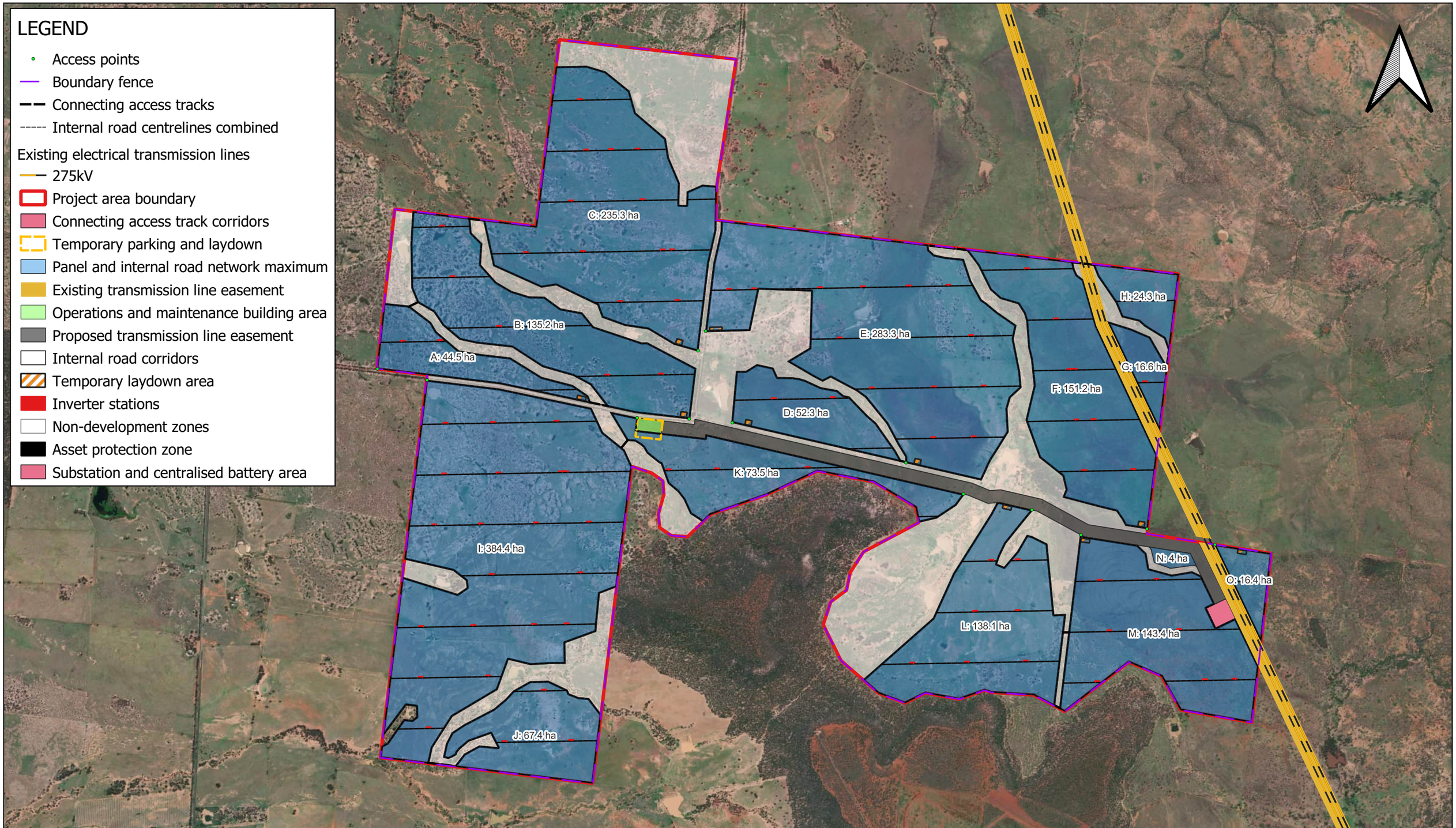
1.1 Purpose

The purpose of this CEMP is to provide a structured approach to environmental management associated with the construction of the SPS to minimise the risk of environmental harm as far as practicable during normal and abnormal operations.

1.2 Objectives

The broad objectives of this CEMP are to provide planning and management systems to:

- Facilitate achievement of environmental standards
- Ensure prevention and mitigation of environmental harm which may occur from the construction phase
- Facilitate appropriate and timely responses to equipment failure, emergencies or other unusual conditions that may cause environmental harm
- Provide a framework for documentation, communication and implementation of contingency plans
- Ensure that all personnel responsible for construction of the facility are aware of their environmental responsibilities
- Ensure that environmental monitoring and review occurs to manage and respond to impacts the construction phase and to ensure continual improvement in this CEMP
- Ensure that relevant information is retained and is communicated throughout the organisation
- Ensure communication with regulatory authorities as required under legislation and approval conditions.



Terra SOLUTIONS

CLIENT: EDIFY ENERGY

FIGURE 1: PROJECT LOCATION

0 1 2 3 4 5 km

1:28,000

DOCUMENT: E:\Terra Solutions\PROJECTS - Documents\Projects\202104_

DATE: 15/08/2022

AUTHOR: Anton Fitzgerald

Credits:

© Commonwealth of Australia (Geoscience Australia) 2021. This product is released under the Creative Commons Attribution 4.0 International Licence. http://creativecommons.org/licenses/by/4.0/legalcode ,Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/ Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Coordinate system: GDA2020 / MGA zone 56 EPSG:7856

1.3 Outline of the CEMP

The outline of the CEMP is presented in Table 1.

Table 1 Outline of the CEMP

Section of Report	Description
Section 1 Introduction	Contains a brief introduction, identifies purpose and objectives, and lists relevant government regulations.
Section 2 Project Overview	Provides a description of construction works, construction timeframe and duration, working hours.
Section 3 Existing Environment	Contains a description of the site and existing environment.
Section 4 Implementation and Operation of the CEMP	Outlines the management arrangement for the site including the environmental policy, management system, roles and responsibilities, training and competency, stakeholder engagement and communication, complaints management and contractor management.
Section 5 Key Environmental Issues	Outlines the key environmental issues on the site.
Section 6 Environmental Management and Mitigation	Presents proposed environmental objectives and management actions.
Section 7 Incident Management	Contains incident and emergency procedures and relevant contacts.
Section 8 Environmental Performance and Reporting	Provides the environmental reporting requirements and the process for assessing environmental compliance and performance

1.4 Application

This CEMP applies to all personnel (staff and contractors) and activities associated with the construction of the SPS and on land under the control of the managing entity.

The Site Supervisor is responsible for implementation of the CEMP.

The Site Supervisor shall ensure that all persons employed or sub-contracted to construct the Project are trained in environmental responsibilities as determined by this CEMP and as legislated by the *Environmental Protection Act 1994* (EP Act). Environmental duties of all personnel include the following:

- General Environmental Duty whereby a person in the performance of their duties shall not do so in a manner which will cause, or is likely to cause, environmental harm unless the person takes all reasonable and practical measures to prevent or minimise the harm; and
- Duty to Notify Environmental Harm whereby if a person in the performance of their duties becomes aware that serious or material environmental harm is caused or threatened, then the person must immediately contact the Site Supervisor who in turn must immediately notify the relevant authorities.

1.5 Applicable Legislation

The key legislative requirements for consideration in the CEMP are provided in Table 2.

Table 2 Applicable Legislation and Policy

Legislation	Objectives
Commonwealth	
Environmental Protection Biodiversity Conservation Act 1999 (EPBC Act)	The EPBC Act governs the protection of Matters of National Environment Significance, including the habitat for listed threatened species and Threatened Ecological Communities.
Queensland	
Environmental Protection Act 1994 *(EP Act)*	The EP Act protects environmental values through development and implementation of environmental protection policies and regulates environmentally relevant activities prescribed in the *Environmental Protection Regulation 1998* (EP Reg).
Environmental Protection (Water and Wetland) Policy 2019 *(EPP Water)*	The EPP Water administers the protection of environmental values from activities that may result in the release of contaminants to waterways.
Environmental Protection (Air) Policy 2019 *(EPP Air)*	The EPP Air governs the protection of ambient air quality and specifies indicators and air quality goals for the control of the release of airborne contaminants that are regulated through issued permits.
Environmental Protection (Noise) Policy 2019 *(EPP Noise)*	The EPP Noise specifies an acoustic quality objective for the protection of the well-being and amenity of individuals and the community in surrounding residential areas.
Aboriginal Cultural Heritage Act 2003	This act recognises and protects significant Indigenous cultural heritage in Queensland. The Aboriginal Cultural Heritage Act sets out requirements for the protection and management of Indigenous cultural heritage.
Waste Reduction and Recycling Act 2011 (WRR Act)	Contains a suite of measures to reduce waste generation and landfill disposal and encourage recycling.
Biosecurity Act 2014 (Biosecurity Act)	Is designed to ensure a consistent, modern, risk-based and less prescriptive approach to biosecurity in Queensland. The Act requires all people and organisations in Queensland to manage biosecurity risks under their control under the general biosecurity obligation.

2 PROJECT OVERVIEW

2.1 Facility

The SPS will consist of solar panels mounted on a frame which tracks the sun to generate energy. The panels will be connected to inverter stations which convert the DC power to AC power, and using integrated transformers step the voltage up to 33kV. A medium voltage AC network will be installed in underground trenches to connect each inverter to a central switchgear. The switchboard is adjacent to the step-up substation, which is owned and operated by the network operator, Powerlink. This substation will step up the voltage to 275kV for injecting the green energy into the transmission network operated by Powerlink.

The development will contain the following infrastructure:

- Photovoltaic solar panels
- Tracking system
- Piled foundations
- DC/AC Inverter stations
- Battery enclosures/modules
- High Voltage Switchroom
- Internal access tracks
- Underground medium voltage network
- Administration and amenities building
- Vehicle car park
- Security fencing
- Substation

2.1.1 Solar Arrays

The development will consist of several solar array areas or blocks comprised of photovoltaic modules arranged in a series of long rows. The modules are mounted on frames which follow the sun to optimize energy generation. The frames are fixed to piles driven into the soil. The rows interconnect to form a single array block of either approximately 3.0MW (AC) or 6 MW (AC). In each block there will be a prefabricated, containerized/skid mounted inverter and integrated transformer to convert and step up the voltage level.

Electrical connections will also be constructed between the PV arrays, as well as associated monitoring and protection equipment and central inverters via underground or frame secured cabling. Row Spacings are generally between 6 & 7 meters apart.

The solar module frames and inverter stations will be installed on piles and sit above ground level. This ensures retention of existing grassland vegetation and habitats in situ with a minimal level of ground disturbance. Regrowth of vegetation will be enabled following temporary disturbance during installation.

2.1.2 Medium Voltage Reticulation

Each inverter will be connected to the central 33kV switchroom by underground medium voltage cable reticulation. The cables will be installed in trenches not below 1m in depth and typically less than 1m in width. The excavation will comply with the Soil and Erosion Sediment Control Report and Regulations for construction within Queensland. The medium voltage switchboard will be connected through a step-up transformer and the substation via an overhead (or underground) line which may be constructed by Powerlink.

Temporary disturbances to vegetation from the underground installation of the cables will rehabilitate through reseeding the area with pasture grasses.

2.1.3 Solar Substation

A high voltage substation will connect the solar farm to the national transmission network. The substation footprint will be approximately 100m x 100m. The substation will provide switching and protection of the electrical network and will be fenced separately from the solar farm for safety reasons. The T connection into the existing transmission line will be owned and operated by the Network Operator, Powerlink. This will form part of the National Energy Network.

2.2 Construction process

2.2.1 Pre-mobilisation

Pre-mobilisation activities for each area of development areas will typically occur over a 1-2 month period and include the following as required:

- Temporary fencing of site offices and facilities for construction.
- Fencing of areas for development. The fence will be compliant with the Development Consent.
- Removal of any non-remnant woody vegetation within the areas to be developed in accordance with the vegetation removal procedure.
- Laydown of temporary offices and facilities. These will be temporary prefabricated buildings used for construction projects.

The current site works requirements include:

- Office facilities.
- Changing rooms.
- Toilets.
- Showers.
- First aid.
- Lunchrooms.
- Parking
- Lay down areas.
- Temporary Security building at the front gate for construction

The SPS generates electricity using thousands of photovoltaic (PV) panels which capture and convert solar energy. Each PV panel captures the energy from sunlight which excites electrons within the panel (photoexcitation) and creates an electrical current.

The PV panels are wired in series to meet the minimum operating voltage of the inverter. The strings are connected in parallel and then combined and fed into the Power Conversion Stations (PCS).

2.2.2 Construction

Construction activities will include the installation of the PV arrays and supporting infrastructure.

The PV arrays and site office components will largely be built off-site and transported to the site in modulated sections. Construction on-site will be limited to the unloading and joining together of the modulated sections

and trenching electrical and control cabling to the electricity grid and control room. Construction activities are planned to occur during daylight hours only.

Construction will consist of installing the following components:

- Arrays of solar PV modules arranged in a series of long rows (generally up to 90m) typically no higher than 2.5 m above the ground and supported by a steel and/or aluminium mounting structure including framing and piles which are either screwed or driven into the ground.
- A series of prefabricated, containerised/skid-based inverters distributed throughout the PV arrays.
- Electrical connections between PV arrays, associated monitoring and protection equipment, and central inverters via underground or frame secured cabling.
- A tracker actuation system.
- Network interconnection facilities to connect the project to high voltage transmission network

Construction of the Project is anticipated to be staged, with indicative timeframes for each stage of construction activities for the PV arrays (there may be overlap in timing) to include:

- Pile driving or screwing mounting pylons (~6 months)
- Trenching or underground cabling connecting PV (~3 months)
- Mounting pre constructed PV modules (~4 months)
- Network interconnection (~6 weeks)
- Establishing revegetation as screening (~1-2 years)

To facilitate the future operational and maintenance activities on site the following infrastructure will be constructed:

- Site office and operations and maintenance facilities
- Site entry road, internal access tracks and car park
- Site fencing and associated security equipment

3 EXISTING ENVIRONMENT

3.1 Topography and Drainage

The site has variable topography including:

- Hilly country in the extreme east and of Lot 37 and on the boundary of the lateritic tableland that follows the southern boundary of Lot 37.
- Undulating plains dominate Lot 32, Lot 33 and Lot 37 and the eastern parts of Lot 28. These plains decline in elevation toward the west and northwest (around 220 m AHD to 170 m AHD).
- Level to gently undulating plains across most of Lot 39 and the Lot 28.
- Gilgai microrelief in the west of Lot 28 and the north-west of Lot 39.

The site is located within the Dawson River sub-basin which is in the Fitzroy basin of the Northeast Coast drainage division of Queensland.

Drainage from the site is variable but in general terms the direction of the watercourses is as follows:

- The southern extent of Lot 39 is drained by one of the large watercourses in the project area and its smaller tributaries following a westerly path toward a large dam north of Dooney Smooth Road. The central part of Lot 39 also drains west but slightly downstream of the dam and flows into a long linear billabong associated with Callide Creek (Lake Victoria).
- Water from Lot 18, Lot 28, most of Lot 29 and the western half of Lot 37 drain in a northwest direction and eventually combine with the Don River approximately 6.5 km from the site. Water from Lot 32, Lot 33, and most of the eastern half of Lot 37 drain north combining with the Don River further upstream approximately 6.5 north of the site.
- The eastern half of Lot 37 is the only area which drains in a southerly direction. Watercourses and drainage lines in this area ultimately join Gerard Creek, approximately 4.5 km south-southeast of the site.

All watercourses on the site are small (stream order one or two) and classified as ephemeral systems with intermittent flashy flow regimes. The direction and quantity of flow off the site is affected by numerous in-stream dams which have been constructed to support agricultural enterprises. The dams would provide for a prolonged water supply which may extend year-round, except in drought years. The dams are in various states of disrepair with substantial rill erosion on the earthen dams constructed from sodic soils.

Gilgai pooling habitats occur to the west of the project area. These small wetlands range is size and water holding capacity and ephemerality with some of the smaller water bodies evaporating relatively quickly whilst some others probably lasting well into the spring months.

3.2 Geology

Geological mapping of the site identifies five distinct rock units that underly the site (i.e. Biloela formation, Smoky beds, Qpa-QLD, Balaclava formation and Pg/g?-YARROL/SCAG) (Table 3). Except for the granitoid unit Pg/g?-YARROL/SCAG, all rock units are sedimentary with variable age and composition (Murray 1975).

Table 3 Detailed Surface Geology of the Site

Rock unit name	Map symbol	Lithological summary	Dominant rock	Rock type	Time (years)	Site area (ha)
Qpa-QLD	Qpa	Clay, silt, sand and gravel; flood-plain alluvium on high terraces	Alluvium	Stratified unit (including volcanic and metamorphic)	10,000 – 140,000	227.223
Biloela formation	To	Freshwater, lacustrine mudstone, siltstone, oil shale and sandstone; minor lignite, carbonaceous mudstone and limestone.	Arenite-mudrock	Stratified unit (including volcanic and metamorphic)	≈ 25 Mya	1733.41
Pg/g? - YARROL/SCAG	Pg/g?	Granite, granodiorite	Granitoid	Intrusive unit	≈ 251 Mya	0.185
Smoky beds	Ps	Andesitic conglomerate and sandstone, mudstone, minor andesite lava	Mafites (lavas, clastics & high-level intrusives)	Stratified unit (including volcanic and metamorphic)	272 – 299 Mya	283.181
Balaclava formation	DCb	Rhyolitic volcaniclastic sandstone and conglomerate, minor ignimbrite, rare rhyolite, siltstone and oolitic limestone	Mixed sedimentary rocks and felsites	Stratified unit (including volcanic and metamorphic)	346 - 382 Ma	56.772

3.3 Soils

Fifteen soil profiles are mapped within the project area (Muller 2008) where the dominant soil orders are Sodosols 971.53 ha (43%) and Vertisols 861.81 ha (38%). The cracking clays (Vertisols) are diverse with six different profiles whilst three sodic duplex soils (Sodosols) are mapped.

The vertisols are categorised as either moderately well drained soils with a high exchangeable calcium content or strongly sodic with a highly saline subsoil (Muller 2008). These soils often form gilgai mounds and depressions and are mapped in the western extent of the project area. The common vertisol soils on the site are:

- Earlsfield: Very deep cracking clays with occasional widely spaced melonholes ranging in size from 10 – 15 m horizontally and 0.3 – 0.5 m deep.
- Greycliffe: Deep cracking clays with widely spaced melonhole gilgai ranging in size from 10 – 30 m horizontally and 0.1 – 0.2 m deep. These gilgai are poorly drained with very slow runoff but are shallow and quite ephemeral. Soils on the mounds are strongly sodic with very high salt content.
- Greycliffe - melonhole phase: Very deep cracking clays with strongly developed melonhole gilgai. Gilgais range in size from 20 – 60 m horizontally and 0.5 – 1.6 m deep. These gilgai are poorly drained with a very slow runoff and due to their size and depth contain water for long periods. Soils on the mounds are strongly sodic with very high salt content.

All mapped sodic duplex soils on the site are formed from unconsolidated Cainozoic alluvial- colluvial sediments consisting of sand and loam overlying a sodic clay subsoil of which three profiles are mapped on the site.

- Kokotungo: Kokotungo has a clay loamy topsoil with a strongly sodic subsoil that is highly dispersive. The most extensive soil profile on the site in this project area (940.11 ha).

- Desdemona: Desdemona has a sandy topsoil with a sodic subsoil which is less prone to dispersal than Kokotungo. Occurs in only a few small areas on the extensive colluvial plains to the north-east of Goovigen.
- Ulogie: A sandy loam to clay loam topsoil with a dense and strongly sodic subsoil that is highly dispersive and erodible. This profile often occurs near Tertiary sandstone plateaus.

Further information relating to the soil profiles mapped in the project area are found in the Ecological Assessment Report (Terra Solutions 2022).

3.4 Ecology

Vegetation communities identified through ecological investigations were described as:

- Pasture grassland of sabi grass (*Urochloa mosambiquensis*) with isolated trees and shrubby regrowth areas over approximately 1,967 ha.
- Gilagai wetlands comprising aquatic plants and mounds and inter-gilgai flats consisting of sabi grass and salt-tolerant species
- Brigalow woodlands and watercourse fringing woodlands containing brigalow (*Acacia harpophylla*) and occasionally containing vine-thicket elements
- Narrow-leaved ironbark (*Eucalyptus crebra*) woodland with a sparse shrub layer and a sparse to dense grass layer of primarily sabi grass
- Dawson's gum (*Eucalyptus cambageana*) woodland with a sparse shrub layer and a sparse to dense grass layer of primarily sabi grass
- Belah (*Casuarina christata*) woodland with Moreton Bay ash (*Corymbia tesselaris*) and variable-barked bloodwood (*Corymbia erythrophloia*) and a ground layer dominated by buffel grass (*Cenchrus ciliaris*)

Threatened flora species forming the focus of ecological investigations prior to development of the site included the following:

- *Solanum dissectum* (Endangered under the EPBC Act)
- *Solanum johnsonianum* (Endangered under the EPBC Act)

Significant threatened species forming the focus of ecological investigations prior to development of the site included the following:

- Ornamental snake (Vulnerable under the EPBC Act and NC Act)
- Squatter pigeon (Vulnerable under the EPBC Act and NC Act)

4 IMPLEMENTATION AND OPERATION OF CEMP

4.1 Environmental Policy and Commitment

Edify Energy is committed to environmental protection and the management of adverse activities associated with their developments. All Edify Energy employees including contractors have a responsibility to implement the overarching environmental objectives of the organisation and actively engage the companies' commitments.

Edify Energy has not been involved in environmental proceedings of any kind under Commonwealth, State or Territory law and will continue to enact the highest environmental standards in their work practices and onsite management of the environment.

Edify Energy carefully select sites and design infrastructure with a determined focus of avoiding environmentally significant and sensitive areas with an understanding that impacts associated with large-scale developments are often not seen for several years. Edify Energy has successfully referred several projects to the Federal Environment Minister and will continue to work closely with Government to modify development features to reduce impacts to MNES to the greatest extent possible.

Edify Energy and their contractors maintain their high standards of environmental protection through the following measures:

- Setting objectives and targets to monitor performance aimed at the elimination or minimisation of work-related injury, illness, and environmental harm.
- Systematically identifying, assessing, and managing as far as reasonably practicable the health and safety risks and environmental impacts which may arise from our activities.
- Ensuring that health, safety and environmental responsibilities are clearly defined within management plans and procedures
- Engaging with employees, landowners and key stakeholders to identify critical environmental issues on land under Edify's control.
- Ensuring that the planning, design, construction, operation and maintenance of Edify's assets occur in accordance with Government approvals.
- Provide the resources required to achieve Project approval commitments
- Implement mitigation and management measures to minimise impacts to air, water, land and biota unless authorised under license or approvals to
- Complying with the requirements of environmental legislation and any Environmental Management Plan and Environmental Work Plan that applies to the property being accessed.
- Taking all reasonable actions to ensure that weeds, pests or pathogens are not spread.

4.2 Site Contacts

Relevant site contacts are detailed in Table 4.

Table 4 Site Contacts Details

Issue	Organisation	Person	Position	Contact Details
Implementation and management of the CEMP	Principal's Representative	To be appointed	Project Manager	To be appointed
Receiving the following reports; monitoring, remedial action,	To be appointed	To be appointed	Site Supervisor	To be appointed

Issue	Organisation	Person	Position	Contact Details
environmental complaints and emergencies				
Ensuring measures/action plans are implemented	To be appointed	To be appointed	HSEO	To be appointed
Reporting and auditing	To be appointed	To be appointed	HSEO	To be appointed

4.3 Roles and Responsibilities

The roles and responsibilities for the SPS will ultimately be defined by the Principal Contractor, however it is envisaged that they will align with the management arrangements detailed in Figure 2.

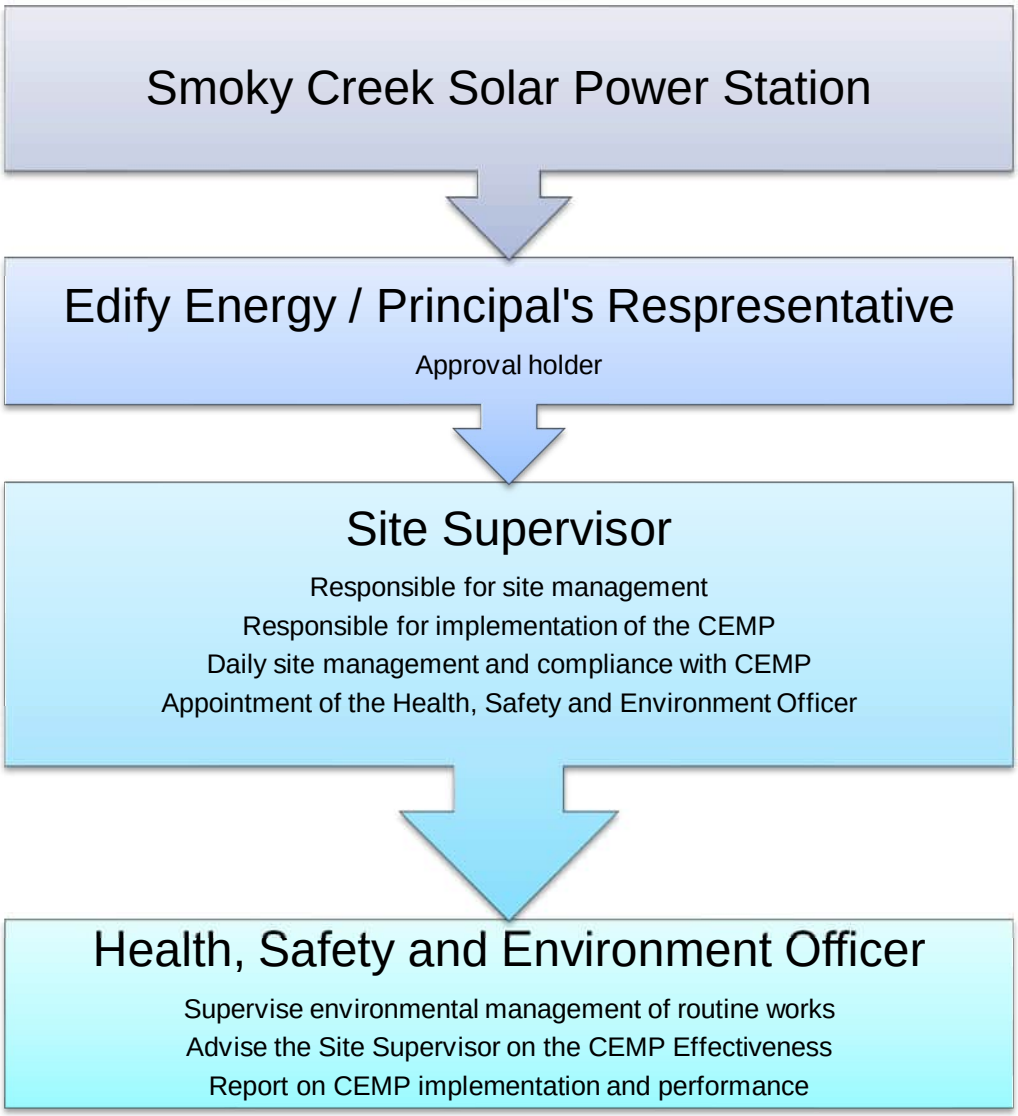


Figure 2 Site Construction Management Arrangements

The responsibilities and reporting structure for key environmental management roles at the facility are broadly outlined in Table 5.

Table 5 Roles and responsibilities

Role	Responsibilities	Reporting
Principal's Representative	▪ Provision of sufficient resources to support the implementation of the CEMP and ongoing environmental management activities required by the Project ▪ Ensure appropriate training (requirements of the CEMP) is undertaken by all site personnel ▪ Acquisition of all required permits and approvals ▪ Engagement and briefing of site staff and sub-contractors ▪ Review of monitoring outcomes and ensure corporate compliance ▪ Ensure environmental non-conformances are appropriately actioned and corrective and preventative measures are implemented ▪ Approval of CEMP revisions ▪ Community consultation and regulator liaison ▪ Appoint consultants to assist in overseeing works and monitoring compliance with conditions of relevant permits	▪ Reports to Banana Regional Council and DCCEEW
Site Supervisor/s	▪ Work with Edify Energy to address complainants, community groups and other stakeholders ▪ Ensure the site is compliant with provisions in this CEMP and with relevant approvals on a day-to-day basis ▪ Perform regular inspections ▪ Implement the CEMP for all environmental matters on site, with authority to direct compliance with the CCEMP ▪ Manage emergency responses ▪ Report on CEMP implementation and performance. ▪ Conduct daily visual inspections and weekly site checklists	▪ Reports to Principal's Representative
Health, Safety and Environment Officer (HSEO)	▪ Conduct site inspections or as requested by the Site Supervisor, and as triggered by any relevant permits or environmental incidents ▪ Review CEMP effectiveness (including for continuous improvement) ▪ Perform regular inspections ▪ Implement the CEMP for all environmental matters on site, with authority to direct compliance with the CCEMP ▪ Prepare written Corrective Action Reports within 24 hours of the identification of a need for corrective actions to be taken ▪ Maintain records of any complaints received and responses, investigate and (where appropriate) implement control measures	▪ Reports to Site Supervisor/s

Role	Responsibilities	Reporting
	▪ Investigate and review non-conformances and identify, implement and monitor corrective and preventative actions for non-conformances ▪ Maintenance of training, non-conformance and complaints registers ▪ Conduct monthly internal audits ▪ Undertake or coordinate environmental monitoring events ▪ Approve chemicals entering the site ▪ Maintain complaints register ▪ Ensure the CEMP is made available to all staff, contractors and authorities ▪ Allocate resources for environmental management, staff training and CEMP duties ▪ Ensure all personnel and contractors have completed a site induction and orientation	
All Site Staff and Contractors	▪ Undertake site works as instructed by the Site Supervisor ▪ Undertake site works with a duty of care under the *Environmental Protection Act 1994* ▪ Undertake activities in compliance with this CEMP ▪ Report all concerns, complaints, incidents, near misses, spills or non-conformances with the CEMP to Site Supervisor	▪ Reports to Project and Site Supervisor/s
Consultant	▪ Provide the Site Supervisor/ HSEO with specifications and certifications of specific works ▪ Prepare plans and specifications that comply with relevant conditions of approvals and the requirements of this CEMP ▪ Undertake required pre-construction surveys ▪ Develop specifications and plans that adequately address environmental issues ▪ Report to the Principal's Representative any areas of non-compliance with the specifications that may require corrective actions or modifications to the CEMP	▪ Reports to HSEO / Site Supervisor/s

4.4 Training and Competency

It will be the HSEO responsibility to ensure all employees and sub-contractors are fully formally inducted into the CEMP. An employee and sub-contractor training register is in Appendix B.

Inductions will cover the following:

- Spill kit use and response
- Equipment and maintenance
- Cultural Heritage requirements
- Roles and responsibilities
- Environmental incident notification and reporting
- Location of conservation and buffer areas

- The CEMP requirements
- The general duty of environmental care

4.5 Communication

Regular Environmental, Health and Safety (EHS) meetings shall be held with the Principal Contractor to maintain an awareness of environmental issues. The EHS Meeting shall be a brief team meeting to discuss recent onsite incidents, results of inspections, relevant EHS topics including observed hazards and audit results.

Records of EHS Meetings shall be retained by the Principal Contractor.

4.6 Regulatory Authorities

Principal's Representative may occasionally schedule update meetings or have informal discussions with the Department of Environment and Science (DES), Department of Climate Change, Energy, the Environment and Water (DCCEEW) and Banana Shire Council (BSC). DES and BSC are notified immediately of any significant incidents and updated with compliance reports required as per the Conditions of Consent and associated endorsed plans.

4.7 Complaints Management

The procedure provided in Figure 3 will be adhered to following a complaint.

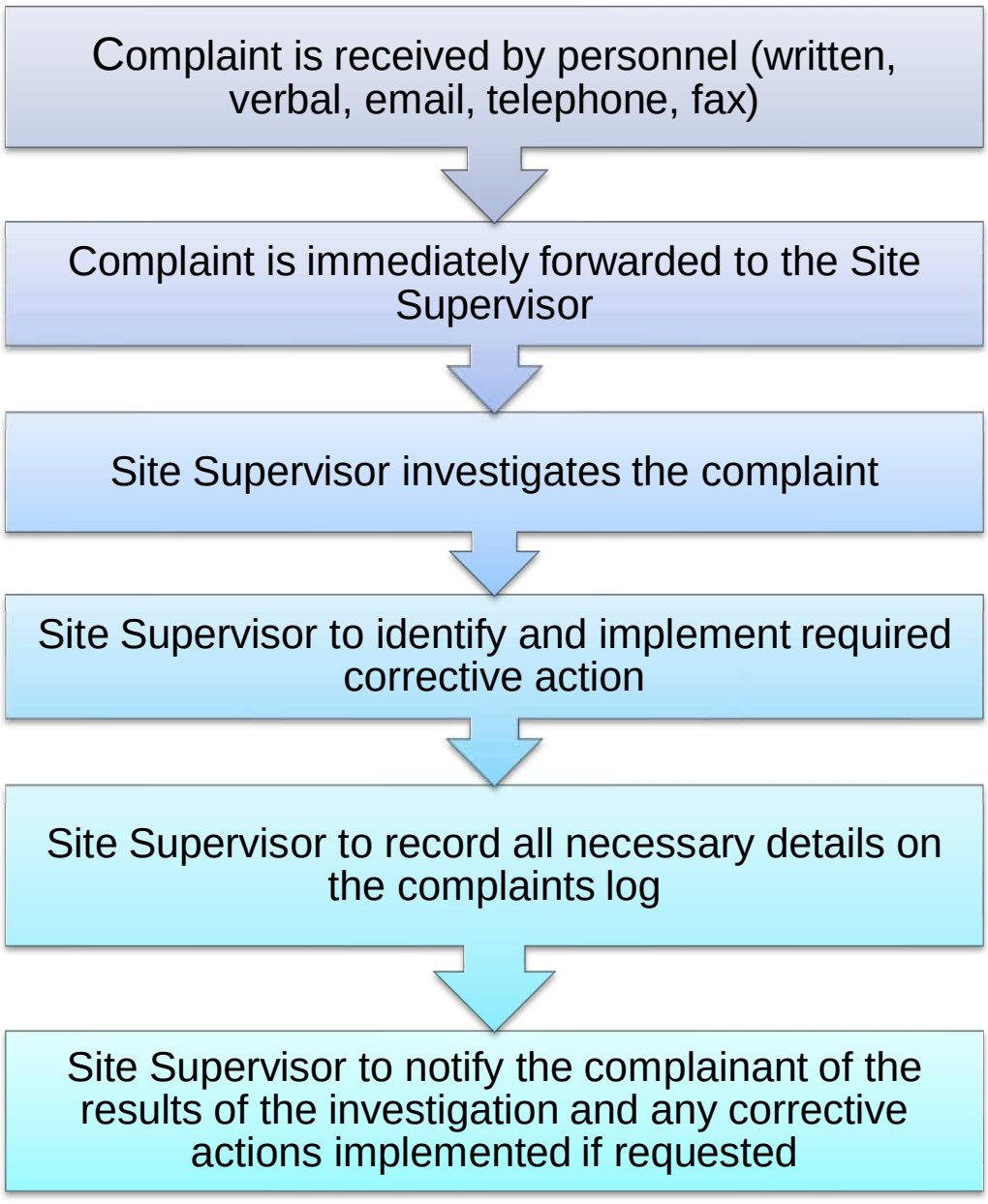


Figure 3 Complaints procedure

The HSEO will maintain and update a complaints log (Appendix C). The following details must be recorded for all complaints received:

- Time, date, name and contact details of the complainant
- Reasons for complaint
- Any investigations undertaken
- Conclusions formed
- Any actions taken

The complaints log must be provided to the administering authority on request.

4.8 Contractor Management

4.8.1 Contractor Pre-qualification

Principal's Representative will assess all contractor competency in relation to Health, Safety and Environmental aspects of their operation to ensure that work carried out by third parties considers controls that prevent environmental harm.

4.8.2 Compliance with CEMP

The Site Supervisor must ensure that all contractors and sub-contractors are aware of their compliance requirements and supervised to monitor compliance within the provisions of this CEMP. Whilst contractors may develop and adhere to their own Environmental Plans and Management Systems, this CEMP provides the overarching framework.

4.9 Record Management

A copy of the CEMP shall be always kept in the site office.

Any record or document required as an outcome of this CEMP or requested by a regulatory authority must be kept at the project office for a period of five years and be available to an authorised person upon request.

Records must be kept of monitoring results, corrective actions, environmental incidents and complaints, reports to management, and any records required by law such as regulated waste tracking.

5 SUMMARY OF KEY ENVIRONMENTAL ISSUES

Table 6 summarises the key environmental issue for the construction of the SPS.

Table 6 Key Environmental Issues for the SPS

Issue	Potential Impact/Hazard
Increased Traffic Movements	Road congestion
	Vehicle collision
	Animal strike
	Disturbance of residents
Air Quality and Dust	Impact on local amenity
	Impact on human health
	Impact on health of flora, fauna and ecosystems
Noise / Vibration	Impact on local amenity/disturbance of residents
Solar Panel Glare and External Lighting	Distraction of pilots (air traffic) / Disturbance of residents
Land and Soil Management	Erosion of soil from the site / increased sedimentation in watercourse / loss of topsoil
	Compaction of soil
Stormwater Management	Altered runoff from site
	Contaminated runoff from site
Waste	Waste generation
	Impact on local amenity
	Wildlife accessing waste
	Contamination of downstream receiving environment
Chemical Storage and Spills (Chemical, Fuel, etc.)	Surface water contamination
	Groundwater contamination
	Soil contamination
Flora and Fauna Management	Clearing of potential squatter pigeon habitat
	Clearing of areas containing potential ornamental snake habitat
	Clearing of the TEC Brigalow (*Acacia harpophylla* dominant and co-dominant);
	Clearing of threatened flora species *Solanum johnsonianum* and *Solanum dissectum*.
	Grasses under solar panels – bushfire hazard
	Disturbance/harm to native fauna
	Loss of habitat for local fauna
	Disturbance of riparian buffer zones
	Loss of vegetation providing groundcover
	Loss of vegetation stabilising watercourse bed or banks
	Introduction and spread of weeds
	Introduction and spread of invasive fauna

Issue	Potential Impact/Hazard
Cultural Heritage	Loss of, or damage to, indigenous and non-indigenous cultural heritage.

6 ENVIRONMENTAL MANAGEMENT AND MITIGATION

6.1 Traffic Management

Traffic management measures are provided in the Traffic Management Plan – prepared by the Contractor.

6.2 Air Quality Management

The air quality and dust management actions to be implemented during construction of the SPS are outlined in Table 7.

Table 7 Management Actions Relating to Ambient Air Quality

Air Quality and Dust			
Aim			
To construct the SPS with minimal impacts to air quality where: ▪ No environmental nuisance is caused by the release of noxious or offensive airborne odours or contaminants – such as smoke and fumes from faulty equipment and fugitive dust emissions ▪ Aesthetics and amenity of the local environment is maintained ▪ Health of surrounding ecosystems and species is protected ▪ Human health and wellbeing are protected.			
Success Criteria			
No air quality complaints received from nearby sensitive places or from statutory authorities.			
Issues	**Management Actions**	**Responsibility**	**Frequency / Timing**
Air Quality	Adhere to speed limits across the site (i.e., 20km/h).	All site personnel	At all times
	Cover loads on trucks carrying material that would be easily dispersed by the act of normal driving.	All site personnel	At all times
	Visually monitor dust conditions at the site and implement appropriate mitigation procedures for the level of dust control required.	Site Supervisor	At all times
	Vehicle movement will be restricted to defined areas.	Site Supervisor	At all times
	All plant and equipment (e.g. haulage trucks, loading machinery) will be maintained and operated in accordance with Australian Design Rules and manufacture's specification.	Site Supervisor	As required
	Ensure machinery or plant is not left running idle when not in use.	All site personnel	At all times
	Conduct works (e.g. earth works) that may produce excessive dust when the wind is favourable.	Site Supervisor	As required
	Water down trafficable areas.	Site Supervisor	As required
	Limit dust generating activities during windy or stormy conditions.	All site personnel	At all times

Air Quality and Dust		
Routine Monitoring		
Report any malfunctioning equipment to the Site Supervisor.	All site personnel	As required
Visually inspect site and operations for smoke, fumes and dust.	Site Supervisor/ HSEO	Daily
Monitoring in Response to a Complaint		
When requested by the administrating authority, dust and particulate monitoring must be undertaken to investigate any complaints of environmental nuisance caused by particulate matter. Monitoring must be carried out at a place(s) relevant to the potentially affected odour sensitive place and at upwind control sites and must include: ▪ For complaint alleging dust nuisance, dust deposition monitoring shall be in accordance with AS3580.10.1 2016 or more recent editions; and ▪ For a complaint alleging adverse health effects caused by dust, the PM10 concentration suspended in the atmosphere over a 24hr averaging time shall be monitoring in accordance with AS3580.9.6 2015 (or more recent editions).		
Corrective Action		
If success criteria are not met, examples of corrective actions may include: ▪ Repair, service or replace faulty plant and equipment; and ▪ Implement dust mitigation measures (e.g. watering of roads).		
Reporting		
Record observations and actions.	Site Supervisor/ HSEO	As required
Record and retain inspection notes and observations.	Site Supervisor/ HSEO	Weekly
Results from complaint monitoring shall be forwarded to the administering authority.	Site Supervisor	Within 14 days of the completion of monitoring.

6.3 Noise and Vibration Management

The noise and vibration management actions are outline in Table 8 will be implemented during construction of the SPS.

Table 8 Management Actions Relating to Noise and Vibration

Noise and Vibration			
Aim			
To construct the SPS with minimal noise and vibration where: ▪ No environmental nuisance is caused at a noise sensitive place by noise emissions from the site. ▪ Aesthetics and amenity of the local environment is maintained.			
Success Criteria			
Noise emissions do not exceed acoustic quality objectives stated in *Schedule 1* of the *Environmental Protection (Noise) Policy 2019*.			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Noise	Liaise with/notify residents of work and intended construction times and the potential for increased noise levels during the works.	Site Supervisor	As required
	Locate accesses and Project facility areas as far away from sensitive receptors as possible	Site Supervisor	As required
	Adhere to speed limits on construction site and when accessing construction site.	All site personnel	At all times
	Adhere to approved hours.	Site Supervisor	At all times
	No unnecessary use of horns or other audible signals on mobile plant or equipment.	All site personnel	At all times
	No unnecessary revving or idling of engines on mobile and stationary machines and shut down any equipment not in use.	All site personnel	At all times
	Keep equipment well maintained to limit noise emissions.	Site Supervisor	As per manufacturers specifications
	Inform neighbours prior to creating excessive noise.	Site Supervisor	As required
	Schedule noisy activities that could cause vibration during times that will cause the public the least disturbance (e.g. middle of the day when most individuals are at work).	Site Supervisor	As required
Routine Monitoring			
Inspect site in relation to noise/vibration controls and operations.		Site Supervisor / HSEO	Daily
Monitor noise/vibration from plant and equipment.		All site personnel	At all times
Monitoring in Response to a Complaint			

Noise and Vibration		
When requested by the administering authority noise monitoring must be undertaken to investigate any complaint of noise nuisance and must include: ▪ LA 10, adj, 10mins ▪ LA 1, adj, 10mins ▪ The level and frequency of occurrence of impulsive or tonal noises ▪ Atmospheric condition including wind speed and direction ▪ Effects due to extraneous factors such as traffic noise ▪ Location, date and time of recording ▪ The contractor is responsible for engaging a suitably qualified and experienced acoustic consultant to undertake the monitoring. The method of measurement and reporting of noise levels must comply with the latest edition of the DES Noise Measurement Manual. All monitoring equipment used must be calibrated and appropriately operated and maintained.		
Corrective Action		
When criteria are not met, examples of corrective actions may include: 1. Review the use of any audible signals. 2. Investigate feasible additional noise attenuation devices for plant or equipment.		
Reporting		
Record observations, actions and notifications from staff in diary.	Site Supervisor / HSEO	As required
Record inspection notes and observations.	Site Supervisor / HSEO	Weekly
Results from complaint monitoring shall be forwarded to the administering authority.	Site Supervisor	Within 14 days of the completion of monitoring.

6.4 Lighting Management

The solar panel glare and external lighting management actions are outline in Table 9 will be implemented during construction of the SPS.

Table 9 Management Actions Relating to Solar Panel Glare and External Lighting

Solar Panel Glare and External Lighting			
Aim			
To minimise solar panel glare from PV solar modules shall: ▪ Maintain the aesthetics and amenity of the local environment. ▪ Protect the health of fauna.			
Success Criteria			
The Civil Aviation Safety Authority (CASA) requests that lights that may cause confusion, distraction or glare to pilots in the air be extinguished or modified in accordance with regulation 94 of the *Civil Aviation Regulations 1988* (CAR 1988). Night and outdoor lighting is designed, constructed and operated in accordance with Australian Standard AS4282 – Control of the obtrusive effects of outdoor lighting.			
Issues	**Management Actions**	**Responsibility**	**Frequency / Timing**
Glare	Solar panels, visible support structures, framing, cabling and other equipment and infrastructure shall be made of non-reflective materials or have a matte finish to minimise glare	Site Supervisor	Design stage
	Any glare or external lighting identified as hazardous to be modified if requested by the Civil Aviation Authority.	All site personnel	As required
Corrective Action			
When criteria are not met, examples of corrective actions may include: ▪ Investigation of feasible glare or external lighting modifications			
Reporting			
Record observations, actions and notifications from staff in diary.		Site Supervisor / HSEO	As required

6.5 Land and Soil Management

The land and soil management actions are outline in Table 10 will be implemented during construction of the SPS.

Table 10 Land and Soil Management

Land and Soil Management			
Aim			
To minimise the impact to land and soil from construction activities, specifically: ▪ Compaction ▪ Erosion ▪ Sedimentation			
Success Criteria			
▪ Erosion is not exacerbated by construction activities. ▪ On-site and within site waterbodies do not receive excessive deposits of sediment			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Erosion and Sedimentation	Ensure that un-impacted drainage (outside project footprint) is diverted around impacted areas.	Site Supervisor	Pre-construction
	Prior to construction commencing, a detailed Erosion and Sediment Control Plan (ESCP) to manage the site during the Construction and Operation Periods will be finalised.	Site Supervisor	Pre-construction
	Conduct all major earthworks during the dry season and ensure that all bed and banks are stabilised prior to the onset of wet season.	Site Supervisor	Pre-construction
	Limit ground disturbance and vegetation clearing to the minimum extent necessary for safe construction of solar modules.	Site Supervisor	At all times during mobilisation and construction
	Minimise the amount of material exposed to potential erosion (e.g. exposed stockpiles)	Site Supervisor	At all times
	Store stockpiles or excavated material in appropriate locations (e.g. on level ground, away from stormwater drainage)	Site Supervisor	At all times
	Topsoil stockpiles are to be protected from sediment runoff by a catch drain constructed along uphill sides and a suitable silt fence/sediment trap constructed on the downhill sides.	Site Supervisor	At all times
	Install and maintain erosion and sediment control structures where necessary.	Site Supervisor	As required
	Backfill and compact any trenches or other excavations to a level consistent with surrounding soils.	Site Supervisor	As required
	In the event of rain and wet soils, movement of vehicles and equipment will be minimised or avoided.	All site personnel	As required during mobilisation and construction

Land and Soil Management			
	Ensure that all access tracks are constructed clear of riparian buffer zones except for waterway crossings.	Site Supervisor	At all times
	Disturbance to ground cover and soil must be effectively returned to a stable, non-eroding condition equal or better than the existing condition.	Site Supervisor	As soon as practicable following disturbance
	Roughen exposed surfaces and re-spread stockpiled topsoil in all areas not to be further disturbed	Site Supervisor	As soon as practicable following disturbance
Soil Compaction	Restriction of construction activities to defined areas.	Site Supervisor	At all times during mobilisation and construction
	Restrict vehicles from entering riparian buffers.	Site Supervisor	At all times during mobilisation and construction
Routines Monitoring			
Monitor construction and work practices.		Site Supervisor / HSEO	Daily
Monitor receiving surface water – no turbidity plume. Maintain downstream turbidity at comparable levels to upstream turbidity.		Site Supervisor / HSEO	At all times
Monitor accumulation of sediment against silt traps, fences and other erosion control measures.		Site Supervisor / HSEO	Regular monitoring and as required
Corrective Action			
If success criteria are not met, examples of corrective actions may include: ▪ If erosion occurs, carry out maintenance and/or repair ▪ Ensure erosion and sediment controls are appropriate and effective ▪ Ensure stormwater management measures are adequate and effective			
Reporting			
Record inspection notes and observations.		Site Supervisor / HSEO	Weekly Audit
Record site observations, actions and notifications in diary.		Site Supervisor / HSEO	As required

6.6 Water and Stormwater Management

The stormwater management actions are outline in Table 11 will be implemented during construction of the SPS.

Table 11 Management Actions Relating to Stormwater

Stormwater Management			
Aim			
To minimise the impact of stormwater, specifically: ▪ Changes in the volume or path of runoff ▪ Inundation of the site with floodwaters or stormwater			
Success Criteria			
▪ Post construction stormwater volume and runoff is similar to pre-construction. ▪ No complaints are received in relation to stormwater issues. ▪ All stormwaters being discharged from the site meets the requirements of the Capricorn Municipal Development Guidelines and the *Queensland Water Quality Guidelines 2009* No ponding of stormwater resulting from the development on adjacent properties Contaminated water is not directly or indirectly released from the premises onto the ground or into groundwater at the premises Releases of stormwater must not cause any visible oil/hydrocarbon slick or other evidence of oil or grease, nor contain visible grease, scum, litter or floating oil/hydrocarbon			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Altered Runoff from Site	Ensure appropriate vegetation is planted in and around the site to promote infiltration of runoff.	Site Supervisor	As required
	Backfill and compact any trenches or other excavations to a level consistent with surrounding ground level.	Site Supervisor	As required during mobilisation and construction
	Avoid creating any new access tracks where possible.	Site Supervisor	As required
	Treat compacted soil appropriately and quickly to promote infiltrations of stormwater.	Site Supervisor	As required
	All pre-existing sheet flow and site drainage should be maintained	Site Supervisor	As required
	Panels will reduce rain splash erosion by acting as a barrier approximately 1.5 m above ground, where drip zones will be readily managed (i.e. gravel).	Site Supervisor	As required
	In storm events the trackers will automatically move to stow position and face panels directly skywards, meaning that rain splash/run off is further mitigated and reduced to drip zones that can be readily managed.	Site Supervisor	As required
	Where there is a slight gradient across the site and stormwater sheet flows towards the creek lines, water will be slowed before it enters the creeks with strategic placement of level spreaders and natural materials such as rocks and logs.	Site Supervisor	During construction and construction.

Stormwater Management			
	Drainage associated with formed roads should include drainage channels constructed of compacted earth which will be hydroseeded with a suitable grass seed mix. Drainage channels will follow existing contours, maintaining pre-construction drainage and sheet flows.	Site Supervisor	During construction
	Where trench dewatering is required, ensure the dewatering effluent is dispersed on stabilised ground via a suitable dispersion method. Sediment traps are to be used where required.	Site Supervisor	As required
Routine Monitoring			
Monitor site for concentrated flows or evidence of soil erosion.		Site Supervisor / HSEO	At all times.
Corrective Action			
If success criteria are not met, examples of corrective actions may include: ▪ If concentrated flows or erosion occurs, implement stormwater controls. ▪ Ensure stormwater management measures are adequate and effective.			
Reporting			
Record inspection notes and observations.		Site Supervisor / HSEO	Weekly Audit
Record site observations, actions and notifications in diary.		Site Supervisor / HSEO	As required

6.7 Waste Management

The waste management actions are outline in Table 12 will be implemented during construction of the SPS.

Table 12 Management Actions Relating to Waste

Waste			
Aim			
All solid and liquid wastes are stored, handled and transferred in a proper and efficient manner to minimise the risk of release to the environment.			
Success Criteria			
▪ No complaints received by the public in relation to waste issues ▪ All works are managed in accordance with Queensland WWR Act ▪ No improper storage, transport or disposal of wastes ▪ Minimise the amount of waste generated.			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Waste Generation	Personnel will be inducted in the requirements for waste management	Site Supervisor	Prior to undertaking any construction activities
	All construction activities likely to generate waste will be recorded within the EMP (Construction) to allow specific management measures	Site Supervisor	Prior to undertaking any construction activities
	Characterise all waste streams and develop measures to: ▪ Minimise site waste generation ▪ Segregate waste groups ▪ Direct all recyclable/reusable wastes away from landfill wherever possible	Site Supervisor / HSEO	As required
Proper Disposal	All regulated wastes are removed by a licensed waste management company. Examples of regulated wastes include tyres and waste oils. Trap Gully Landfill is the sole facility for commercial and regulated waste.	Site Supervisor	As required
	General wastes are disposed of in accordance with local council directions and regulations at their nominated facilities.	Site Supervisor	As required
	Do not burn waste	All site personnel	At all times
	Construct a concrete washout area at the site Depot. Ensure the washout area is self-contained, lined with black plastic and located at least 200 m from any waterway/watercourse.	Site Supervisor	As required
	File substantial written evidence (dockets, invoices and receipts) for all	Site Supervisor	As required

Waste			
	waste disposals. Provide copies of records to the regulator when requested.		
Impact on Local Amenity	General wastes shall be stored in covered bins.	All site personnel	As required
	Good housekeeping should be practiced ensuring any loose waste materials are secured in appropriate collection containers.	All site personnel	At all times
	Cover all loads when leaving the site to prevent the loss of loose objects	All site personnel	At all times
Wildlife Accessing Waste	Ensure all bins and litter-receptacles at the site are bird/animal proof.	Site Supervisor	At all times
Routine Monitoring			
Regular inspections of on-site facilities shall be undertaken to ensure waste is being generated, stored, handled, disposed and transported in accordance with regulations. A periodic review of waste management will be undertaken during construction to identify efficiencies and deficiencies in management.		Site Supervisor	Daily
Corrective Action			
If success criteria are not met, examples of corrective actions may include: ▪ Retrain staff in correct waste management and disposal procedures ▪ Ensure appropriate storage and disposal facilities are available for regulated and general waste.			
Reporting			
If a regulated waste is removed from the site and disposed of in an unauthorised, improper or unlawful manner, this must be reported to the administering authority.		Site Supervisor	As soon as practicable
Retain records of regulated waste disposal.		Site Supervisor	At all times
Record site observations, actions and notifications in diary.		Site Supervisor	As required

6.8 Chemical Storage and Spill Management

The chemical storage and spill management actions are outline in Table 13 will be implemented during construction of the SPS.

Table 13 Management Actions Relating to Chemical Storage and Spills

Chemical Storage and Spill Management			
Aim			
To minimise the risk of adverse impacts of chemical and fuel spills on and around the project site by implementing appropriate pollution controls at the site.			
Success Criteria			
▪ No adverse impacts to existing surface water, groundwater and land ▪ No oil, fuel or chemical spills ▪ Emergency spill response contacts displayed prominently at site office ▪ No complaints received from regulatory authorities or the community in relation to the storage and utilisation of fuel and hazardous material			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Hazardous Substance (Handling and Storage)	All hazardous material, including hydrocarbons (fuels) will be securely stored in a designated storage area. All storage tanks to be secured and stored in such as manner to prevent spills. Wherever possible, tanks will be self-bunded or bunded with an impervious surface and a capacity to contain 110% of the largest storage tank capacity.	Site Supervisor	At all times
	Minimise the quantities of hazardous substances, fuel, oil and chemicals stored on site.	Site Supervisor	At all times
	All hazardous substances or dangerous goods procured for use on the project will be accompanied with a: ▪ Safety Data Sheets (SDS) ▪ Risk assessment generated by the supplier; and ▪ Adequate labels Spill kits shall be available in all areas where hydrocarbons and chemicals are stored or used. Spill kits shall be adequately stocked with materials that are suitable for the hydrocarbons and chemicals stored on site.	Site Supervisor	At all times
	All dangerous goods (DG) and hazardous substances shall be stored in a dedicated DG storage container which is adequately ventilated and has adequate bunding for the quantity of DG and hazardous substances being stored.	Site Supervisor	At all times
	Smoking is not permitted within 5 metres of dangerous goods storage containers.	Site Supervisor	At all times

Chemical Storage and Spill Management			
	DG storage will be fitted with an external fire extinguisher which is suitably mounted and sign marked. The fire extinguisher shall comply with AS2444 Portable Fire Extinguishers and Fire Blankets, be 3.5 kg minimum capacity and be Powder Type Class ABE.	Site Supervisor	At all times
	DG will be stored in accordance with the separation distances defined in AZ/NZS 3833:2007 The Storage and Handling of Mixed Classes of Dangerous Goods.	Site Supervisor	At all times
	Any bulk chemicals to be transported using an appropriately licensed and experience operator.	Site Supervisor	At all times
	Ensure that all personnel have received appropriate training in spill prevention, response and clean-up, including refuelling techniques and chemical storage and handling requirements.	Site Supervisor	As required
	Site workers are required to wear appropriate PPE which will limit contact with potentially hazardous substances.	All personnel	At all times
Spill Prevention	Prepare and implement a spill response and containment procedure in the event of a spillage or hazardous waste substance, including the immediate containment, clean-up and disposal to a licenced trade waste site.	Site Supervisor	At all times
	A spill kit will be provided and maintained on site and all operators trained in their use.	Site Supervisor	At all times
	Accidental leaks of oils etc (e.g. burst hydraulic hoses) will be cleaned up immediately using an on-site spill kit to minimise water contamination.	All site personnel	As soon as practicable
	All refuelling and maintenance activities to be more than 50m from a watercourse or drainage line	All site personnel	At all times
	All equipment is to be inspected at daily start up for fluid, oil or fuel leaks.	All site personnel	Daily
	Concrete trucks shall be washed out in designated bunded areas.	Site Supervisor	As required
	All maintenance activities for machinery are undertaken offsite.	Site Supervisor	At all times
	Vehicle wash down shall only be undertaken outside of the riparian buffers in a nominated wash down area.	Site Supervisor	As required
Routine Monitoring			
Visual inspections of site to ensure no leaks, hydraulic leaks, fuel leak/spills or any other hazardous material		Site Supervisor / HSEO	At all times

Chemical Storage and Spill Management		
Monitor receiving surface water – no sheen or slick on surface.	Site Supervisor / HSEO	At all times
Corrective Action		
If success criteria are not met, examples of corrective actions may include: ▪ Ensure refuelling and maintenance activities are undertaken in contained areas to minimise the risk of water contamination. ▪ Remove any contaminants from outside the site limits. ▪ Review maintenance activities undertaken on site and ensure that they are undertaken in approved areas only.		
Reporting		
Notify the Principal's Representative immediately if any of the following hazardous materials are found that have not been known to the site. These include, but are not limited to: ▪ UXO's ▪ Flammable or explosive liquids or gases ▪ Toxic, infectious or contaminated materials ▪ Noxious or explosive chemicals ▪ Tanks or containers that may have previously been used to store explosives or toxic substances.	Site Supervisor	Immediately following identification of any hazardous material
Environmental incidents involving spills shall be recorded including time of incident, persons involved, details of incident mitigation measures and actions taken to minimise the probability or reoccurrence.	Site Supervisor	At all times
Incidents involving large scale spills of hydrocarbons or chemicals likely to cause Serious or Material Environmental Harm are to be reported to Department of Environment and Science pollution hotline	Site Supervisor / HSEO	Within 24 hours following event
Record site observations, actions and notifications in diary.	Site Supervisor / HSEO	Daily as required
Record all water quality sampling results.	Site Supervisor / HSEO	As required

6.9 Biosecurity Management

The biosecurity management actions are outline in Table 14 will be implemented during construction of the solar SPS.

Table 14 Management Actions for Biosecurity

Biosecurity Management			
Aim			
Prevent, eliminate, and minimise the biosecurity risks posed by invasive plants and animals.			
Success Criteria			
▪ Control infestations of invasive weeds listed under the *Biosecurity Act 2014* ▪ All plant and equipment entering the site provides a Weed Hygiene Declaration as evidence of vehicle washdown ▪ Weed zones are established and vehicle movement into these zones are restricted ▪ A weed management strategy and control program are implemented, and actions recorded ▪ No disturbance to vegetation and surface soils outside of the development footprint ▪ All sightings of invasive fauna are recorded and reported ▪ No increase in the presence of pest animals ▪ *All requirements associated with the Grape Phylloxera and Sugar Cane Zone 4 biosecurity zones are complied with.*			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Introduction and proliferation of weeds	Implement a weed and pest management plan	Site Supervisor	Pre-construction
	Minimise vegetation and soil disturbance to reduce rate of weed invasion.	Site Supervisor	At all times
	Minimise bare ground with mulch and revegetation to reduce or prevent rate of weed invasion.	Site Supervisor	At all times
	Stockpiles of native vegetation are to be inspected for weeds species and weeds removed prior to export off site/mulching.	Site Supervisor	At all times
	Prior to entering or leaving the site, all vehicles and equipment involved in clearing and weed removal works should be cleaned down to remove soil and plant material to prevent spreading of soil borne disease and weed seeds or plant material.	Site Supervisor	At all times
	Establish and construct wash-down areas at project location to minimise the spread of weeds. All wash-down areas are to be constructed at least 200 m of any watercourse/waterway.	Site Supervisor	At all times
	Materials (e.g. gravel and sand) brought on to site will be obtained from weed-free sources.	Site Supervisor	At all times
	Equipment manufacturers shall be informed of Principal's Representative quarantine requirements. If packing materials are found to be contaminated during unpacking, they will be removed from the site for disposal at a licensed facility.	Site Supervisor	As required

Biosecurity Management			
	Control key weed species under the weed and pest management plan	Site Supervisor	At all times
	Monitor disturbed areas for new weed establishment and undertake control of key weed species under the weed and pest management plan.	Site Supervisor	At all times
Biosecurity Zones	If soil on which a banana plant has been growing, or machinery used in production of the plants is moved out of any banana biosecurity zone, or into the Northern Banana Biosecurity Zone, a biosecurity certificate will be required. If soil associated with grape plants, or machinery used in their production is moved into the state phylloxera exclusion zone a biosecurity certificate will be required.	Site Supervisor	As required
Pest fauna	All vehicles, machinery and equipment obtained from Fire Ant, Yellow Crazy Ant or Electric Ant regions are to be washed down and inspected prior to entering the project area.	Site Supervisor	At all times
	Ensure all bins are covered and waste is removed from site in a timely manner.	Site Supervisor	At all times
	Ensure site offices and other fixtures are rodent-proof as far as practicable.	Site Supervisor	As required
	Regular site inspections undertaken to assess the presence of vermin on site.	Site Supervisor	At all times
	Any pest control work on site will be carried out by a professional pest control organisation, either from the local authority environmental health department, or from a pest control company which is a member of a recognised trade body.	Site Supervisor	At all times
Routine Monitoring			
All vehicles and equipment to be inspected for weeds		Site Supervisor / HSEO	Regular monitoring and as required
Maintain a wash-down and inspection register for all vehicles, machinery and plant.		Site Supervisor / HSEO	Regular monitoring and as required
Monitor disturbed areas for new weed establishment.		Site Supervisor / HSEO	Regular monitoring and as required
Corrective Action			
If success criteria are not met, corrective actions may include: ▪ Where investigations show restricted/declared weeds, and pests present, revision to management plans shall be undertaken and further controls implemented, as necessary. Controls may include use of contracted licensed weed eradicator or pest exterminator.			
Reporting			

Biosecurity Management		
Washdown logs for vehicles, plant and equipment entering the site	Site Supervisor / HSEO	At all times
Records of inspections, surveys and monitoring completed in accordance with the monitoring program	Site Supervisor / HSEO	At all times
Records of weed control activities including the activity, location and timing	Site Supervisor / HSEO	At all times
Any incidents of non-compliance	All personnel	As required

6.10 Flora and Fauna Impact Management

The flora and fauna management actions are outlined in Table 15 will be implemented during the construction of the SPS. Due to the presence or potential presence of MNES in the vicinity of the development footprint, specific management actions have been prescribed for these MNES. The MNES and related management action table are identified below:

- Ornamental snake (*Denisonia maculate*) - Table 16
- Squatter pigeon (*Geophaps scripta scripta*) – Table 17
- *Solanum johnsonianum* and *Solanum dissectum* – Table 18
- TEC Brigalow (*Acacia harpophylla* dominant and co-dominant) - Table 19

Table 15 Management Actions for Flora and Fauna (General)

Flora and Fauna			
Aim			
Ensure local and regional biodiversity is not affected because of the Project and that legislative requirements are met.			
Success Criteria			
▪ Control grass under solar panels to 200 mm ▪ Minimise negative impacts on biodiversity ▪ No loss of threatened species or communities ▪ No injury or death of native wildlife ▪ All vegetated areas outside of clearing footprint are not disturbed			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Grass Control Under Solar Panels	Implement strategic grazing of stock or mechanical control to control grass height under panels to 200 mm	Site Supervisor	As required
Loss of Habitat	Site inductions to include awareness of significant vegetation or habitat	Site Supervisor	At all times
	Prior to any vegetation disturbance, the areas not to be cleared are to be clearly marked using temporary fencing (e.g. star picket fencing or orange barrier mesh) and declared as a 'no go zone'. Where fencing cannot be erected, other protection measures are to be implemented, i.e. trunk, branch and ground protection.	Site Supervisor	Pre-construction

Flora and Fauna			
	Fencing must be provided in accordance with AS 4970-2009 – Protection of Trees on Development Sites (AS 4970-2009). Fencing design to be considered in relation to potential incidents of trapping fauna.		
	All trees identified as "to be retained" on any project drawing shall be protected from damage and clearly marked with an easily visible non-injurious and removable means of identification.	Site Supervisor	Pre-construction
	Vegetation clearance to be limited to areas designated for vegetation removal.	Site Supervisor	At all times
	Except for hollow logs, any felled native trees are to be recycled (milled, chipped or mulched) and reused as mulch for landscape works and/or erosion or weed control.	Site Supervisor	At all times
	Do not stockpile dead fall. Timber should be mulched or cut into manageable pieces and removed form site.	All personnel	At all times
	Where significant habitat trees are identified (e.g. hollow-bearing trees with native fauna occupants), construction works will be scheduled wherever possible to avoid the breeding season of the hollow-roosting species. A licenced spotter-catcher will be present during all clearing activities.	Site Supervisor	At all times
	Vegetation is not to be burnt on site.	Site Supervisor	At all times
Minimise Harm to Fauna	Any wildlife found injured and sick because of site activities will be taken immediately to a wildlife veterinarian or qualified wildlife carer for treatment / rehabilitation.	Site Supervisor	As required during construction
	A licenced fauna spotter/catcher will conduct a pre-clearing survey to identify the presence of breeding places.	Site Supervisor	Directly prior to clearing works
	In the days prior to potential habitat trees being removed, these trees will be subjected to a series of bangs, knocks and other loud noises to encourage any wildlife to seek shelter elsewhere.	Site Supervisor	At all times
	If any animals are identified in trees marked for removal, work shall cease on that tree, and it is not to be damaged or interfered with until the animal has been allowed to move on freely of its own accord. If inhabiting fauna is not breeding, a licenced Fauna Spotter Catcher will be present whereby the tree will be soft-felled in late afternoon and be left overnight for fauna to move on freely.	Site Supervisor	As required
	Sequential clearing is to be undertaken, with clearing works to be commenced from clear areas towards vegetated areas within or adjacent to the site to allow fauna to move off the site of their own accord.	Site Supervisor	At all times

Flora and Fauna			
	Ensure vehicle speeds within areas of high fauna activity are regulated to avoid collisions.	All personnel	At all times
	'Fauna Warning' signs are to be used in areas of high fauna activity.	Contractor's HSE Manager	At all times
	Minimise the time that trenches remain open. Where open for more than 24-hours, insulated shelters and trench ramps are to be placed every 50 m (ramps to provide an escape option for fauna).	Site Supervisor	At all times
Routine Monitoring			
Monitor vegetation clearing and ensure management strategies are adhered to.		Site Supervisor / HSEO	Regular monitoring and as required
Open trenches to be checked daily by a fauna spotter and any trapped fauna to be removed.		Site Supervisor / HSEO	Regular monitoring and as required
Corrective Action			
If success criteria are not met, corrective actions may include: ▪ Where investigations identify environmental nuisance or potential to harm fauna, revision to management plans shall be undertaken and further controls implemented, as necessary.			
Reporting			
Report any incident involving damage to flora or fauna to the Principal's Representative.		Site Supervisor / HSEO	As required
Any incidents of non-compliance to be recorded in an environmental diary		Site Supervisor / HSEO	As required

Table 16 Management Actions for Ornamental Snake

Ornamental Snake			
Aim			
While the species is not considered likely to be present within the area, a precautionary approach has been adopted where a suite of mitigation measures have been proposed to avoid impacts to ornamental snake and associated habitat.			
Success Criteria			
▪ No injury or death of ornamental snake through vehicle strike or clearing activities ▪ Clearing which occurs in potential habitat areas are limited ▪ Minimise the introduction and spread of vermin which may have an impact on ornamental snakes ▪ Protect the integrity of native flora values by minimising weed dispersal throughout the Project area ▪ Potential habitat areas are not impacted for sedimentation or contamination			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Mortality from vehicles	Implement traffic control measures including specific measures in relation to speed restrictions (max 20km/hr on site), site inductions, and signage.	Site Supervisor	At all times
Mortality from feral predators	Adhere to management measures stipulated in Table 14 to minimise the introduction and spread of feral predators. Management measures include the appropriate management of site waste.	Site Supervisor	At all times
Loss of habitat	Areas to be cleared within the Development Footprint are to be delineated to avoid any unnecessary clearing.	Site Supervisor	At all times
Sedimentation	Adhere to management measures stipulated in Table 10 and Table 11 to minimise the risk of sedimentation. Management measures include the implementation of an Erosion and Sediment Control Plan (ESCP) to manage the site during the construction stage.	Site Supervisor	At all times
Contamination and/or pollution	Adhere to management measures stipulated in Table 12 and Table 13 to minimise the risk of contamination/pollution. Management measures include the appropriate management of site waste and storage of chemical and fuels.	Site Supervisor	At all times
Introduction of exotic weed species	Adhere to management measures stipulated in Table 14, to minimise the introduction and spread of weeds.	Site Supervisor	At all times
Routine Monitoring			
Fencing is to be inspected regularly to ensure that it remains properly installed.		Site Supervisor / HSEO	Regular monitoring and as required
Monitor vegetation clearing and ensure management strategies are adhered to.		Site Supervisor / HSEO	Regular monitoring and as required
Corrective Action			
If success criteria are not met, corrective actions may include: ▪ Reviewing the effectiveness of the CEMP and proposed mitigation measures for ornamental snake			

Ornamental Snake		
▪ Use non-conformance record and register to document incidents involving the ornamental snake.		
Reporting		
Record site observations, actions and notifications in diary.	Site Supervisor / HSEO	As required
Any incidents of non-compliance to be recorded in an environmental diary	Site Supervisor / HSEO	As required

Table 17 Management Actions for Squatter Pigeon (Sth.)

Squatter pigeon			
Aim			
Avoid impacts to squatter pigeon and associated habitat			
Success Criteria			
▪ Ensure identified habitat connectivity corridors through the site is maintained ▪ No injury or death of squatter pigeon through vehicle strike or clearing activities ▪ No clearing occurs in identified habitat areas for squatter pigeon ▪ Minimise the introduction and spread of vermin and weeds which may have an impact on squatter pigeon ▪ Reduce the risk of bushfire which may impacts squatter pigeon and associated habitat.			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Mortality from vehicles	The proponent will implement a number of traffic control measures through the Traffic Management Plan. These will include specific measures in relation to speed restrictions (max 20km/hr on site), site inductions, and signage.	Site Supervisor	At all times
Mortality from dogs and dingoes	Adhere to management measures stipulated in Table 14 to minimise the introduction and spread of feral predators. Management measures include the appropriate management of site waste.	Site Supervisor	At all times during
Increased risk of fire	The Bushfire Management Plan (Terra Solutions 2022) will be implemented to ensure that the risk of bushfire is minimised, and fuel loads are managed to reduce the rate of spread and intensity of bushfires. Bushfire Asset Protection Zones (APZ) will be maintained within the Development Footprint and will not impact on surrounding vegetation.	Site Supervisor	At all times
Fragmentation or loss of habitat	Areas to be cleared within the Development Footprint are to be delineated to avoid any unnecessary clearing.	Site Supervisor	At all times
	All vegetation outside the Development Footprint will be retained.	Site Supervisor	At all times
	All associated infrastructure (i.e. cabling, tracks etc) will be microsited to prevent the disturbance of important habitats.	Site Supervisor	At all times
	Riparian habitat corridors will be maintained throughout the development area and any site fencing will be conducive to the safe movement of fauna.	Site Supervisor	At all times
Disturbance and mortality during construction	All clearing will require a licensed and qualified spotter-catcher to be present to ensure squatter pigeon are not utilising areas of cleared vegetation. Breeding season is to be avoided.	Site Supervisor	At all times
	If any threatened species are identified within an area to be cleared, no clearing activities will be undertaken prior to an assessment by an Environmental Consultant.	Site Supervisor	At all times
Routine Monitoring			

Squatter pigeon		
Fencing is to be inspected regularly to ensure that it remains properly installed.	Site Supervisor / HSEO	Regular monitoring and as required
Monitor vegetation clearing and ensure management strategies are adhered to.	Site Supervisor / HSEO	Regular monitoring and as required
Corrective Action		
If success criteria are not met, corrective actions may include: ▪ Reviewing the effectiveness of the CEMP and proposed mitigation measures for squatter pigeon; and ▪ Use non-conformance record and register to document incidents involving squatter pigeon.		
Reporting		
Record site observations, actions and notifications in diary.	Site Supervisor / HSEO	As required
Any incidents of non-compliance to be recorded in an environmental diary	Site Supervisor / HSEO	As required

Table 18 Management Actions for *Solanum johnsonianum* and *Solanum dissectum*

Solanum johnsonianum* and *Solanum dissectum			
Aim			
Avoid impacts to known Solanum populations and associated habitats which is mapped in the south of the site within remnant riparian areas.			
Success Criteria			
▪ No clearing occurs in mapped habitat for *Solanum* spp. ▪ Protect the integrity of native flora values by minimising weed dispersal throughout the Project area. ▪ Reduce the risk of bushfire which may impact the integrity of the Brigalow community.			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Increased weed incursion	Adhere to management measures stipulated in Table 14, to minimise the introduction and spread of weeds.	Site Supervisor	At all times
Sediment and erosion	Adhere to management measures stipulated in Table 10 to minimise the risk of erosion and sedimentation. Management measures include the implementation of an Erosion and Sediment Control Plan (ESCP) to manage the site during the construction stages.	Site Supervisor	At all times
Increased risk of fire	The Bushfire Management Plan (Terra Solutions 2022) will be implemented to ensure that the risk of bushfire is minimised and fuel loads are managed to reduce the rate of spread and intensity of bushfires. Bushfire Asset Protection Zones will be maintained within the Development Footprint and will not impact on surrounding vegetation.	Site Supervisor	At all times
Loss of community	All TEC Brigalow is to be retained outside the proposed impact area. Site is to be clearly delineated prior to any clearing.	Site Supervisor	Pre-construction
Routine Monitoring			
Fencing is to be inspected regularly to ensure that it remains properly installed.		Site Supervisor / HSEO	Regular monitoring and as required
Monitor vegetation clearing and ensure management strategies are adhered to.		Site Supervisor / HSEO	Regular monitoring and as required
Corrective Action			
If success criteria are not met, corrective actions may include: ▪ Reviewing the effectiveness of the CEMP and proposed mitigation measures for *Solanum* spp. ▪ Use non-conformance record and register to document incidents involving the *Solanum* spp.			
Reporting			
Record site observations, actions and notifications in diary.		Site Supervisor / HSEO	As required

Solanum johnsonianum and *Solanum dissectum*		
Any incidents of non-compliance to be recorded in an environmental diary	Site Supervisor / HSEO	As required

Table 19 Brigalow TEC Management Actions

TEC Brigalow			
Aim			
Avoid impacts to TEC Brigalow which is mapped to the south of the impact area.			
Success Criteria			
▪ No clearing occurs in TEC Brigalow areas which are mapped within adjacent areas ▪ Protect the integrity of native flora values by minimising weed dispersal throughout the Project area; and ▪ Reduce the risk of bushfire which may impact the integrity of the Brigalow community.			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Increased weed incursion	Adhere to management measures stipulated in Table 14, to minimise the introduction and spread of weeds.	Site Supervisor	At all times
Sediment and erosion	Adhere to management measures stipulated in Table 10, to minimise the risk of erosion and sedimentation. Management measures include the implementation of an Erosion and Sediment Control Plan (ESCP) to manage the site during construction.	Site Supervisor	At all times
Increased risk of fire	The Bushfire Management Plan (Terra Solutions 2022) will be implemented to ensure that the risk of bushfire is minimised, and fuel loads are managed to reduce the rate of spread and intensity of bushfires. Bushfire Asset Protection Zones will be maintained within the Development Footprint and will not impact on surrounding vegetation.	Site Supervisor	At all times
Loss of community	All TEC Brigalow is to be retained outside the proposed impact area. Site is to be clearly delineated prior to any clearing.	Site Supervisor	Pre-construction
Routine Monitoring			
Fencing is to be inspected regularly to ensure that it remains properly installed.		Site Supervisor / HSEO	Regular monitoring and as required
Monitor vegetation clearing and ensure management strategies are adhered to.		Site Supervisor / HSEO	Regular monitoring and as required
Corrective Action			
If success criteria are not met, corrective actions may include: ▪ Reviewing the effectiveness of the CEMP and proposed mitigation measures for TEC Brigalow. ▪ Use non-conformance record and register to document incidents involving the TEC Brigalow.			
Reporting			
Record site observations, actions and notifications in diary.		Site Supervisor / HSEO	As required
Any incidents of non-compliance to be recorded in an environmental diary		Site Supervisor / HSEO	As required

6.11 Cultural Heritage

The cultural heritage management actions are outline in Table 20 will be implemented during construction of the SPS.

Table 20 Cultural Heritage Management Actions

Cultural Heritage			
Aim			
Prevent loss of, or damage to items of indigenous and non-indigenous cultural heritage due to construction of the SPS.			
Success Criteria			
▪ No loss of or damage to indigenous and indigenous cultural heritage.			
Issue	**Management Actions**	**Responsibility**	**Frequency / Timing**
Cultural Heritage	Cultural Heritage Management Plan (CHMP) to be developed in consultation with the Gaangalu Nation People (this may be provided by the Principal)	Principal / Site Supervisor	Prior to construction
	All staff to be inducted into the requirements of the CHMP, CEMP and the requirements of the ACH Act and the Duty of Care.	Site Supervisor	At all times
	Do not form new tracks, alter existing tracks, remove vegetation, cut fences or perform any activities not specified or indicated under the construction drawings or otherwise required under the contract without prior approval by the Principal's Representative.	Site Supervisor	At all times
	If cultural heritage material is unearthed during earthworks the below steps must be followed: ▪ Stop Work Immediately at the location of the cultural finds. ▪ Avoid disturbance of the area and adjacent area. ▪ Protect the finds by erecting a temporary barrier. ▪ Advise the Principal's Representation	All staff	At all times
Routine Monitoring			
Monitor excavations and ground clearing for potential signs of cultural heritage.		Site Supervisor	Weekly
Corrective Action			
If success criteria are not met, examples of corrective actions may include: ▪ Reviewing the effectiveness of the CHMP, CEMP and proposed mitigation measures for cultural heritage ▪ All complaints relating to cultural heritage management issues will be investigated promptly and appropriate actions taken.			

Cultural Heritage		
Reporting		
Principal's Representative to report incidents to the Cultural Heritage Unit of the Department of Aboriginal and Torres Strait Islanders Partnership (DATSIP).	Site Supervisor / HSEO	As required
Any incidents of non-compliance to be recorded in an environmental diary	Site Supervisor / HSEO	As required

7 INCIDENT AND EMERGENCY MANAGEMENT

An incident, in the context of this CEMP, refers to any circumstances that causes or threatens to cause serious or material harm to the environment. This may include but is not limited to:

- Major spills of hydrocarbons or chemicals
- Fire which spreads beyond the confines of the site
- Water contamination leading to mass fish kill
- Dusty, odorous or noisy conditions
- Unauthorised land clearing
- Unauthorised waste disposal
- Explosion

7.1 Incident Management Response

7.1.1 Immediate response

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

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

7.1.2 Internal notifications

Any incident must be reported to the Site Supervisor, and HSEO manager (i.e. the responsible person) immediately following the incident. The project manager, senior project manager and project owner are also to be notified as soon as possible and no later than 1 hour following the incident. Site inductions will emphasise this obligation to all contractors and personnel working on-site.

The responsible person will investigate the incident to determine the next steps and undertake external notifications as appropriate. The following information will be documented by the responsible person:

- Nature, type, location and extent of the incident and the affected area
- Actual and/or potential environmental impacts of the incident (see below)
- Suspected cause of the incident
- Measures required to mitigate any further environmental harm
- Remedial measures required to correct any environmental harm
- Measures to be implemented to prevent a recurrence of the incident

The requirements for the environmental assessment of impacts of an incident shall be determined by an Environmental Consultant. The assessment may include environmental monitoring of contaminant releases in relation to land, water, noise, air and light (in addition to routine monitoring requirements). Based on the nature and type of the incident, the Environmental Consultant shall determine:

- Sampling and analytical requirements
- Applicable guidelines or levels to apply to data for assessing compliance and level of impact

Any monitoring shall be undertaken by a competent person and all monitoring equipment shall be appropriately maintained, calibrated and operated. Monitoring will be designed in consultation with DES, DCCEEW and/or Banana Regional Council where required.

7.2 Incident Management Reporting

All personnel are responsible for reporting all incidents to the HSEO. The HSEO will be responsible for reporting environmental incidents to the Site Supervisor and appropriate agencies. All incidents are to be recorded on the Incident Report Form provided in Appendix D. All persons attending the site are required to sign in at security and provided with the contact details for emergencies (Table 21).

The HSEO shall telephone the DES pollution hotline as soon as practical after becoming aware of any release of contaminants not in accordance with the DES Permits. Following this, a written notice detailing the following information must be provided to DES within 14 days of the initial notification:

- The name of the operator, including their approval / registration number
- The name and telephone number of a designated contact person
- Quantity and substance released
- Vehicle and registration details
- Person/s involved (driver and any others)
- The location and time of the release
- The suspected cause of the release
- A description of the effects of the release
- The results of any sampling performed in relation to the release
- Actions taken to mitigate any environmental harm caused by the release; and
- Proposed actions to prevent a recurrence of the release.

Table 21 outlines the necessary contact details of the relevant person/agency in the event of an incident or emergency.

Table 21 Incident/Emergency Contact Details

Issue	Person/Organisation	Contact Person	Contact Details	Comments
Project Management				
Incident/Emergency/Spills	Project Manager	To be appointed	To be appointed	-
	Project Engineer	To be appointed	To be appointed	-
	Site Environmental Representative	To be appointed	To be appointed	-
Contractors				
Incident/Emergency/Spills	Contractor	To be appointed	To be appointed	-
	Environmental Officer	To be appointed	To be appointed	-
	First Aid Officer	To be appointed	To be appointed	-
Emergency Services / Authorities				
Incident/Emergency/Spills	Site Supervisor	To be appointed	To be appointed	-
	HSEO	To be appointed	To be appointed	-
Incident/Spills to the Environment	Department of Environment and Science or Banana Regional Council	-	Pollution Hotline – **1300 130 372**	Outside of business hours the hotline is operated by non-DES staff. You will most likely be asked if it is an 'emergency incident'. This will be taken as does the incident pose a significant environmental issue – if you answer yes, the call will be forwarded to a DES incident response person for further clarification and consideration of the onsite response required. Please answer yes if you are unsure so that you can discuss the incident with the incident response officer.
Fire or Other Emergency	QLD Fire and Rescue	-	000 (112 from a mobile)	-
	QLD Ambulance	-	000 (112 from a mobile)	-
	QLD Police	-	000 (112 from a mobile)	-

7.3 Emergency Management

This section provides an overview of response requirements for emergencies that could potentially occur at the site. Table 21 outlines the necessary contact details of the relevant person/agency in the event of an emergency.

7.3.1 Spill Response

If a spill threatens the safety or health of people, creates a fire hazard or has the potential to cause or causes serious environmental harm then the site emergency procedure shall be followed.

7.3.1.1 Chemical Spills

Where a chemical spill occurs, consult the Safety Data Sheet (SDS) for spill procedures. If the SDS indicates a requirement for containment and clean up, then the following steps will also be considered:

a. Stop the source and spread of the spill if safe to do so:
   i. Check for danger
   ii. Contain the spill (turn off valves, block damaged tanks or pipes).
   iii. Use any suitable material or equipment to confine the spill by “damming it off” (e.g. use available spill response equipment such as booms or absorbent or if unavailable then use soil or other suitable material).

b. Clean up the spill:
   i. Once the spill has been contained, retrieve as much of the spilled liquid as possible and place in an appropriate container (e.g. 20 L drum or 1000 L pod) for disposal.
   ii. Absorb remaining spill with absorbent material and place used absorbent in the appropriate waste bin.
   iii. Where applicable, replenish equipment used from Spill Response Kit.

c. Report the spill:
   i. Investigate and report all spills in accordance with Incident Reporting and Analysis (Section 7.2).

7.3.1.2 Spill Kits

Spill kits and/or spill clean-up equipment will be available at the locations listed in Table 22.

Table 22 Spill Kit / Clean Up Equipment Location

Location	Responsible Person
Mobile Spill Response Kits to be carried on all service vehicles or any vehicle that carries more than 50 litres of substances.	Individual drivers
In workshop	Site Supervisor

Spill kits and/or spill clean-up equipment will be available on site for use in the event of a spill. Equipment contained in spill response kits shall be replenished upon use, equal to the specified list contained within the kit. The HSEO will ensure that Spill Response Kits are inspected regularly, and missing items replenished when necessary.

7.3.1.3 Treatment of Contaminated Soils

The preferred options for treatment of contaminated soils (hydrocarbon) are:

- On-site treatment of the soil so that the associated hazard is reduced to an acceptable level.
- Off-site treatment of excavated soil so that the contaminant is destroyed, or the associated hazard is reduced to an acceptable level.
- Should it not be possible to implement either of the above options, alternative options must be undertaken. Strategies can reduce the concentrations of contaminants to acceptable levels without necessarily excavating all affected soil and disposing of it off-site at a landfill.

Soil that is contaminated by hazardous substances including hydrocarbons shall be treated according to the following:

- For small volumes of contaminated soil (<1.0m3), soil must be collected and disposed of in a regulated waste bin (a soil disposal permit from DES shall be obtained prior to removal from the site).
- For large volumes of contaminated soil (>1.0m3), an Environmental Consultant shall be contacted to determine whether the contamination is best treated in-situ or excavated for appropriate disposal.
- Temporary storage or treatment of contaminated soils shall only occur in a specially designated location.
- Validation testing shall be conducted by the Environmental Consultant to ensure all contaminated soil has been satisfactorily treated or removed.

7.3.1.4 Treatment of Contaminated Water

Any water that may have been contaminated by a spill shall be contained and tested as directed by the Site Supervisor to determine if it is contaminated. If the water is found to be contaminated it shall be removed by a licensed regulated waste transporter. If the water is not contaminated it shall be released to grade on site.

7.3.2 Fire Management

7.3.2.1 Potential Fire Sources

Fire scenarios on the site are likely to arise from:

- Combustion
- Bushfire
- Refuelling incidents

7.3.2.2 Fire Risk Minimisation

To minimise these risks the following measure are to be adopted for the site:

- Always maintain clear access for the fire extinguishers and hydrants
- Use of fire suppression systems on all equipment

7.3.2.3 Fire Response

In the event of a small fire at the site, a portable fire extinguisher shall be used to attempt to extinguish the fire. Small fire extinguishers shall always be carried on plant and equipment. If the initial response to a fire is unsuccessful or if there are any doubts as to the capability of the onsite firefighting resources, the Queensland Fire and Rescue Service shall be contacted immediately.

8 ENVIRONMENTAL PERFORMANCE AND REPORTING

Environmental inspections, monitoring and auditing will be undertaken to assess the effectiveness of management requirements specified in this CEMP and overall compliance with regulatory requirements.

8.1 Compliance Auditing and Monitoring

8.1.1 Daily Visual Inspection

The Site Supervisor will carry out daily visual inspections of all applicable work areas, noting potential environmental risk and incidents. Inspections should confirm that management options are complying with those outlined in this CEMP. Daily visual inspections should be recorded and be available for review during weekly site checks and monthly internal audits.

8.1.2 Weekly Site Checklist

The Contractor's Site Supervisor or Environmental Officer will carry out weekly site checklists to ensure compliance with environmental obligations, task and actions outlined in this CEMP. A weekly site checklist is provided in Appendix E.

8.1.3 Monthly Internal Audit

The HSEO will conduct monthly internal audits. The audit will focus on:

- Review of all environmental incidents and corrective actions
- Review of daily visual inspection records
- Review of weekly site checklists
- Implementation of sub-management plans as outlined in section 6.

Monthly audit reports will be submitted to the Contractor's Site Supervisor and will include the date of the audit and the timeframe that the Contractor has to complete any required action.

Following each audit, the CEMP shall be reviewed and updated where necessary.

8.1.4 Environmental and Cultural Heritage Auditing

The Principal's Representative will conduct audits at quarterly intervals (as a minimum) during the project to confirm that the CEMP is effectively implemented. The audits should be timed to be undertaken alongside project milestones, such as, commencement of early works, commitment of any major works, prior to the commencement of wet season, mid-term (during construction), prior to the commencement of dry season and upon completion of the project.

Audits will be provided to the Contractor's Site Supervisor and include the date of the audit and the timeframe that the Contractor has to complete any required action. Corrective actions may be regulated between the Principal's Representative and the Site Supervisor.

8.2 Non-compliance and Corrective Action

The Site Supervisor shall assume responsibility for implementation of this CEMP. Where the Site Supervisor becomes aware of a condition that does not comply, a Corrective Action Report (CAR) form is to be completed and actioned. An example CAR form is provided in Appendix F of this CEMP. A CAR for any non-compliance is to be actioned within 24 hours of receiving confirmation of the non-compliance.

In some instances, further investigation or monitoring may be required to establish whether the CEMP has been adequately implemented, or whether the work is compliant with relevant legislation, guidelines and statutes. In these instances, an independent party, such as an Environmental Auditor, will carry out the investigation or monitoring.

The notification of any emergency or incident which results in the release of contaminants not in accordance with conditions of the relevant approval, must include, but will not be limited to the following information.

- The name of the holder of the approval
- The location of the emergency or incident.
- The number of the relevant approval.
- The name and telephone number of the designated contact person.
- The time of the release.
- The time the Site Supervisor became aware of the release.
- The suspected cause of the release.
- The environmental harm caused, threatened, or suspected to be caused by the release.
- Actions taken to prevent any further release and mitigate any environmental harm caused by the release.

8.3 Compliance Tracking

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

9 REFERENCES

Terra Solutions (2022). Smoky Creek Solar Power Station – Bushfire Management Plan. Report for Edify Energy Pty Ltd.

Appendix A

Development Approval

Council Chambers
62 Valentine Plains Road
Valentine Plains
Biloela Qld 4715

All Correspondence to
Chief Executive Officer
PO Box 412
Biloela Qld 4715

Phone 07 4992 9500
Fax 07 4992 3493
enquiries@banana.qld.gov.au
www.banana.qld.gov.au
ABN 85 946 116 646

Your Reference:
Our Reference: CW: RR: mw: 20-09 (FID85501, COM002-18/19, 14706-00000-000, 14704-00000-000, 14682-10000-000, 14299-50000-000, OM004568, ID1510147, ID1517148)
Contact: Rentia Robertson

15 September 2020

Edify Energy
C/- RPS
Attn: Mark Carter
PO Box 977
TOWNSVILLE QLD 4810

Dear Sir/Madam

Re: Power to Amend/Repeal Instrument or a Decision – Section 24AA Acts Interpretation Act 1954

Council advises that under Section 24AA of the Acts Interpretation Act 1954 it intends to amend Negotiated Decision Notice dated 17 December 2019 as Council has become aware that this Negotiated Decision Notice was sent with an error as Condition 62 incorrectly references Conditions 15 instead of Condition 14.

Please find enclosed the reissued Negotiated Decision Notice which is issued under Section 24AA of the Acts Interpretation Act 1954.

Should you require further assistance in relation to this matter, please do not hesitate to contact Council's Development Services section on (07) 4992 9500, quoting your application number of COM002-18/19.

Yours sincerely

Chris Welch
DIRECTOR COUNCIL SERVICES

Enc

Council Chambers
62 Valentine Plains Road
Valentine Plains
Biloela Qld 4715

All Correspondence to
Chief Executive Officer
PO Box 412
Biloela Qld 4715

Phone 07 4992 9500
Fax 07 4992 3493
enquiries@banana.qld.gov.au
www.banana.qld.gov.au
ABN 85 946 116 646

Your reference:
Our reference: CW:RR: mw: 19-12 (FID85501, COM002-18/19, 14706-00000-000, 14704-00000-000, 14682-10000-000, 14299-50000-000, OM004568, ID1510147, ID1517148)
Contact: enquiries@banana.qld.gov.au

17 December 2019

Edify Energy
C/- RPS
Attn: Mark Carter
PO Box 977
TOWNSVILLE QLD 4810

Dear Sir/Madam

(AMENDED 15 SEPTEMBER 2020) Negotiated Decision Notice about request to change development approval
(Given under section 76 of the Planning Act 2016)

Application Number:	COM002-18/19
Description:	COMBINED APPLICATION Material Change of Use for a Public Facility - Other (Solar PV Power Station (Solar Farm) and Associated Facility Switchyard and Electrical Transmission Line) Reconfiguring a Lot for Subdivision by Agreement (10 Lease Areas)
Level of Assessment:	*Impact Assessable*
Site Address:	480 Tomlins Road, Goovigen Lot 38 Tomlins Road, Dixalea Lot 18 Dodsons Road, Dixalea Lot 37 Hibbs Road, Goovigen 5460 Dodsons Road, Ulogie Lot 33 Dodsons Road, Ulogie
Lot & Plan Details:	Lot 39 on RN395 part of Lot 28 on RN211 part of Lot 18 on RN271 part of Lot 37 on RN1147 Lot 29 on RN210 Lot 32 on RN194 Lot 33on RN210

On 11 December 2019, at council's ordinary meeting (OM004568), your request for a Negotiated Decision, received by Council on 21 November was approved to the extent detailed in this Notice. This Negotiated Decision Notice replaces the Decision Notice previously issued and dated 29 October 2019.

The nature of the changes are listed below and clearly shown in the Negotiated Decision Notice and attachment 1 (as strikethrough bold text):-

- Condition 5 – Amended
- Condition 10 – Amended
- Condition 11 – Amended
- Condition 12 – Amended
- Condition 14 – Amended
- Condition 16 – Amended
- Condition 17 – Deleted
- Condition 18 – Amended
- Condition 21 – Amended
- Condition 44 – Amended
- Condition 57 – Amended
- Condition 65 – Amended
- Condition 74 – Amended

1. Details of the approval

The following approval is given:

	Planning Regulation 2017 reference	**Development Permit**	**Preliminary Approval**
Making a Material Change of Use assessable under the planning scheme	s20	☑	
Reconfiguring a Lot	S20	☑	

2. Approved Plans

The approved plans and documents for this development approval are listed in the following table:

Drawing/Report Title	**Prepared By**	**Date**
140339-1-01 Subdivision Proposal Plan (Revision E)	RPS	21/12/2018
140339-1-02 Project Proposal Plan (Revision F)	RPS	26/04/2019
180217A-A200 Plan (Revision O)	ATCO Structures & Logistics	20/04/2018
180217A-A300 Elevations (Revision O)	ATCO Structures & Logistics	09/04/2018
QC02-ST-TGD-DET-0001 (Revision A) Elevation	RCR Infrastructure	16/11/2017
NILSEN 60086 (Sheet 4.1) Floor Plan	ROLCON Pty Ltd	undated
NILSEN 60086 (Sheet 5.1) Elevations	ROLCON Pty Ltd	undated
NILSEN 60086 (Sheet 5.2) Elevations	ROLCON Pty Ltd	undated

Engineering Report (Revision A)	Northern Consulting Engineers	07/09/2018
Ecological Assessment Report	RPS (Version 3)	16/08/2019
Traffic Assessment Report (Revision B)	Northern Consulting Engineers	11/01/2019
Land Condition Assessment (J000283)	Range Environmental Consultants	27/09/2019

3. Further Development Permits

Please be advised that the following development permits are required to be obtained before the development can be carried out:

- Operational Works
- Building Works
- Plumbing & Drainage

4. Conflict with relevant instrument and reasons for the decision despite the conflict.

The assessment manager does not consider that the assessment manager's decision conflicts with a relevant instrument.

5. Submissions

There were properly made submissions about the application.

The name and address of the principal submitter for each properly made submission are as follows:

Name of Principal Submitter/s	Address
Dennis Earth Moving	Lot 2 Burnett Highway, Jambin
Tony & Bridget Bongers	PO Box 6, Jambin QLD 4702
Errol Dennis	erroldennis@outlook.com
Noel Jones	790 Mt Eugene Road, Jambin QLD 4702
Sue Wilkie	jambinhotelmotel@bigpond.com
Geoff Maynard	Mt Eugene, Jambin QLD 4702
Lachlan & Kristy Dickson	"Burravale", 550 Dodson Road, Ulogie
Cedric Creed	beefy@beagle.com.au
Greenfields Charbrays	PO Box 23, Jambin QLD 4702
Sanderson & Parks Solicitors	PO Box 1, Biloela QLD 4715
Les Marshall	lamarshall81@bigpond.com.au

6. Referral Agencies

The referral agency for this application was:

Name of referral agency	Advice agency or concurrence agency	Referral Basis	Address
The Chief Executive Officer of the entity	Advice		Powerlink PO Box 1193 VIRGINIA QLD 4014

7. Currency Period for the Approval

This development approval will lapse at the end of the period set out in section 85 of the *Planning Act 2016*.

8. Statement of Reasons

Description of the development	Combined application for Material Change of Use - Public Facility - Other (Solar PV Power Station (Solar Farm) and Associated Switchyard and Electrical Transmission Line) and Reconfiguring a Lot for Subdivision by Agreement(10 Lease Areas)
Assessment Benchmarks	Rural Zone Code Natural Features and Conservation Areas Overlay Code Economic Resources Overlay Code Major Utilities Overlay Code Natural Disaster Overlay Code Development Standards Code Reconfiguring a Lot Code
Reasons for Decision	Rural Zone Code - The development complies or has been conditioned to comply with all applicable Outcomes. Natural Features and Conservation Areas Overlay Code - The development complies or has been conditioned to comply with all applicable Outcomes. Economic Resources Overlay Code - The development complies or has been conditioned to comply with all applicable Outcomes. Major Utilities Overlay Code - The development complies or has been conditioned to comply with all applicable Outcomes. Natural Disaster Overlay Code - The development complies or has been conditioned to comply with all applicable Outcomes.

	Development Standards Code - The development complies or has been conditioned to comply with all applicable Outcomes.

9. Appeal rights

The rights of an applicant to appeal to a tribunal or the Planning and Environment Court against a decision about a development application are set out in chapter 6, part 1 of the Planning Act 2016. For particular applications, there may also be a right to make an application for a declaration by a tribunal (see chapter 6, part 2 of the Planning Act 2016).

Appeal by an applicant

An applicant for a development application may appeal to the Planning and Environment Court against the following:

- the refusal of all or part of the development application
- a provision of the development approval
- the decision to give a preliminary approval when a development permit was applied for
- a deemed refusal of the development application.

An applicant may also have a right to appeal to the Development tribunal. For more information, see schedule 1 of the Planning Act 2016.

Appeal by a submitter

A submitter for a development application may appeal to the Planning and Environment Court against:

- any part of the development application for the development approval that required impact assessment
- a variation request.

The timeframes for starting an appeal in the Planning and Environment Court are set out in section 229 of the Planning Act 2016.

Attachment 2 is an extract from the Planning Act 2016 that sets down the applicant's appeal rights and the appeal rights of a submitter.

The Planning and Environment Court appeals database lists all the appeals lodged in the Planning and Environment Court since 15 March 2008, which the department has been notified of. It contains information about the appeal, including the appeal number, site address, local government area, and a copy of the appeal notice, including grounds for the appeal. The appeal database is an easy way for anyone to obtain information about an appeal or check if an appeal has been lodged for a specific development application or approval.

The appeal database is available at https://planning.dsdmip.qld.gov.au/planning/our-planning-system/dispute-resolution.

Should you require further assistance in relation to this matter, please do not hesitate to contact Council's Development Services section on (07) 4992 9500, quoting you application number of COM002-18/19.

Yours sincerely

Chris Welch
DIRECTOR COUNCIL SERVICES

Enc Attachment 1 Copy of Original Decision Notice showing changes

Attachment 1

Copy of Original Decision Notice
Showing the Changes

Council Chambers
62 Valentine Plains Road
Valentine Plains
Biloela Qld 4715

All Correspondence to
Chief Executive Officer
PO Box 412
Biloela Qld 4715

Phone 07 4992 9500
Fax 07 4992 3493
enquiries@banana.qld.gov.au
www.banana.qld.gov.au
ABN 85 946 116 646

Your Reference:
Our Reference: CW: RR: ak: 19-10 (FID85501, COM002-18/19, 14704-00000-000, ID1451981)
Contact: Chris Welch

29 October 2019

Edify Energy C/- RPS
Mark Carter
PO Box 977
TOWNSVILLE QLD 4810

Dear Sir/Madam

(AMENDED 11 DECEMBER 2019) Decision Notice – Approval
(Given under section 63 of the Planning Act 2016)

Application Number: *COM002-18/19*

Description: *COMBINED APPLICATION*
Material Change of Use for a Public Facility - Other (Solar PV Power Station (Solar Farm) and Associated Facility Switchyard and Electrical Transmission Line)
Reconfiguring a Lot for Subdivision by Agreement (10 Lease Areas)

Level of Assessment: *Impact Assessable*

Site Address: *480 Tomlins Road, Goovigen, Lot 38 Tomlins Road, Dixalea, Lot 18 Dodsons Road, Dixalea, Lot 37 Hibbs Road, Goovigen, 5460 Dodsons Road, Ulogie, Lot 33 Dodsons Road, Ulogie*

Lot & Plan Details: *Lot 39 on RN395, part of Lot 28 on RN211, part of Lot 18 on RN271, part of Lot 37 on RN1147, Lot 29 on RN210, Lot 32 on RN194, Lot 33on RN210*

On 23 October 2019, at Council's Ordinary Meeting (OM004518), the above development application was approved in full subject to conditions. The conditions of this approval are set out in Attachment 1. These conditions are clearly identified to indicate whether the assessment manager or a concurrence agency imposed them.

1. Details of Approval

The following approvals are given:

	Planning Regulation 2017 reference	Development Permit	Preliminary Approval
Making a Material Change of Use assessable under the planning scheme	s20	☑	
Reconfiguring a Lot	s20	☑	

2. Approved Plans

The approved plans and documents for this development approval are listed in the following table:

Drawing/Report Title	Prepared By	Date
140339-1-01 Subdivision Proposal Plan (Revision E)	RPS	21/12/2018
140339-1-02 Project Proposal Plan (Revision F)	RPS	26/04/2019
180217A-A200 Plan (Revision O)	ATCO Structures & Logistics	20/04/2018
180217A-A300 Elevations (Revision O)	ATCO Structures & Logistics	09/04/2018
QC02-ST-TGD-DET-0001 (Revision A) Elevation	RCR Infrastructure	16/11/2017
NILSEN 60086 (Sheet 4.1) Floor Plan	ROLCON Pty Ltd	undated
NILSEN 60086 (Sheet 5.1) Elevations	ROLCON Pty Ltd	undated
NILSEN 60086 (Sheet 5.2) Elevations	ROLCON Pty Ltd	undated
Engineering Report (Revision A)	Northern Consulting Engineers	07/09/2018
Ecological Assessment Report	RPS (Version 3)	16/08/2019
Traffic Assessment Report (Revision B)	Northern Consulting Engineers	11/01/2019
Land Condition Assessment (J000283)	Range Environmental Consultants	27/09/2019

3. Further Development Permits

Please be advised that the following development permits are required to be obtained before the development can be carried out:

- Operational Works
- Building Works
- Plumbing & Drainage
-

4. Conflict with relevant instrument and reasons for the decision despite the conflict.

The assessment manager does not consider that the assessment manager's decision conflicts with a relevant instrument.

5. Submissions

There were properly made submissions about the application.

The name and address of the principal submitter for each properly made submission are as follows:

Name of Principal Submitter/s	Address
Dennis Earth Moving	Lot 2 Burnett Highway, Jambin
Tony & Bridget Bongers	PO Box 6, Jambin QLD 4702
Errol Dennis	erroldennis@outlook.com
Noel Jones	790 Mt Eugene Road, Jambin QLD 4702
Sue Wilkie	jambinhotelmotel@bigpond.com
Geoff Maynard	Mt Eugene, Jambin QLD 4702
Lachlan & Kristy Dickson	"Burravale", 550 Dodson Road, Ulogie
Cedric Creed	beefy@beagle.com.au
Greenfields Charbrays	PO Box 23, Jambin QLD 4702
Sanderson & Parks Solicitors	PO Box 1, Biloela QLD 4715
Les Marshall	lamarshall81@bigpond.com.au

6. Referral Agencies

The referral agency for this application was:

Name of referral agency	Advice agency or concurrence agency	Referral Basis	Address
The Chief Executive Officer of the entity	Advice		Powerlink PO Box 1193 VIRGINIA QLD 4014

7. Currency Period for the Approval

This development approval will lapse at the end of the period set out in section 85 of the *Planning Act 2016.*

8. Statement of Reasons

Description of the development	Combined application for Material Change of Use - Public Facility - Other (Solar PV Power Station (Solar Farm) and Associated Switchyard and Electrical Transmission Line) and Reconfiguring a Lot for Subdivision by Agreement(10 Lease Areas)
Assessment Benchmarks	Rural Zone Code Natural Features and Conservation Areas Overlay Code Economic Resources Overlay Code Major Utilities Overlay Code Natural Disaster Overlay Code Development Standards Code Reconfiguring a Lot Code
Reasons for Decision	Rural Zone Code - The development complies or has been conditioned to comply with all applicable Outcomes. Natural Features and Conservation Areas Overlay Code - The development complies or has been conditioned to comply with all applicable Outcomes. Economic Resources Overlay Code - The development complies or has been conditioned to comply with all applicable Outcomes. Major Utilities Overlay Code - The development complies or has been conditioned to comply with all applicable Outcomes. Natural Disaster Overlay Code - The development complies or has been conditioned to comply with all applicable Outcomes. Development Standards Code - The development complies or has been conditioned to comply with all applicable Outcomes.

9. Appeal rights

The rights of an applicant to appeal to a tribunal or the Planning and Environment Court against a decision about a development application are set out in chapter 6, part 1 of the Planning Act 2016. For particular applications, there may also be a right to make an application for a declaration by a tribunal (see chapter 6, part 2 of the Planning Act 2016).

Appeal by an applicant

An applicant for a development application may appeal to the Planning and Environment Court against the following:

- the refusal of all or part of the development application
- a provision of the development approval
- the decision to give a preliminary approval when a development permit was applied for
- a deemed refusal of the development application.

An applicant may also have a right to appeal to the Development tribunal. For more information, see schedule 1 of the Planning Act 2016.

Appeal by a submitter

A submitter for a development application may appeal to the Planning and Environment Court against:

- any part of the development application for the development approval that required impact assessment
- a variation request.

The timeframes for starting an appeal in the Planning and Environment Court are set out in section 229 of the Planning Act 2016.

Attachment 2 is an extract from the Planning Act 2016 that sets down the applicant's appeal rights and the appeal rights of a submitter.

The Planning and Environment Court appeals database lists all the appeals lodged in the Planning and Environment Court since 15 March 2008, which the department has been notified of. It contains information about the appeal, including the appeal number, site address, local government area, and a copy of the appeal notice, including grounds for the appeal. The appeal database is an easy way for anyone to obtain information about an appeal or check if an appeal has been lodged for a specific development application or approval.

The appeal database is available at https://planning.dsdmip.qld.gov.au/planning/our-planning-system/dispute-resolution.

Should you require further assistance in relation to this matter, please do not hesitate to contact Council's Development Services section on (07) 4992 9500, quoting you application number of COM002-18/19.

Yours Sincerely

Chris Welch
MANAGER ENVIRONMENT & PLANNING

CC Powerlink

Enc Attachment 1 – Part A Conditions imposed by the Assessment Manager
Attachment 1 – Part B Assessment Manager Notes
Attachment 1 – Part C Conditions imposed by Powerlink
Attachment 2 – Appeal Rights
Attachment 3 – Approved Drawings
Attachment 4 – Environmental Obligations

COM002-18/19 Attachment 1

Part A - Conditions imposed by the Assessment Manager

Section 1 – Development Permit – Reconfiguring a Lot (Subdivision by Agreement – 10 lease areas)

General

1. The development is to be completed and maintained generally in accordance with the approved plans and documents, as attached to this Decision Notice, except where modified by the conditions below:

Plan/Document number	Plan/Document name	Date
140339-1-01 (Revision E)	Subdivision Proposal Plan	21/12/2018

2. The leasehold period must not exceed a period of 43 years, and may be extended to provide tenure over the site for the conclusion of operations approved under Section 2 of this approval, decommissioning and rehabilitation works for a further period consistent with the approved Site Rehabilitation Plan.

3. A copy of the registered leases is to be provided to Council upon registration of the leases.

Note: If the applicant does not provide a copy of the leases on registration, the commencement date of the term of the leases will be taken from the date the development approval became effective.

4. Complete all associated works, including any relocation or installation of services, at no cost to Council.

Section 2 – Development Permit – Material Change of Use (Public Facility – Other (Solar PV Power Station (Solar Farm) and Associated Facility Switchyard and Electrical Transmission Line))

General

1. The development is to be completed and carried out generally in accordance with the following approved plans and reports, except where modified by the conditions of this Development Approval:

Plan/Document number	Plan/Document name	Date
140339-1-02 (Revision F)	Project Proposal Plan	26/04/2019
180217A-A200 (Revision 0)	Plan	10/04/2018
180217A-A300 (Revision 0)	Elevations	10/04/2018
QC02-ST-TGD-DET-0001 (Revision A)	Elevation	16.11.17
NILSEN 60086 Sheet 4.1	Ground Floor Plan	Undated
NILSEN 60086 Sheet 5.1	Elevations	Undated
NILSEN 60086 Sheet 5.2	Elevations	Undated
Engineering Report prepared by Northern Consulting (Revision A)		07/09/2018
Ecological Assessment prepared by RPS (Version 3)		16/08/2018
Traffic Assessment Report prepared by Northern Consulting (Issue B)		11/01/2019
Land Condition Assessment prepared by Range Environmental Consultants		27/09/2019

2. Comply with all of the conditions of this Development Approval prior to the commencement of the use, unless otherwise stated within this Decision Notice, and maintain compliance for the duration of the approved use.

3. Exercise the approval and complete all associated works, including any relocation or installation of services, at no cost to Council.

4. Alterations to public utilities, mains and services made necessary in connection with any of the works arising from this approval including works to restore and reinstate all roads are to be completed at no cost to Council.

Amended Plans

5. **(Amended 11 December 2019)** Submit an amended Project Proposal Plan that excludes solar array panels or other improvements from any areas identified as land degradation features in Figures 7, 8, 9 or 10 of the approved Land Condition Assessment including suitable buffers. **Council may accept solar arrays over areas which are rehabilitated prior to establishing the structures subject to satisfactory evidence being provided to Council of the rehabilitation.**

6. Final detailed layout plans of the solar farm facility are to be submitted to Council for approval prior to the commencement of the use. The plans at a minimum must show:
   a. all building and structure locations;
   b. substation locations;
   c. inverter locations;
   d. above and below ground cabling;
   e. internal access roads;
   f. boundary setbacks;
   g. solar panel system type;
   h. solar plant configuration; and
   i. fencing associated with the use;

Approved Use

7. The approved use of the premises is for Public Facility – Other (Solar PV Power Station (Solar Farm) and Associated Facility Switchyard and Electrical Transmission Line).

8. The approved use may operate for a maximum of 40 years from the date the facility, or part thereof, becomes operational.

Building and other works

9. The applicant shall obtain a development permit prior to commencement of any works defined as building work under the Building Act 1975.

10. **(Amended 11 December 2019)** The maximum height of any building must not exceed 10 meters above natural ground level. This does not include any support towers for the proposed transmission line **or switchyards**.

11. **(Amended 11 December 2019)** Proposed earthworks are limited to the establishment of building pads, hardstand areas, internal roads, vehicle parking areas, ~~and~~ minor re-profiling of land beneath the solar arrays **and trenching**. A development permit is required for all Operational Works.

12. **(Amended 11 December 2019)** ~~**All habitable buildings must be located a minimum of 40 metres from any electricity transmission line.**~~
All habitable buildings must be located a minimum of
    a) **20m for a transmission lines up to 132 kilovolts;**
    b) **30m for a transmission lines between 133 kilovolts and 275 kilovolts;**
    c) **40m for a transmission lines exceeding 275 kilovolts from any electricity transmission line.**

Setbacks

13. Project infrastructure is setback a minimum of 30 metres from site boundaries adjoining Lots 30 and 31 on RN210 and Lot 40 on RN396.

14. **(Amended 11 December 2019)** Screen landscaping in accordance with Condition 62 below is established to a mature height for a distance of 20 metres from the site boundaries adjoining Lots 30 and 31 on RN210 and Lot 40 on RN396 prior to installation of solar farm infrastructure on Lot 29 on RN210, Lot 32 on RN194 and Lot 39 on RN395 respectively where visible from a residence on an adjoining site **as determined by an approved landscape and visual assessment prepared in consultation with adjoining landholders**.

15. Project infrastructure is setback a minimum of 20 metres from all other site boundaries including Dodsons Road.

16. **(Amended 11 December 2019)** Project infrastructure is setback 50 metres from the top of the bank of ~~**waterways**~~ **watercourses** and 27 metres from the edge of vegetation mapped under the *Vegetation Management Act 1999*.

17. **(Deleted 11 December 2019)** ~~**Except where in conflict with the advice provided by Powerlink (as attached), a 20 metre vegetated buffer is provided adjacent to all easements for electricity transmission lines.**~~

18. **(Amended 11 December 2019)** All improvements are to be located outside any bushfire hazard area and associated impact buffers identified on the State's Development Assessment Mapping System **or where infrastructure is proposed in the bushfire hazard area, the applicant must prepare and submit to Council, a Bushfire Management Plan prepared by qualified professional to adequately mitigate against the risk from bushfire.**

Road work and access

19. Prior to the commencement of construction of the solar farm, the following roads are to be upgraded:

a. Tomlins Road – Upgraded to Rural Minor Collector as per CMDG-Geometric Design or as agreed to by Council. Records and site inspection indicate seal widths less than 5.0m with poorly formed shoulders.

b. Dodsons Road – Upgraded to Rural Minor Collector as per CMDG-Geometric Design or as agreed to by Council. Records and site inspection indicate a formation width (shoulders inclusive) of 5.0m (max) and inadequate clear zones.

20. Prior to the commencement of construction of the solar farm, the intersection of Tomlins and Dodsons Road is to be upgraded as per the recommendations included in the approved Traffic Assessment Report (Issue B) prepared by Northern Consulting or as agreed to by Council.

21. **(Amended 11 December 2019)** The ~~developer is to maintain the upgraded sections of Tomlins and Dodsons Roads for the life of the development to the appropriate standard in the CMDG.~~ **upgrades required by Condition 19 are to be designed for a 20 year design life to the maximum Design Equivalent Standard Axles (DESA's during peak construction) to the appropriate standard in the CMDG. The developer will be responsible for the maintenance of storm water, pavement and seal to the design life including rehabilitation of the road should pavement fatigue or rutting occur. A pavement and road assessment shall be performed on an annual basis and submitted to council confirming the condition of the road reflects the expected condition at that stage of the design life. Prior to the end of the maintenance period should the assessment reveal a substandard condition the applicant shall be responsible for rehabilitating the roads to the expected condition.**

22. A rural access is to be provided in accordance with an Operational Works approval constructed in accordance with the requirements of the CMDG (Standard Drawing CMDG-R-040).

Note: The dimensions listed on this standard drawing are considered the minimum required for compliance.

23. Design and construct all internal roads and parking areas to be all weather gravel standard with suitable permanent dust suppression methods provided.

24. All vehicles accessing the site must be able to enter and exit in a forward gear.

25. Provide sufficient parking and manoeuvring, loading/unloading space on-site for all vehicles; no vehicle storage or parking is permitted on the adjoining road reserve. Car parking facilities must be designed in accordance with the Australian Standard.

26. Where an existing driveway crossover is proposed to be replaced it is to be constructed in accordance with the CMDG and have a slope not exceeding 1 in 6.

27. Any damage to the existing road surface, services or furniture as a result of construction work is to be repaired to the pre-existing condition or better condition at no cost to Council.

28. Prior to undertaking any road upgrade works identified in the conditions of this development permit, provide a bank guarantee for an amount equivalent to 10% of the value of the road upgrade works.

Water and Sewerage Infrastructure

29. Prior to the commencement of construction, a detailed report for the on-site wastewater disposal, that addresses on-site treatment and disposal for each proposed use area, is to be submitted to Council. The report is to be prepared by a suitably qualified person in accordance with the relevant codes and Australian Standards. The report is to clearly demonstrate the suitability of the lot size and treatment facilities for sustainable treatment and disposal of wastewater generated by the proposed development.

30. The minimum standard of wastewater treatment to be considered is secondary treatment incorporating disinfection. Appropriate reserve disposal areas are to be provided and maintained on the site.

31. Prior to the commencement of use, an effluent disposal/storage system, appropriate for the proposed development, is to be installed. All relevant approvals for this system, in accordance with the requirements of the *Plumbing and Drainage Act,* are to be obtained before installation.

32. The proposed effluent disposal/storage system is to be maintained so that all effluent is wholly contained within the confines of the development site and does not pond or enter any gully, watercourse, stormwater system or adjoining properties.

33. Provide a sufficient supply of potable water for all staff and visitors associated with the approved use. The water must satisfy the Australian Drinking Water Guidelines or relevant standard applicable at the time.

34. At the time of lodging a building application, documentation is required to be submitted to Council that demonstrates that a reasonable water supply for emergency purposes (including adequate storage for a minimum 5,000 Litre capacity volume) is available for the development.

Stormwater Quality

35. The solar farm should not adversely interfere with the existing hydrological regime of adjoining properties or catchments

36. Stormwater Management is to be undertaken in accordance with the approved Engineering Report prepared by Northern Consulting.

37. All stormwater being discharged from the site is to meet the requirements of the CMDG and the Queensland Water Quality Guidelines 2009.

38. Stormwater runoff is to discharge to Council's stormwater drainage system or a legal point of discharge. A detailed Stormwater Management Plan, and associated engineering drawings, is to be provided to Council, as part of an Operational Works application, for approval. This plan must comply with the requirements of the CMDG and is to address all relevant recommendations made by the approved Land Condition Assessment prepared by Range Environmental Consultants.

39. All stormwater infrastructure must be designed and constructed, prior to the commencement of use, as per the requirements of the Stormwater Management Plan.

40. The stormwater drainage system serving the approved use must be designed so that the development will not make material changes to the pre-development location, duration, frequency or concentration of overland stormwater flow at the point of discharge to all downstream properties including road reserves. In the event that a material change to the pre-development stormwater flows cannot be avoided provide written evidence to Council's satisfaction of a legal right to discharge stormwater over the downstream land in the proposed method.

41. Ponding of stormwater resulting from the development must not occur on adjacent properties. Stormwater formerly flowing onto the site must not be diverted onto other properties.

42. Contaminated water must not be directly or indirectly released from the premises onto the ground or into the groundwater at the premises.

43. Releases to stormwater must not cause any visible oil slick or other visible evidence of oil or grease, nor contain visible grease, scum, litter or floating oil.

44. **(Amended 11 December 2019)** Grass cover is to be established across all areas of the development site, excluding internal roads, vehicle parking and hardstand areas **once construction is complete for the respective stage area** ~~prior to construction~~ and maintained for the duration of the use.

Erosion and Sediment Control

45. A detailed Erosion and Sediment Management Plan, and associated engineered drawings, is to be provided to Council as part of the operational works application and in accordance with the CMDG and is to address all relevant recommendations made by the approved Land Condition Assessment prepared by Range Environmental Consultants.

46. During construction the developer is to undertake sediment and erosion control management as per the approved Erosion and Sediment Management Plan.

Construction Phase Environmental Management Plan

47. The applicant must prepare a separate detailed Construction Phase Environmental Management Plan (CPEMP) for each stage of the development identifying environmental management measures to be implemented during all construction works associated with the solar farm facility. The CPEMP must address the following as a minimum:

    a. Erosion and Sediment Control
    b. Stormwater Management / Water Quality and Surface Water Runoff (interim drainage plan during construction);
    c. Water Management
    d. Air Quality Management (dust suppression)
    e. Noise and Vibration Management
    f. Management of light spill and on-site lighting
    g. Land Contamination (storage / use of fuel and chemicals)
    h. Biosecurity Management (animal and plant pests)
    i. Construction Waste Management
    j. Flora and Fauna Impact Management
    k. Storage and handling of fuel and other hazardous goods
    l. Emergency Management
    m. Environmental monitoring and reporting
    n. Management of works near existing above ground and underground infrastructure
    o. Hazard Management

p. Complaints handling and Management

q. Statutory obligations and approvals

48. The CPEMP must:

a. Be prepared and certified by a suitably qualified person

b. Clearly identify design and control measures to be adopted during the construction and post construction phase

c. Provide recommendations based on criteria and environmental data relevant to the site and surrounding area and construction works proposed

d. Be prepared in accordance to the relevant standards

e. Contain all recommendations of the approved Land Condition Assessment prepared by Range Environmental Consultants

49. The Applicant must prepare and submit the CPEMP to Council for approval within 40 working days of construction work commencing on each stage of the solar farm facility. The plan must be approved by Council before work commences.

50. The applicant must implement the recommendations of the Council approved CPEMP including any recommended works, installation of monitoring equipment and management measures at all times during construction of the Solar Farm Activity.

Operational Environmental Management Plan

51. The applicant must prepare a detailed Operational Environmental Management Plan (OEMP) identifying environmental management measures to be implemented during operation of each stage of the solar farm facility. The OEMP must address the following as a minimum:

a. Erosion and Sediment Control

b. Stormwater Management / Water Quality

c. Groundcover management

d. Water Management

e. Air Quality Management (dust suppression)

f. Noise and Vibration Management

g. Management of light spill and on-site lighting

h. Land Contamination (storage / use of fuel and chemicals)

i. Biosecurity Management (animal and plant pests)

j. Operational Waste Management

k. Flora and Fauna Impact Management

l. Storage and handling of fuel and other hazardous goods

m. Emergency Management

n. Environmental monitoring and reporting

o. Hazard Management

p. Complaints handling and Management

q. Statutory obligations and approvals

52. The OEMP must:

a. Be prepared and certified by a suitably qualified person

b. Clearly identify design and control measures to be adopted during the operational phase.

c. Provide recommendations based on criteria and environmental data relevant to the site and surrounding area and operational works proposed.

53. The Applicant must prepare and submit the OEMP to Council for approval within 40 working days of operations commencing on each stage of the solar farm facility. The plan must be approved by Council before work commences.

54. The applicant must implement the recommendations of the Council approved OEMP including any recommended works, installation of monitoring equipment and management measures at all times during operation of the Solar Farm Activity

Amenity

55. Ensure that all reasonable and feasible avoidance and mitigation measures are employed so that noise, dust, glare, vibration and other emissions generated by the construction and operation of the approved does not cause a nuisance at any sensitive land use.

56. The photovoltaic panels, any visible support structures, framing, cabling, or other equipment and infrastructure shall have a non-reflective or matte finish.

57. **(Amended 11 December 2019)** In the event that panels become 'out-of-sync' (i.e. not tracking the sun such that the panels are perpendicular to the sun), the affected panels are to be repaired as soon as reasonably practicable; or removed; or adjusted to remain in a fixed stowed position (so that potential for reflection is minimised for any sensitive receptors) until the repair is completed. **This does not apply to panels being fixed to provide protection from damage associated with an imminent storm activity forecast for the area.**

58. Night and outdoor lighting must be designed, constructed and operated in accordance with *Australian Standard AS4282 – Control of the obtrusive effects of outdoor lighting*.

59. Air-conditioning units (including individual compressor units), mechanical plant and equipment fitted to service the building must be shielded from view from public roads and adjoining properties. They must be concealed or screened with materials compatible and consistent with that elsewhere in the building.

60. The applicant must construct and operate the project in a manner that minimises dust generation from the site, including wind-blown and traffic-generated dust as far as practicable. The applicant must identity and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust are minimised during severe weather conditions.

61. Should Council receive a dust nuisance complaint (that is not frivolous or vexatious) directly related to the operation of the development, further actions must be taken to manage the impacts

Landscaping

62. **(Amended 15 September 2020)** Prior to the commencement of the installation of any infrastructure associated with the use, the applicant is to submit for approval to Council, a landscaping plan showing the vegetated buffers identified in Condition ~~15~~ **14**. The landscaping plan must include:

a. Identification of any existing vegetation to be retained as part of site landscaping;

b. A list of plantings, the species to be used, containing predominantly species that are endemic to Central Queensland;

c. The location of plantings, spaced to achieve a dense, visually-impermeable screen;

d. Sections through each area of landscaping showing the mature heights of the planted native vegetation

e. A watering and maintenance plan during the establishment phase;

f. An ongoing maintenance and replanting program.

63. The vegetation buffer must be sufficiently vegetated such that when fully mature, screens views into the approved development from adjoining sensitive uses.

64. The landscaping is to be maintained in a tidy manner by the developer (i.e. watering, fertilising, mulching, weeding, and the like) at all times to the satisfaction of the Assessment Manager.

65. **(Amended 11 December 2019)** Any **existing** significant trees to be retained are to be protected during construction.

Fencing and signage

66. The applicant must install safety / security fencing a minimum of 1.8 metres in height along all property boundaries to prevent unauthorised or accidental public entry. The fencing must not obscure sight lines at corners or intersections.

67. The applicant must install industry standard warning signage on all boundaries of the site, at regular intervals, warning of the safety hazards associated with the approved use.

68. Erect and maintain a single sign with a minimum area of six square metres adjacent to each access for the approved use. The sign must display as a minimum:

a. the name of the business operating on the premises;

b. the maximum onsite speed limit of 20km/h;

c. contact details for complaints and the site office.

69. All fencing must be completed prior to the commencement of use.

Waste

70. The applicant is required to prepare a Waste Management Plan for the proposed development. The plan should include, but is not limited to, the following

a. A description of the development activities that may generate waste

b. The types and amount of waste that might be generated by the activities

c. how the waste will be dealt with, including a description of the types and amounts of waste that will be dealt with under each waste management practices under the waste hierarchy

d. procedures for identifying and implementing opportunities to minimise the amount of waste generated, promote efficiency in the use of resources, and otherwise improve the waste management practices employed

e. procedures for dealing with accidents, spills and other incidents that may impact waste management

f. how often the waste management practices will be assessed

71. Recycling and waste must use appropriately licensed facilities.

72. Waste must not be burned at the premises.

Site rehabilitation

73. Commence rehabilitation of areas of existing land degradation identified in Figures 7, 8, 9, or 10 of the approved Land Condition Assessment as soon as practical after this approval takes effect. The areas are to be rehabilitated to a condition consistent with the soil classifications identified on Map 2 contained in Appendix A of the approved Land Condition Assessment.

74. **(Amended 11 December 2019)** Bank guarantees are to be provided to Council at the commencement of construction of each stage of development to be held against the cost of rehabilitating the site post-operation. The amount of the bank guarantee is to be agreed between the developer and Council, is to represent a reasonable estimation of costs. ~~**and is to be indexed annually**~~**. The value of the bond is to be reviewed annually.**

Factors influencing the review of the value of the bond will include, but not be limited to:

a) The extent of development of the site at any given time
b) Indexation of any previously agreed costs
c) Changes to technology or legislation that may increase or decrease the cost of rehabilitation.

The bank guarantee is to be returned to the applicant on successful rehabilitation of the site post –operation.

75. Twelve (12) months prior to the operations associated with the approved use ceasing on the premises the applicant must provide a Site Rehabilitation Plan (SRP) to Council detailing all planned works and actions proposed and required to be undertaken to rehabilitate the site as far as practical to the condition consistent with the soil classifications identified on Map 2 contained in Appendix A of the approved Land Condition Assessment. The SRP must contain all relevant recommendations from the approved Land Condition Assessment prepared by Range Environmental Consultants.

76. Within 6 months of ceasing electricity generation, the applicant must commence implementation of the Council approved SRP including any recommended works and remediation measures required to rehabilitate the site as far as practical to the condition the site was in prior to the approved use commencing on the premises.

77. Within 6 months of the site rehabilitation works being completed the applicant must submit a Site Conditions Report detailing the condition of the site following the recommended works stipulated in the SRP.

78. Decommissioning activities to be undertaken as part of the SRP must include, though not limited to, the following:

a. Disconnection of the Solar Installation from the switchyard

b. Disconnection of the PV modules and all the equipment
c. Removal of PV modules from trackers and packaged for removal from the site
d. Removal of all the buildings, equipment and materials recycled, wherever possible
e. Disassembling and recycling of trackers
f. Removal and recycling (where appropriate) of steel columns and cabling
g. Removal of fencing in accordance to the landowners wishes
h. Removal of gravel from internal tracks in accordance to the landowners wishes
i. No disposal of any waste material is permitted to municipal landfill facilities.

COM002-18/19 Attachment 1

Part B – Assessment Manager Notes

A. In carrying out the activity or works associated with the development, all reasonable and practical measures are to be taken to minimise releases and the likelihood of releases of contaminants to the environment, except as otherwise provided by the conditions of this development approval.

B. The approved development must also comply with Council's current Local Laws under the Local Government Act 2009.

C. The applicant and or owner/s of the land and the person/s responsible for the management of the premise is/are to ensure ongoing compliance with conditions of this Development Permit including Conditions relating to the ongoing use of the premise, and the design and layout of the development.

D. Pursuant to section 75 of the *Local Government Act 2009*, Council's written approval is required to carry out works on a road, or interfere with a road or its operation. This requirement applies to all Council-controlled roads within its local government area. The process for obtaining approval is set out in Council's *Local Law No. 1 (Administration) 2011*. Approval must be obtained prior to the commencement of the works.

E. Please note the statements dated 7 March 2019 from Powerlink as an advice agency and attached to this Decision Notice.

F. Please note the advice surrounding the applicants 'Environmental Obligations' contained in an attachment to the Decision Notice.

G. Where further development is proposed it is the applicant's / developer's responsibility to ensure further approvals are sought as required by the Banana Shire Planning Scheme.

Engineering

H. Prior to commencing any of the following construction activities the applicant/developer will be required to obtain a development permit for operational work:

i. Internal and external roadworks;
ii. earthworks;
iii. Internal pathways;
iv. stormwater drainage ;
v. erosion and sediment control;
vi. electricity and communication layout;
vii. internal and external lighting; and

viii. landscaping.

I. Operational works designs are to be in accordance with Capricorn Municipal Development Guidelines - CMDG Design Specifications and Standard Drawings (www.cmdg.com.au), unless otherwise stated in a condition of the Development Approval.

Cultural Heritage

J. This development approval does not authorise any activity that may harm Aboriginal cultural heritage. Under the Aboriginal Cultural Heritage Act 2003 you have a duty of care in relation to such heritage. Section 23(1) provides that, "A person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage".
Council does not warrant that the approved development avoids affecting Aboriginal cultural heritage. It may therefore be prudent for you to carry out searches, consultation, or a cultural heritage assessment to ascertain the presence or otherwise of Aboriginal cultural heritage. The Act and the associated duty of care guidelines explain your obligations in more detail and should be consulted before proceeding.

Declared Pests/Plants

K. A landowner has an obligation to take reasonable steps to keep their land free of invasive plants and animals in accordance with the Biosecurity Act 2014. Consideration should be given to appropriate treating of invasive plants, where necessary, in the construction and operational phases of the proposed development to meet the obligations under this Act.

L. Vehicle movement must be managed to prevent the spread of invasive plants. All vehicles used in weed infested areas must either be contained or cleaned to prevent the spread of invasive plant material. Numerous washdown facilities are available within the Shire to help remove weed seeds, soil and other foreign matter from vehicles and machines, and Council staff is available to conduct vehicle inspections.

Mosquito breeding

M. The site is required to be appropriately drained so that water is not allowed to accumulate or pond in a manner that may allow mosquito breeding, as required under the Public Health Regulation 2005.

Water & Sewerage

N. The applicant is responsible for ensuring Queensland Fire Services requirements are met with respect to this development which may include but

not be limited to the installation/upgrade of holding tanks or pumps as necessary to meet flow and pressure requirements.

O. Subsequent applications will be required for Operational Works, Building and Plumbing/Drainage Works. Building works are to comply with the *Building Act 1975*, the Building Code of Australia and other relevant authorities.

P. All new taps and plumbing fixtures on the site are to be installed and maintained with approved water saving devices in accordance with current legislative and Council requirements (AAA rating or better). The installation shall include but not be limited to approved water efficient shower heads, flow restrictors/aerators on internal taps, dual flush toilets, etc. In addition approved water efficient washing machines, dishwashers and other appliances shall be the only appliances installed on the site. Pre and post installation inspections shall be arranged with Council's Plumbing Inspector.

Q. Hydraulic Services plans will be required to be submitted to Council for Plumbing and Drainage approval. These plans must show all drinking, non-drinking, heated, rainwater, sanitary plumbing, sanitary drainage and trade waste services.

Amenity

R. Air and light emissions must be appropriately managed to prevent environmental nuisance beyond the boundaries of the property during all stages of the development including earthworks and construction.

S. Suitable dust suppression should be used, where required during excavation and building works, to reduce the emission of dust or other such emissions from the site.

T. Artificial illumination should not cause a nuisance to occupants of nearby premises and any passing traffic. Security and flood lighting is to be directed away from adjacent premises to minimise the protrusion of light outside the site.

Water & Stormwater

U. It is an offence under the *Environmental Protection Act 1994* to discharge sand, silt, mud, oils, chemicals, cement or concrete, paint, thinner, degreaser, rubbish and other such contaminants to a stormwater drain, roadside gutter or a water course.

V. During construction, stockpiles and areas of bare soil or earth that are likely to become eroded must be adequately protected – by upslope surface water diversion, downslope sediment fencing and/or temporary surface coverings.

W. Building and construction materials and waste, including bitumen, brick, cement, concrete and plaster, are prescribed water contaminants and as such must not be stored or disposed of in a water course, stormwater drain, roadside gutter or where they may be expected to wash into such places.

X. It is recommended that any oil, waste oil, paints and chemicals kept on site are stored within a bund or otherwise in a manner that will prevent spills onto land or into stormwater.

Y. Appropriate material must be kept on site for the containment and clean-up of spills, and any spills of oils, paints, chemicals etc must be contained and cleaned up as soon as possible.

Waste Management

Z. It is an offence under the *Waste Reduction and Recycling Act 2011* to leave litter behind or allow litter to blow from site. All waste must be appropriately contained on site prior to removal.

AA. Trap Gully Landfill is the only approved waste facility within the Banana Shire for the disposal of commercial waste. No commercial waste is to be deposited at other Banana Shire landfills or transfer stations without prior written approval from Council.

BB. It is an offence under the *Environmental Protection Regulation 2008* to fail to comply with signage or directions at a waste facility.

CC. Regulated waste (including asbestos) is only to be disposed of at Trap Gully Landfill and an application form must be completed and approved prior to disposal.

Appendix B

Environmental Site Induction / Training Register

Environmental Site Induction / Training Register					
Date	**Name**	**Company Name**	**Company Address**	**Signature**	**Training Provider Signature**

Appendix C

Non-conformance and Complaints Register

Non-conformance and Complaints Register					
Date	Issue / Complaint	Affected Neighbours	Activity Date	Follow-up/Complaints	
				Action	Date

Appendix D

Incident Report Form

Incident Report Form	
Date:	**Time:**
Incident reported by:	
Area where incident occurred:	
Details of Incident:	
Actions following incident: (date, method, personnel)	
Recommended for future actions (date, method, personnel)	
Relevant personnel informed (names and signatures)	
Site supervisor:	
Copy sent to DEHP: (date and initial)	

Appendix E

Weekly checklist

AUDIT CHECKLIST				
		COMPLIES	NEEDS IMPROVEMENT	DOES NOT COMPLY
PLANT AND EQUIPMENT				
1	No unnecessary use of horns or other audible signals on mobile plant or equipment.			
2	No unnecessary revving or idling of engines on mobile and stationary machines.			
3	Equipment is kept maintained.			
4	Equipment turned off when not in use.			
5	Review register of complaints.			
LAND AND SOIL MANAGEMENT				
6	Erosion and sediment control measures have been installed and maintained.			
7	Un-impacted drainage is diverted around impacted areas.			
8	Stockpiles or excavated material is stored in appropriate locations (e.g. level ground away from stormwater drainage)			
9	Trenches and other excavations have been backfilled to a level consistent with surrounding soils.			
10	All access tracks are cleared from riparian buffer zones except for waterway crossings.			
11	All construction activities are restricted to defined areas.			
WASTE				
12	All waste oils and fluids are stored appropriately.			
13	General wastes stored in bins (covered where appropriate).			
14	Regulated wastes only removed from site by a regulated waste contractor			
15	Review incident reports (product spills etc).			
16	Good housekeeping is being practiced.			
17	All loads leaving the site are covered.			
CHEMICAL STORAGE AND SPILL MANAGEMENT				
18	All hazardous material including hydrocarbons are securely stored in a designated storage area.			

AUDIT CHECKLIST				
		COMPLIES	NEEDS IMPROVEMENT	DOES NOT COMPLY
19	MSDS are available on site for all hazardous substances or dangerous goods stored on site.			
20	No evidence of spills, all spills cleaned up.			
21	Spill kits are provided and maintained on site and all operators are trained in their use.			
22	Review monitoring data, incident reports and complaints register.			
23	Concrete trucks are washed out in designated bunded areas.			
24	All maintenance activities for machinery are undertaken off site.			
FLORA AND FAUNA				
25	Vegetation clearance to be limited to areas designated for vegetation removal.			
26	Sequential clearing is being undertaken, with clearing works commencing from clear areas towards vegetated areas.			
27	Felled native trees (with exception of logs) are being recycled (milled, chipped or mulched) and reused as mulch for landscape works and/or erosion weed control			
28	Any felled non-native vegetation is disposed of at an appropriate waste disposal facility or mulched and reused provided that no seed bearing material is present.			
29	Stockpiling of trees only occurs within the construction footprint (ie. areas to be cleared). Stockpiling is not being undertaken within exclusion zones or adjacent vegetated areas.			
30	Where significant habitat trees have been identified, construction works have been undertaken to avoid the breeding season of the hollow-roosting species.			
31	A spotter-catcher is present during clearing activities.			
32	Vegetation and soil disturbance is minimised during construction.			
33	Prior to entering or leaving the site, all vehicles and equipment involved in clearing and weed removal works are cleaned down to remove soil and plant material to prevent spreading of soil borne disease and weed seeds or plant material.			

AUDIT CHECKLIST				
		COMPLIES	NEEDS IMPROVEMENT	DOES NOT COMPLY
DOCUMENTATION REVIEW				
34	Incident reporting and procedures - have all incidents have been documented on the “Incident Report Form” and correctly reported and investigated?			
35	Sight evidence of regulated wastes tracking paperwork and receipts.			
36	Review Site Supervisor has records of daily site observations, actions and notifications in diary.			
37	Sight evidence of staff training.			
38	Sight evidence that vehicle and equipment maintenance has been undertaken as per the manufactures instructions.			
OTHER				
39	Have any changes to daily operations have been made since last inspection – If Yes then are any updates to the CEMP required.			
40	Have any complaints been received? Does the complaints log need to be updated?			
41	Does DES need to be notified of any breaches of the licence?			
42	Does an audit report need to be completed following this audit?			
LIST ADDITIONAL ISSUES FOR INSPECTION FROM AUDIT AND/OR INCIDENT INVESTIGATIONS				
43				
44				
45				

Appendix F

Corrective Action Report

Corrective Action Report			
Report No:			
Date:			
Details of Non-conformance:			
Inspected by:			
Details of Recommended Corrective Action:			
Recommended completion date:			
Preventative/ Corrective Action to Prevent Issue Recurring			
Date action required by (if applicable):			
Signed (by Site Supervisor):		Date:	
Authority to Proceed			
Sign:		Date:	
Action Carried Out			
Sign:		Date:	
Element Re-inspected by			
Sign:		Date:	
Copy Issued to Site Supervisor			
Sign:		Date:	