

# **Environmental Management Plan**

## **King Rocks Wind Farm**

Version: Version A  
Version Date: 29<sup>th</sup> May 2025  
Document Number: HSEC-MPL-002

# Contents

|   |           |
|---|-----------|
| <b>Amendment Record .....</b>                                       | <b>4</b>  |
| <b>Approval &amp; Authorisation Record.....</b>                     | <b>4</b>  |
| <b>1. Introduction.....</b>   | <b>5</b>  |
| <b>2. Lucas TCS HSEC System .....</b>                               | <b>5</b>  |
| <b>3. Project Description.....</b>                                  | <b>6</b>  |
| 3.1 <i>Project Location .....</i>                                   | 6         |
| 3.1.1 <i>Climate.....</i>   | 6         |
| <b>4. Scope of Works .....</b>                                      | <b>7</b>  |
| <b>5. Environmental Policy.....</b>                                 | <b>9</b>  |
| <b>6. Purpose &amp; Structure.....</b>                              | <b>10</b> |
| <b>7. Environmental Commitment &amp; Leadership .....</b>           | <b>10</b> |
| 7.1 <i>Roles &amp; Responsibilities .....</i>                       | 10        |
| 7.1.1 <i>Project Manager / Site Manager.....</i>                    | 11        |
| 7.1.2 <i>Supervisor .....</i>                                       | 12        |
| 7.1.3 <i>Workers .....</i>  | 13        |
| 7.2 <i>Environmental Commitment .....</i>                           | 13        |
| 7.3 <i>Project Objectives and Targets .....</i>                     | 14        |
| <b>8. Implementation &amp; Project Start Up .....</b>               | <b>15</b> |
| 8.1 <i>Environmental Management Implementation .....</i>            | 15        |
| <b>9. Identification of Environmental Impacts.....</b>              | <b>16</b> |
| <b>10. Environmental Communication &amp; Training .....</b>         | <b>16</b> |
| <b>11. Environmental Management Legislation &amp; Records .....</b> | <b>18</b> |
| 11.1 <i>Relevant Legislation .....</i>                              | 18        |
| 11.2 <i>Legislative Updates .....</i>                               | 19        |
| 11.3 <i>Environmental Records Management.....</i>                   | 19        |
| <b>12. Compliance Monitoring &amp; Auditing .....</b>               | <b>20</b> |
| <b>13. Environmental Authorisations .....</b>                       | <b>21</b> |
| <b>14. Environmental Reporting .....</b>                            | <b>21</b> |
| <b>15. Complaint Handling .....</b>                                 | <b>21</b> |

# Contents

|  |           |
|--|-----------|
| <b>16. Environmental Incidents &amp; Emergencies .....</b>               | <b>22</b> |
| 16.1 <i>Bushfire Prevention</i> .....                                    | 23        |
| 16.1.1 Fire Service Interface .....                                      | 23        |
| 16.1.2 Hot Work Activities .....   | 23        |
| 16.1.3 Fire Training .....   | 23        |
| 16.1.4 Communication of Fire Danger Ratings .....                        | 23        |
| 16.1.5 Fire Safety Bans .....  | 24        |
| 16.1.6 Total Fire Ban Days .....   | 25        |
| 16.1.7 Vegetation Management .....                                       | 26        |
| 16.1.8 Fire Fighting Equipment .....                                     | 26        |
| <b>17. Corrective Actions .....</b>                                      | <b>27</b> |
| <b>18. Emergency Response Priorities .....</b>                           | <b>28</b> |
| 18.1 <i>Emergency Incident</i> .....                                     | 28        |
| 18.2 <i>Emergency Support Structure / Personnel</i> .....                | 29        |
| <b>19. Environmental Procedures &amp; Practices .....</b>                | <b>29</b> |
| 19.1 <i>Permit to Work System</i> .....                                  | 29        |
| 19.2 <i>Washing of Plant</i> .....                                       | 29        |
| 19.3 <i>Hazardous Substance Management</i> .....                         | 30        |
| 19.3.1 Refuelling of Plant & Equipment .....                             | 32        |
| 19.3.2 Mobile Refuelling .....   | 33        |
| 19.4 <i>Erosion &amp; Sediment Control / Stormwater Management</i> ..... | 33        |
| 19.4.1 Reporting .....   | 37        |
| 19.4.2 Erosion & Sediment Control Example 1 – Sediment Fence .....       | 38        |
| 19.4.3 Erosion & Sediment Control Example 2 – Catch Drains .....         | 39        |
| 19.4.4 Erosion & Sediment Control Example 3 – Earth Banks .....          | 40        |
| 19.4.5 Erosion & Sediment Control Example 4 – Rock Check Dam .....       | 41        |
| 19.4.6 Erosion & Sediment Control Example 5 – Stockpiles .....           | 42        |
| 19.5 <i>Noise Control and Vibration</i> .....                            | 43        |
| 19.6 <i>Air Quality &amp; Dust Pollution</i> .....                       | 44        |
| 19.7 <i>Waste Management</i> .....                                       | 46        |
| 19.8 <i>Cultural Heritage</i> .....                                      | 48        |
| 19.8.1 Native Title .....  | 49        |
| 19.8.2 Heritage Management Background .....                              | 49        |
| 19.9 <i>Flora Management</i> .....                                       | 50        |
| 19.9.1 Weed Management .....   | 53        |
| 19.10 <i>Fauna Management</i> .....                                      | 55        |
| <b>20. Notes .....</b>   | <b>58</b> |

## Amendment Record

| Revision | Description / Details                                  | Date                      |
|----------|--|---------------------------|
| 1        | Version created and approved by HSEC & Quality Manager | 29 <sup>th</sup> May 2025 |
|          |  |                           |
|          |  |                           |
|          |  |                           |
|          |  |                           |
|          |  |                           |

## Approval & Authorisation Record

By signing the below the Site Management Team confirm that that they have read, understood and shall implement the controls and systems identified within the Environmental Management Plan for the Project.

| Created By  | Signature   | Date |
|---|---|------|
|  |  |      |
| Project Director  | Signature   | Date |
|   |   |      |
| Project Manager   | Signature   | Date |
|   |   |      |
| HSEC Department   | Signature   | Date |
|   |   |      |
| Supervisor  | Signature   | Date |
|   |   |      |
| Supervisor  | Signature   | Date |
|   |   |      |

## 1. Introduction

This Environmental Management Plan has been developed to ensure full and complete compliance with Lucas TCS, statutory and regulatory environmental obligations with respect to the applicable requirements for the King Rocks Wind Farm Project

The purpose of the plan is to:

- Define the Environmental Management processes for the project including the identification of environmental accountabilities for all Lucas TCS personnel including information management, reporting and systems requirements.
- Meet these environmental management requirements and to exceed current industry best practice where possible
- Develop an implementation schedule tracking the deliverables and milestones to implement the Environmental Management Plan and ensure that the project is properly resourced.

Lucas TCS shall ensure that the King Rocks Wind Farm Environmental Management Plan meets all Legislative, Vestas and Synergy requirements and shall be specific to the works being undertaken. All workers shall be informed of the content of the Environmental Management Plan through Site Inductions, Site Orientations and Toolbox / Prestart Meeting HSEC Topics as well as each worker's right to access and inspect the Plan as they deem necessary.

The Project Environmental Management Plan shall be reviewed every 6 Months at minimum or sooner when the following occurs on the Project

- Major Change to the Scope of Works of the Project
- Major or Significant new environmental hazards identified on the Project
- Changes made to the Project Management Team
- Changes to Legislation
- After a significant injury or incident on the Project
- Upon the receipt of an updated Vestas Environmental Management Plan

## 2. Lucas TCS HSEC System

This Environmental Management Plan has been developed to assist in the fulfilment of Lucas TCS' commitment to the protection of the Environment. The Environmental; Management Plan shall be read in conjunction with the Client Environmental Management Plan. Both documents shall outline the processes and requirements for the management of workplace Environmental risks on the xx Project.

All stages of the project shall comply with the Lucas TCS Environmental Management Plan including design, planning, procurement, transport and mobilisation, construction and demobilisation during works. The document will be maintained and kept up to date for the term of the contract and shall be readily available to all persons involved in the projects works and Lucas TCS shall ensure that all personnel understand and comply with the Environmental Management Plan at all times.

Lucas TCS currently operates under an integrated management system which encompasses Health, Safety, Environmental, Community Development and Quality Management, and has been certified to ISO45001 for Safety Management Systems, ISO14001 for Environmental Management Systems and ISO9001 for Quality Management Systems. Lucas TCS has also achieved Accreditation under the Australian Government Building & Construction WHS Accreditation Scheme by the Office of the Federal Safety Commissioner.

### 3. Project Description

The King Rocks Wind Farm is located within the eastern wheatbelt region of Western Australia in the shire of Kondinin, 350km east of Perth. The wind farm is sited approximately 35km north-east of Hyden on land primarily used for agricultural farming purposes, including crop and grain production.

The Facility is being developed to supply renewable electricity into the South-West Interconnected System in Western Australia

Project details are as follows:

|                              |   |
|------------------------------|---|
| Principal (Client)           | Electricity Generation and Retail Corporation trading as Synergy  |
| Contractor                   | Vestas Australian Wind Technology Pty Ltd<br>Principal contractor, being the entity with legislative responsibility for the management of health and safety for construction work |
| Contract type                | Engineering, procurement and construction (EPC)   |
| Project name                 | King Rocks Wind Farm  |
| Notice to proceed (NTP) date | 23-Dec-2024   |
| Project reference            | SP-64279  |
| Project address              | King Rocks Road North, HYDEN WA 6359  |
| Turbines                     | 17 x V162 EnVentus 6.2MW @ 125m hub height  |



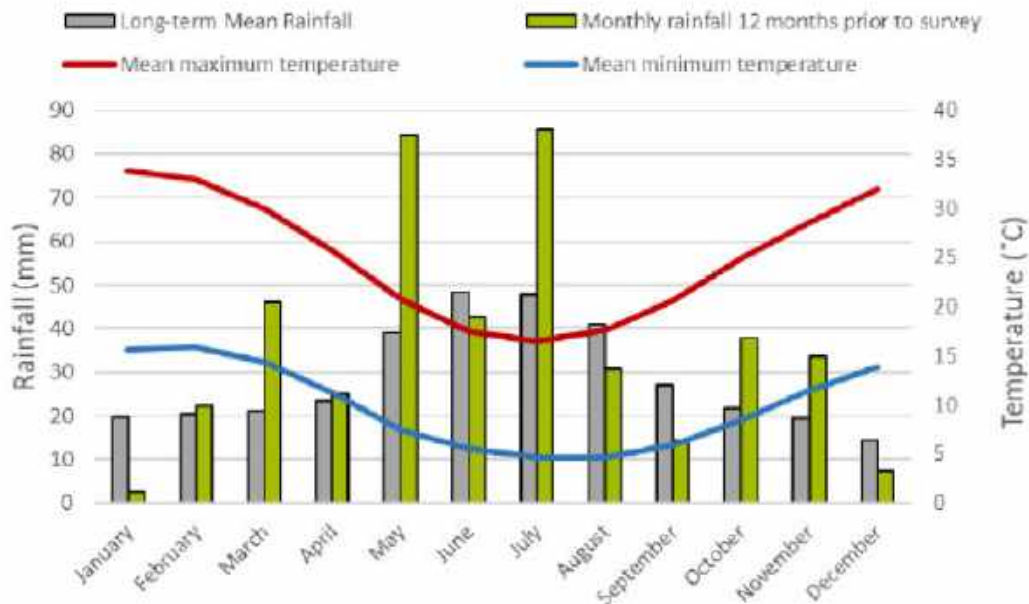
Located within the Wheatbelt and Intensive Land Use Zone, much of the site has been historically cleared for agricultural purposes. The site is sparsely populated, with two private landholders affected by the development and minimal sensitive land uses in the vicinity of the site.

#### 3.1 Project Location

##### 3.1.1 Climate

The closest long-term Bureau of Meteorology weather station with a complete dataset is Hyden Weather Station, located approximately 4 km east of Hyden and 33 km southwest of the Survey Area.

The long-term mean minimum temperature for Hyden Weather Station ranges from 4.7°C (July and August) to 15.9°C (February) (1928 to 2021) and the long-term mean maximum temperature ranges from 16.5°C (July) to 33.8°C (January)



The Hyden Weather Station recorded 431.8 mm of rainfall in the 12 months prior to the survey (November 2020 to October 2021), which is 89.2 mm above the long-term average of 342.6 mm (Bureau of Meteorology, 2021). In the three months prior to the survey (August 2021 to October 2021), 82.9 mm of rainfall was recorded, which is 6.7 mm below the long-term average of 89.6 mm for the same time period.

## 4. Scope of Works

The Scope of Works for the Project includes

- Intersection upgrades including pavement dilapidation survey, Intersection Upgrade Lovering Rd & King Rocks Rd N, Maintenance of the extent of roads specified under the pre-construction dilapidation survey
- Geotechnical investigation, factual report and interpretative report
- Design including drawings, technical specifications and design reports.
- Design and construction of the following benches
  - Site facilities bench
  - Vestas laydown bench
  - Concrete batching plant bench
  - O&M Facility bench
  - Wind farm substation bench
- Design and construction of:
  - Wind farm access tracks
  - Turbine hardstands including crane pad, tower laydown, blade laydown and auxiliary crane pads

- Turbine foundations
- All drainage, sediment and erosion controls
- Setup and managing of the site facilities for all Work Packages including for Vestas and the owner
- Vegetation clearing
- Reseeding and rehabilitation of exposed areas
- Dust suppression of on-site works up to Wind Farm Practical Completion (CoD)
- Sourcing of water for the scope of works.
- Sourcing of pavement materials.
- Supply and install of fencing and gates.
- Any required maintenance of the works from PC up to Wind Farm Practical Completion
- By others / exclusions:
  - Grouting and Sealing of the foundation/tower interface
  - All electrical works
  - All substation works
  - All meteorological mast works
  - HV substation works and HV Overhead Transmission Line

## 5. Environmental Policy

### HSEC POLICY

### ENVIRONMENTAL

Lucas TCS is committed to effective management of environmental issues by establishing and maintaining environmental standards consistent with information gained from developments in technology, industry codes of practice and all relevant statutory requirements.

The aim of this Policy is to provide realistic and achievable procedures for all personnel involved with Lucas TCS.

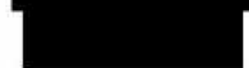
Lucas TCS is committed to:

- Complying with all applicable laws, regulations and standards, upholding the spirit of the law, and where laws do not adequately protect the environment, apply standards that minimize any adverse environmental impacts resulting from its operations and services.
- Ensuring the maintenance and implementation of an Environmental Management System to identify, control and monitor aspects and risks to the environmental arising from all operations and services, ensuring that activities are performed in a safe, planned, and efficient manner.
- Establishing and reviewing objectives and targets, and taking the necessary action to continually improve and report on environmental performance
- Applying waste minimisation principles and taking all practicable steps to prevent pollution and other adverse effects from our operations
- Ensuring the protection of native flora and fauna when undertaking all activities.
- Avoiding the pollution of land, water, and air by strict adherence to Government regulations and industry codes.
- Avoiding disturbance to known archaeological, historical, natural, or scientific significance including Aboriginal and non-Aboriginal heritage sites.
- Ensuring close liaison between the client, project and senior management, and the EPA to ensure all regulatory requirements are adhered to.
- Educating and training our workers and contractors to continually improve awareness, skills and knowledge of environmental issues and practices; and
- Establishing, maintaining, monitoring, auditing, and improving internal environmental management systems and programs including the monitoring and evaluation of the environmental performance of Subcontractors and Suppliers.

Managing Director



General Manager HSEC & Quality



AS/NZS ISO 14001  
Certified

AS/NZS ISO 9001  
Certified

AS/NZS ISO 45001  
Certified

HSEC-POL-003  
Version: 11  
Issue Date: November 2024  
Review Date: November 2027



## 6. Purpose & Structure

The purpose of this Environmental Management Plan is to ensure that the persons and contracting organisations undertaking the works related with the project are aware of their environmental protection obligations and to document the means by which environmental management requirements are implemented. This Environmental management shall be undertaken in line with the Lucas TCS requirements set forth within the HSEC Management System to ensure that all reasonable and practicable measures are taken to prevent or minimise environmental harm.

The overall responsibility for implementation of the Environmental Management Plan rests with Lucas TCS and shall meet the key objectives established by the Client. Lucas TCS shall develop its specific environmental objectives and targets relevant to the Project which shall support the overall Project Key Environmental Objectives and associated targets outlined below.

The Environmental Management System shall be used throughout the course of the Contract to ensure that the environmental aspects of Lucas TCS and any subcontractor's work comply with the requirements of the Contract and with those set forth by Legislation and the Client.

The Environmental Management Plan consists of a series of environmental management elements in lieu of separate standalone documents or Management Plans. The requirements for each element are addressed using the structure detailed below.

- Objective – identifies the broad environmental outcomes to be achieved.
- Target – performance criteria by which achievement of the objective will be measured.
- Controls – Implemented Controls to ensure achievement of objective
- Monitoring – observations or measurements to be made to determine whether targets have been met.
- Reporting – chain of reporting and record keeping requirements.

All stages of the project shall comply with the Environmental Management Plan including

- Design and Engineering
- Planning
- Mobilisation
- Construction
- Demobilisation

This Environmental Management Plan shall be regularly reviewed to ensure that it remains relevant to the project and is effective in addressing the management of environmental aspects identified. Environmental Management Plan reviews shall be undertaken

- Where monitoring of the Environmental Plan and site activities identifies that the objectives of the Plan are not being achieved
- Immediately following any potential or actual incident found to be causing environmental harm
- Where the scope of works, methodology or Management Team changes

## 7. Environmental Commitment & Leadership

### 7.1 Roles & Responsibilities

All Lucas TCS Management and Supervisors working on the Project shall ensure that his or her leadership conforms to the values stated within the Client and Lucas TCS Project HSEC Policies and Procedures. Demonstration of this shall be achieved by Lucas TCS through the following:

- Environment being on the agenda of all relevant meetings including subcontractor and client progress meetings.
- Management attendance at site based toolbox meetings
- Regular Site inspections involving Management and Supervisors including environmental issues to ensure and monitor compliance to environmental controls and legal obligations
- HSEC Audits involving Management & Supervisors including environmental issues to ensure and monitor compliance to environmental controls and legal obligations
- Management and Supervisor Sign Off on all environmental incident investigations to ensure corrective actions are effective.

Lucas TCS Project Specific personnel have set responsibilities, accountabilities and requirements as well that are set by senior management for the Project. The Project Manager is accountable for ensuring that the Environmental Management Plan is followed, that general duties and accountabilities of Management, Supervisors and employees are complied with as outlined below.

#### 7.1.1 Project Manager / Site Manager

- Never issue an instruction or undertake any activity that pollutes or may pollute the environment.
- Display 'Due Diligence' in all Environmental matters and proactively lead the implementation of this Environmental Management Plan and that of Lucas TCS.
- Actively promote a culture that shall mitigate the risk of damage to the environment and heritage aspects of the Project.
- Appoint competent persons (HSEC Coordinator) to assist with the effective management of the objectives of this Environmental Management Plan.
- Developing and submitting for review Lucas TCS' Project specific Environmental Management Plan and associated Operational Procedures, Guidelines, Forms and JSEAs
- Monitor the implementation of the Environmental Management Plan and the HSEC Management System on the Project.
- Attend the required site kick off meeting, progress meetings, required meetings, toolbox and prestart meetings held by Lucas TCS in the interest of managing HSEC matters including Environmental
- Ensuring all employees and visitors attend the required induction sessions and mandatory project training sessions
- Assist in the conduction of Risk Assessments and hazard Evaluations for all major work activities
- Ensure that all identified corrective actions arising from Risk Assessments, Audits, Inspections and Incident Investigations are implemented within the required time frames and monitored for effectiveness.
- Ensure Prestart meetings are conducted daily and involve all employees and relevant contractors.
- Conduct regular inspections of worksites to monitor the compliance with Lucas TCS and site Environmental standards and Environmental Management Plans.
- Assist in the conduction of incident investigations for all environmental incidents including near misses.

- Provide copies of initial incident investigation notifications within 4 hours of occurrence and other required HSEC documentation to the Client Management as required throughout the project.
- Ensure adequate resources are allocated to ensure the objectives of the Environmental Management Plan and protection of the environment is achieved and is not compromised in any way.
- Allow Client management representatives free and ready access to all HSEC records in relation to the Project, to audit and assess compliance with them relative to the Environmental Management Plan.

#### 7.1.2 Supervisor

- Never issue an instruction or undertake any activity that pollutes or may pollute the environment.
- Carry out their roles and responsibilities as identified in Lucas TCS and Client Environmental Policies, Procedures and Plans
- Ensure employees effectively carry out their responsibilities as identified in the Environmental Policies, Procedures & Plans
- Assisting in the identification and development of appropriate training and development programs and activities for themselves and employees.
- Ensuring employees are provided with and undertake appropriate training and development programs and activities.
- Actively participate in training provided to equip them with the knowledge and skills to carry out their current role and potential future role.
- Assisting in the review and evaluation of training and development programs and activities.
- Ensure all personnel are trained and competent to undertake tasks set for them
- Complete Weekly Site Inspections of the worksite
- Participate and assist in HSEC Audits (Internal and client) as required
- Ensure Incidents are reported immediately and investigations are undertaken into all incidents
- Attend and where required conduct daily Pre-Start Meetings on site
- Attend and where required conduct Weekly Toolbox Meetings on site
- Ensure outstanding actions from Daily Prestart and Weekly Toolbox Meetings are actioned within appropriate time frames
- Collect Hazard Identification Cards and implement controls
- Ensure all Hazardous Substances on site are approved by the client and accompanied by a SDS and personnel are trained in the substances use
- Ensure Risk Assessed JSEAs are created and in place for all works completed on site
- Monitor Environmental controls
- Conduct disciplinary actions
- Conduct Site Inductions
- Conduct Risk Assessments

### 7.1.3 Workers

- Carrying out their roles and responsibilities as identified in the Lucas TCS HSEC policies and procedures.
- Undertaking training provided to protect the Environment whilst at work.
- Actively participate in training and development programs and activities provided.
- Provide feedback on the relevance and effectiveness training and development programs and activities.
- Following reasonable instructions and following Operational Procedures, Guidelines and Safe Work Methods designed to protect the environment.
- Complete Step Back forms daily including Environmental controls
- Complete Hazard Report Cards
- Formulate Job Safety & Environmental Analyses
- Actively participate in toolbox meetings on Environmental Matters
- Liaise with HSR's on Safety & Environmental Matters

## 7.2 Environmental Commitment

Lucas TCS has an obligation to protect the environment within areas over which it has control and to assist others to achieve their stated goals. Lucas TCS will ensure that all individuals employed on the project site and / or who visit the site clearly understand their responsibility towards environmental control and that they are sufficiently well informed to be able to play their part in the protection of the environment.

Personnel who disregard their responsibilities in regard to protection of the environment will be subject to disciplinary action. This action may include termination of the employee's contract of employment.

HSEC Policies, signed off by Senior Management are visibly displayed on all Lucas TCS worksites along with the HSEC Commitment document and are included within the Site Induction for all personnel on site and included within the HSEC Guidelines distributed to Contractors prior to commencement on site.

Responsibilities for each level within the organisation are located within the Management System Procedure HSEC-MS-P001 – Leadership, Accountability, Roles & Responsibilities document outlining the specific HSEC responsibilities expected for specific levels within the organisation and includes

- Managing Director
- General Manager HSEC & Quality
- General Manager Civil
- Managers
- Supervisors
- Employees

Each one of these responsibilities can be located within the position specific Position Description created and signed by each employee within the organisation and outlines the Key Performance Indicators specific to each position with regards to HSEC Performance.

Key Performance Indicators are measured at the time of management review and performance review for all employees' at all functional levels within the organisation. These are communicated to all personnel through Position Descriptions.

Lucas TCS shall:

- Ensure that the project activities are conducted in accordance with the requirements of the Environmental Management Plan
- Carry out environmental inspections and coordinate site activities as required by the Environmental Management Plan and described in the Environmental Management Plan in a timely fashion
- Promptly advise the client of any environmental management action to be taken to maintain compliance with this Environmental Management Plan and relevant statutory requirements
- Ensure a copy of the Environmental Management Plan is displayed in the site office at all times and be updated and amended as works progress.
- Advise the client immediately if environmental harm or potential harm occurs within or near the construction site
- Ensure that site activities are conducted in accordance with the requirements of the Environmental Management Plan
- Undertake environmental management actions as directed by The client
- Ensure that all personnel under their direct control are aware of potential environmental impacts, and required minimum environmental control measures before they commence any site works.

### 7.3 Project Objectives and Targets



A series of targets have been established for the project as listed below. The objectives and targets shall be communicated to the site leadership team and compliance measured on a regular basis through regular audits.

| Objective                 | Target   | Measure   | Responsible                         |
|---------------------------|--|---|-------------------------------------|
| Leadership & Commitment   | Commitment to improve environmental performance                                      | Joint Management inspection between Project Manager & Vestas Management   | Project Manager                     |
| Proactive Risk Management | Ensure Subcontractors are pre-qualified and approved in Lucas TCS and Vestas Systems | 100% of subcontractors are registered and approved within SQD and Myosh   | Project Manager                     |
|                           | Lucas TCS Project Risk Assessment environmental section reviewed                     | Monthly review of current risks. New risks documented with approved controls  | Project Manager<br>HSEC Coordinator |
|                           | Environmental Site Inspections   | Daily Environmental Checklists completed<br>Weekly Environmental Checklists completed<br>Monthly Environmental Checklists completed | Supervisors<br>HSEC Coordinator     |

| Objective                   | Target                                | Measure   | Responsible      |
|-----------------------------|---------------------------------------|---|------------------|
|                             | Workplace Audits                      | Completed as per the Lucas TCS Audit Schedule   | HSEC Coordinator |
|                             | Project Inductions                    | 100% of Workers, Subcontractors, Delivery Drivers and Visitors have completed appropriate Lucas TCS and Vestas Inductions | HSEC Coordinator |
|                             | Incident Investigations               | All incident investigations completed / closed within Project timelines   | Project Manager  |
| Communications and Training | Toolbox Topics                        | 1 x Environmental Toolbox Topic to be delivered each month  | HSEC Coordinator |
|                             | Environmental Training Needs Analysis | All Workers to have completed any Cultural Heritage inductions arranged for the project                                   | Project Manager  |

## 8. Implementation & Project Start Up

The key Lucas TCS environmental management personnel for this project include the following:

- Managing Director 
- Project Manager 
- General Manager HSEC & Quality 
- General Manager Civil 
- HSEC Coordinator 

### 8.1 Environmental Management Implementation

Lucas TCS shall be responsible for ensuring compliance with the Environmental Management Plan through the production and utilisation of Environmental Policies and Procedures. The client will ensure that Lucas TCS satisfactorily implements the requirements of the Environmental Management Plan.

All communication between Lucas TCS and client staff shall be directed through the Superintendent or person as nominated by the Client. Lucas TCS shall be responsible for the day to day administration of environmental issues on behalf of client. The Client will maintain an active monitoring role. Lucas TCS will liaise closely with this representative on all environmental matters including monitoring, reporting and actions as necessary.

A Project Management process is employed to identify environmental needs and develop the Environmental Management Plan and timings that will ensure that the Project compliance and environmental deliverables are understood, resourced, scheduled and importantly will deliver on the environmental obligations and objectives of the project.

## 9. Identification of Environmental Impacts

Risk Assessments and Job Safety and Environment Analysis (JSEA's) are the process of planning a job with HSEC as the main priority rather than assuming all people involved in the task know how to do it in a safe manner. Lucas TCS JSEAs are prepared jointly through direct observation, workgroup discussions and continual review, overseen by the Manager HSEC, HSEC Coordinators, Managers and Supervisors. JSEAs shall identify all potential environmental hazards / impacts associated with the works to be undertaken.

The Manager HSEC, Site HSEC Coordinator(s) and the Project Manager are responsible for ensuring that a JSEA is prepared for each job that has one or more known environmental impacts, and ensuring the personnel involved in the task are involved in the preparation of the JSEA. JSEA creation is outlined within HSEC-PRO-111 – Job Safety & Environmental Analysis Procedure.

A Project Risk Assessment shall be undertaken prior to commencement of works on the site and shall identify, assess and control all possible environmental impacts identified by the HSEC Department Personnel and Project Management.

All JSEA's are to be risk assessed to ensure that the controls put into place are suitable as per HSEC-PRO-110 – Risk Assessment Procedure.

Contractors JSEAs shall be submitted and reviewed by the Lucas TCS HSEC department and Project Management prior to works commencing to ensure compliance against Lucas TCS set criteria using form HSEC-FRM-254 – Contractor JSEA Checklist Form. Where the JSEA does not meet set criteria, contains insufficient controls or all hazards have not been identified, The Lucas TCS representatives shall ensure that the JSEA is adjusted to the requirements of the Lucas TCS HSEC Management System.

Lucas TCS utilises a range of Risk Assessment forms to ensure impacts to the environment are identified, assessed and controlled, with Lucas TCS Risk Assessing the following;

- Projects
- Tasks
- Plant
- Hazardous Substances
- Incidents
- Non Conformances reported and found during Audits and Inspections

Where Risk Assessments indicate that the residual risk after controls have been placed is greater than 7, then Senior Management and HSEC Management involvement is required to investigate further ways in which to minimise the risk. Work shall not commence until the Senior Management or HSEC Management have evaluated the risks and have placed further controls.

Risks are assessed utilising the Lucas TCS Risk Matrix and controls are to be placed as per the hierarchy of controls. These processes are outlined within the Management System Procedure HSEC-MSP-003 – Risk & Change Management.

# Risk Assessment Card

LUCAS

## RISK SCORE CALCULATOR

| Likelihood     | Consequences  |       |          |       |              |   |
|----------------|---------------|-------|----------|-------|--------------|---|
|                | Insignificant | Minor | Moderate | Major | Catastrophic |   |
|                | Rare          | 2     | 3        | 4     | 5            | 6 |
|                | Unlikely      | 3     | 4        | 5     | 6            | 7 |
|                | Possible      | 4     | 5        | 6     | 7            | 8 |
|                | Likely        | 5     | 6        | 7     | 8            | 9 |
| Almost certain | 6             | 7     | 8        | 9     | 10           |   |

Step 1. Determine the risk score

Step 2. Refer Risk Score, to the Risk Score Response section for necessary actions

Step 3. Implement Hierarchy of Controls: Eliminate, Substitute, Isolate, Engineering,

Administrative, PPE

## Risk score

|      |  |
|------|--|
| 9-10 | Severe Risk. Highest of all premises, must be resolved immediately |
| 8    | Very High Risk. Requires urgent attention for quick resolution     |
| 7    | High Risk. Monitor notified as soon as possible                    |
| 6    | Significant Risk. Pre-planning & resolution required               |
| 5    | Moderate Risk. Contingency plans to be considered and enacted      |
| 4    | Low Risk. Consultations often required for mutual resolution       |
| 3    | Very Low Risk. Minor issues for monitoring                         |
| 2    | Insignificant Risk   |

Risk Scores 0-10 – ICAM investigation required

## 10. Environmental Communication & Training

Environmental information, issues, requirements, performance and non-conformances shall be communicated to Project personnel throughout the duration of the Project. The following mechanisms shall be used to communicate environmental information:

- Kick Off Meetings
- Site Inductions
- Pre Start Meetings
- Toolbox Meetings
- Toolbox Topics
- Notice Boards
- Weekly Progress Meetings
- Training & Awareness Sessions
- Safety Observations
- Incident Reports
- Scheduled Project reports

Lucas TCS shall conduct Daily Prestart Information Meetings with all employees and subcontractors prior to the daily commencement of work, Weekly Toolbox Meetings, including Toolbox Topics and attend Weekly Contractor Progress Meetings. Records of attendance and minutes of the meetings will be maintained and shall be made available to the Client when requested. One toolbox topic per week shall be presented at this meeting.

All personnel required on the project shall be made aware of their accountabilities and responsibilities and be adequately trained and informed to execute them.

Lucas TCS shall ensure that all project personnel attend a site specific induction including the project developed environmental induction that includes as identified in the Environmental Management Plan

- Purpose, Objectives & Key Issues of the Environmental Management Plan
- Conditions of environmental licenses, permits and approvals
- Cultural Heritage issues including identification of heritage sites and procedures to be followed in the event of discovery of a Cultural Heritage Site
- Management of Construction Noise
- Weed Management & Vehicle Hygiene
- Hydrocarbon and Hazardous Materials Management
- Spill Response and prevention
- Threatened Flora / Fauna and feral animal requirements including striped legless lizard monitoring / identification
- Erosion and Sediment Control Management measures
- Dust Control
- Fire Management & Emergency Response
- General Housekeeping, rubbish and waste management
- Incident Reporting procedures

- Stop work authority in the event that an unsafe or environmentally hazardous activity is about to take place
- Any other Significant environmental risks and their controls

Lucas TCS shall ensure that through the client all staff required to undertake 'high risk' environmental activities including land clearance, hydrocarbon management and saline water management are trained in all works. Records of attendance shall be kept for attendance at formalised training sessions and shall be included within the personal training records of all employees required.

## **11. Environmental Management Legislation & Records**

### **11.1 Relevant Legislation**

Lucas TCS acknowledges its obligation to comply with all relevant State and Commonwealth Environmental Legislation and with best practice environmental management. To achieve legal compliance Lucas TSC shall ensure that a Project Legislation Register is created specific to the project and review this register on a regular basis throughout the contract works.

Lucas TCS shall comply with the following on the Project Acts or Procedures:

- Aboriginal Heritage Act 1972 (Western Australia)
- Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)
- Biosecurity and Agriculture Management Act 2007 (Western Australia)
- Biodiversity Conservation Act 2016 (Western Australia)
- Bush Fires Act 1954 (WA);
- Dangerous Goods Safety Act 2004 (WA)
- Dangerous Goods Safety (General) Regulations 2007
- Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007
- Environmental Protection Act 1986
- Environment Protection and Biodiversity Conservation Act 1999 (Australia)
- Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (WA)
- Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998 (WA)
- Environmental Protection (Controlled Waste) Regulations 2004 (WA)
- Environmental Protection Regulations 1987 (WA)
- Environmental Protection (Metal Coating) Regulations 2001 (WA)
- Environmental Protection (Noise) Regulations 1997 (WA)
- Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)
- Heritage Act 2018 (WA)
- Exotic Diseases of Animals Act 1993 (WA);
- Heritage Act 2018 (WA);
- Industrial Chemicals Act 2019 (Cth);
- Litter Act 1979 (WA);

- National Environmental Protection Measures (Implementation) Act 1998 (Cth)
- Native Title Act 1993 (Cth);
- Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (Cth);
- Planning and Development Act 2005 (WA);
- Rights in Water and Irrigation Act 1914 (WA);
- Soil and Land Conservation Act 1945 (WA);
- Transport Operations (Road Use Management) Act 1995.
- Transport Operations (Road Use Management—Dangerous Goods) Regulation 2018.
- Waste Avoidance and Resource Recovery Act 2007
- Waste Avoidance and Resource Recovery Levy Act 2007
- Waste Avoidance and Resource Recovery Regulations 2008
- Waste Avoidance and Resource Recovery Levy Regulations 2008
- Work Health and Safety Act 2020 (Western Australia)

### **11.2 Legislative Updates**

Project Management will be regularly updated by the HSEC Department regarding any applicable changes to legislation, standards and requirements affecting the Environmental Management Plan

Lucas TCS shall ensure that the Legislative Update Procedure HSEC-PRO-011 is complied with to ensure that upon identification of any Legislative Change the General Manager HSEC & Quality will obtain all available information regarding the Legislative change including copies of the changed document.

Where the change may have an impact on Lucas TCS business the change shall be formally reviewed through the Management of Change Process – HSEC-PRO-010.

The General Manager HSEC & Quality shall then communicate the Legislative change including the potential impacts throughout Lucas TCS and to Project Management through:

- Emails to Internal Stakeholders outlining the Legislative Change
- Emails to External Stakeholders outlining the Legislative Change
- Discussion during Operations Meetings
- Discussion during Weekly Toolbox Meetings on Site
- Discussion during HSEC Committee Meetings
- Discussion during Management Review Meetings

### **11.3 Environmental Records Management**

Lucas TCS shall maintain a system for recording environmental management activities, monitoring data and relevant events. This information shall be incorporated into the Environmental Management Plan. The system shall be maintained in a legible condition and be readily interpretable by a third party and shall outline how Lucas TCS shall perform its obligations under the contract in an environmentally responsible manner and ensure that any detrimental effects on the environment resultant from activities are kept to the minimum practicable.

Lucas TCS shall ensure as per the Environmental Policy that all Legislative compliance shall be maintained at all times throughout all works on the project. Legislation has been identified through the HSEC

Management System and Environmental Management Plan and shall be adhered to by all personnel on the project.

Lucas TCS shall also comply at all times through the project with the Client Environmental Management Plan and Environmental Management Systems to ensure that all works comply with the Project Requirements.

Lucas TCS is aware and shall inform all employees through site inductions, Prestart Meetings, Toolbox Meetings of the requirements of the legislation and the consequences of non-compliance with applicable legislation and approvals requirements such as fines, potential goal terms and potential stop work orders

## 12. Compliance Monitoring & Auditing

Implementation of the Environmental Management Plan shall be monitored to ensure that the environmental management is effective that unforeseen impacts are identified, addressed, and appropriate corrective actions are taken to ensure that the Environmental Management Plans objectives are met.

It is the responsibility of all management and supervisory personnel to comply with their responsibilities as detailed in their position descriptions and Roles & Responsibilities Management System Procedure and to complete workplace inspections and audits within the appointed timeframe, with due diligence and to demonstrate Environmental leadership and appropriate behaviour during these activities.

Weekly inspections will be conducted by an inspection of the workplace, and observation of work activities and the actions of people in the workplace. Weekly safety inspections shall be conducted encompassing all areas of all sites.

Each worksite is audited at a frequency determined by risk assessment in addition to the weekly site inspections. The workplace audits are completed by the supervisor and where possible a member of the HSEC Department.

Environmental Checklists completed as required on a daily, weekly and monthly basis and filed within the Site HSEC Folders and uploaded to the QSE System

A schedule of internal environmental audits shall be prepared and published for the Project, developed by the HSEC & Quality Manager & HSEC Coordinator, in consultation with the Project Manager and based upon the risks of the project. Audits shall be scheduled at frequencies appropriate to the level of risk and completed inspections and audit reports uploaded with corrective actions to the Lucas TCS QSE System and copies sent to the client within 5 days of the completion of the audit or inspection. Auditors who shall carry out these audits shall be trained in Auditing as outlined in the Management System Procedure HSEC-MSP-012 – Audit, Monitoring & Review. Lucas TCS shall ensure that audits are undertaken such that at no stage are intervals between audits greater than 4 weeks. Details of all Audits and Inspections shall be made available to the Superintendent upon request.

| Audit / Inspection                 | Frequency       | Conducted By |
|------------------------------------|-----------------|--------------|
| Daily Environmental Checklist      | Daily           | Supervisor   |
| Weekly Environmental Checklist     | Weekly          | Site Manager |
| Weekly Site Inspection             | Weekly          | Supervisor   |
| Workplace Audit                    | As per Schedule | Site Manager |
| Erosion & Sedimentation Inspection | As Required     | Supervisor   |

Non-conformances identified during the Environmental Inspections and Audits will initiate corrective actions and once completed Lucas TCS shall provide details of the actions undertaken to the client within two days of the identified non-conformance. Where the non-conformance is considered to breach legislative requirements, Lucas TCS will notify the client who will then escalate as required.

In addition to the audits arranged by Lucas TCS, Lucas TCS will also allow external audits of the site and any subcontractors to be undertaken. Where a possible non-conformance is detected during an audit, Lucas TCS shall take immediate action to rectify the non-conformance. Audits shall be undertaken in accordance with the Lucas TCS Standards and adhering to client protocols.

### **13. Environmental Authorisations**

Lucas TCS shall:

- Ensure that any detrimental effects on the environment resultant from any activity associated with Project are kept the minimum practicable.
- Establish processes and control measures to ensure that the requirements of this clause are complied with for the duration of the project; and
- Monitor the performance in relation to all relevant environmental matters throughout the duration of the Project.

### **14. Environmental Reporting**

As part of the Monthly Reporting requirements for the Project, Lucas TCS shall include environmental information including:

- Results of all environmental inspections and monitoring events
- Action arising from inspections
- Summary of environmental incidents and emergencies, response measures and corrective actions
- Fuel, Hydrocarbons and Energy Use
- Land Clearing
- Water Use this shall be completed monthly on the Lucas TCS supplied reporting documents.

### **15. Complaint Handling**

Lucas TCS shall advise the Client immediately of complaints received from stakeholders or other third parties in relation to the project as soon as practicable after receiving the complaint. The report, submitted on the Community Contact Form – HSEC-FRM-003 shall include the details of the complaint, corrective action taken to address the problem and any recommendations for further action. Information recorded shall be as follows:

- Name, Address and Contact number of the complainant
- Time and date of the complaint
- Specifics of the complaint
- Investigations undertaken
- Conclusions formed
- Actions taken to resolve complaints
- Any abatement measures implemented

- Person responsible for resolving the complaint

All community contacts shall also be recorded on the Observation and Complaint Register which shall be made available to the client upon request.

## 16. Environmental Incidents & Emergencies

The reporting and subsequent investigation of all incidents and injuries is an essential part of Lucas TCS' Health, Safety, Environment and Community Development Management System.

HSEC-PRO-100 – Incident Reporting & Investigation describes the processes for the reporting and investigation of incidents and injuries, responsibilities within these processes. Implementation of these minimum standards will provide Lucas TCS with the opportunity to improve HSEC management by identifying the causes of incidents and implementing corrective actions to prevent the recurrence of incidents and injuries.

Pre-start and Toolbox meetings are used to ensure that employees are actively encouraged to report any potential hazards, near misses and potential incidents. Lucas TCS Step Back Program and Hazard Notification Cards will also be utilised as pre-emptive measures to highlight and eliminate observed hazards by employees and management on a continuing basis.

Incidents reported and investigated include but are not limited to:

- Native Fauna Struck
- Damage to vegetation / Fauna Habitats
- Contamination of soil (Spills etc)
- Fire
- Pollution of water ways etc
- Damage / Impact to Heritage Areas
- Significant process failures
- Near misses

Personnel who witness incidents or near misses shall immediately report their occurrence to their line manager or supervisor. Line managers or supervisors shall, where required, take all necessary precautions to make the area safe and isolate the site of the incident. Incident reporting shall be undertaken as per the incident and Investigation processes utilising Lucas TCS forms. Critical Incident Procedure outlines the requirements of Management and Supervisory personnel in the event of a critical incident including timelines, responsibilities, contact with the media, counselling etc.

Lucas TCS will ensure that the Superintendent is notified within 24 hours of becoming aware of an incident that may have caused or threatened serious environmental harm or material environmental harm. This notification shall be immediate and verbal in nature and shall contain sufficient information to provide notice of the event, its nature, and the circumstances in which it happened. This shall be followed by an incident notification completed in writing within 4 hours of the incident occurring and the client notified with the remainder of the investigation to be completed and submitted to the client within 3 days of the incidents occurrence.

If the incident is reportable to External Authorities such as the EPA the HSEC & Quality Manager in consultation with the Chief Operating Officer and HR Manager shall notify the Client and organise the notification to the relevant authorities.

Once Incident Investigation Reports have been created they are communicated to the Site and Client Management and HSEC & Quality Management through the use of an internal email Incident Group and through Lucas TCS' computerised QSE Management System.

## **16.1 Bushfire Prevention**

### **16.1.1 Fire Service Interface**

Fire services are to be invited by Vestas to familiarisation visits during all stages of construction, in order to ensure that fire service personnel can prepare and respond effectively to a fire emergency on-site. Invitations will be extended to all emergency services (police, fire, ambulance, rescue) to participate in simulation exercises on-site when they occur.

Lucas TCS shall Liaise with the Local fire services or local council as required or through Vestas and advise of works that may impact the Emergency Services;

### **16.1.2 Hot Work Activities**

All spark, heat and flame producing work undertaken outside in the open air or work that has a higher or increased risk of fire or explosion shall be carried out using a hot work permit. The hot work permit shall include controls for work to be carried out during the fire danger period, these being.

- Selection of suitable work area for the hot works
- Fire resistant shielding or guarding to stop sparks, hot metal or slag
- Ensuring that a minimum of 15m radius from works is free of flammable materials and dry vegetation, or immediate area has been wet down sufficiently to prevent the spreads of fire
- Fire suppression equipment consisting of either a hose connected to a reticulated water supply, water spray knapsack containing at least 9 litres of water or a 9-litre water (stored pressure) fire extinguisher is readily accessible in the work area.
- All cut-offs and hot materials from the work are placed in fire-proof containers
- A fire watcher is in attendance at all times while hot works are taking place and the person has the capacity and means to extinguish a fire. The fire watch shall remain for a minimum of 30 minutes after the works have finished to prevent any potential flare up.

### **16.1.3 Fire Training**

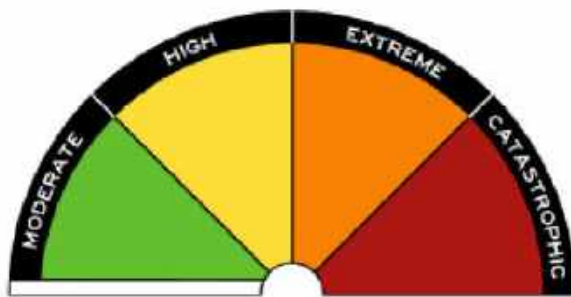
Fire training will be arranged for personnel who are expected to carry out initial first attack firefighting duties, which will consist of.

- The use of any fire fighting equipment on site including extinguishers, water cart cannons etc.
- The emergency procedure for dangerous goods on site

### **16.1.4 Communication of Fire Danger Ratings**

The fire danger rating (FDR) tells you how dangerous a fire would be if one started, and when conditions are dangerous enough to put bushfire survival plans into action. The ratings are provided daily and forecast using Bureau of Meteorology (BoM) data for up to four days in advance, based on weather, fuel load and other environmental conditions. The Fire Danger Rating is the prompt to prepare for any significant fire weather and the action to stay safe which must be validated through the BoM fire weather forecast at [bom.gov.au](http://bom.gov.au) or the WA Bushfire service on [www.emergency.wa.gov.au](http://www.emergency.wa.gov.au).

During the declared fire danger period, the FDR will be communicated to all workers on-site during pre-start meetings.



**MODERATE**  
Plan and prepare

**HIGH**  
Be ready to act

**EXTREME**  
Take action now to protect life and property

**CATASTROPHIC**  
For your survival, leave bushfire risk areas

| Fire Danger Rating   | Action to be Considered   |
|--|---|
| <b>Catastrophic</b><br>The most dangerous conditions for a fire<br>If a fire starts and takes hold, lives are likely to be lost. | Close and vacate the site on these days as buildings are not designed or constructed to withstand fires of this magnitude.<br>Instruct personnel to go to a safer location early in the morning or the night before         |
| <b>Extreme</b><br>Fires will spread quickly and be extremely dangerous<br>Expect hot, dry and windy conditions                   | Consideration must be given to leaving site on these days, dependent on weather conditions and if fires are uncontrolled in the local area.<br>Work that has a high fire risk must not be undertaken under any circumstance |
| <b>High</b><br>If a fire starts it may threaten life and property  | Restrictions to be applied as to what work can and can't be undertaken on these days.<br>Consideration to be given to additional fire fighting equipment for high risk works  |
| <b>Moderate</b><br>Most fires can be controlled  | Care to be taken when undertaking work<br>Know where to obtain fire information and monitor the local environment for alerts or emergency warnings  |
| <b>No Rating</b><br>Fire is not likely to take hold  | No restrictions required for work on these days<br>Hot work Permit still required   |

### 16.1.5 Fire Safety Bans

Bans on the movement of vehicles and machinery in paddocks are declared by the local municipal council and or fire service when they are of the opinion that weather conditions are likely to cause or contribute to the spread of a fire from the use of engines, vehicles, plant or machinery when operated over or near dry vegetation (grass, weeds, stubble or bushland).

When a fire safety ban has been issued, Workers shall not

- Operate any vehicle, plant, or machinery, including the use of chainsaws
- Perform any hot works, such as welding, cutting, or grinding

Fire safety bans, are also known as paddock bans or harvest and vehicle movement bans depending on the jurisdiction that the ban applies. These shall be communicated at Prestart Meetings

### 16.1.6 Total Fire Ban Days

Total fire ban days are declared to set legal restrictions on what activities can or cannot occur in a particular fire district for that day, for the purpose of reducing activities that may start a fire.

When extreme fire weather conditions are prevalent or when fires are likely to spread rapidly and be difficult to control, total fire ban days will be declared. The Fire Safety bans/ total fire bans will be communicated to the site crew through various channels which includes Pre-start meetings, WhatsApp group, emails to the respective Site Manager & Supervisors and two-way radio.

| Site Activity  | Permitted on Total Fire Ban Days   |
|--|--|
| BBQs that are not prepared by commercial catering          | <p>No</p> <p>Unless the barbecue uses only gas or electricity and is a permanently fixed structure built of stone, metal, concrete or another non-flammable material designed exclusively for meal preparation or is designed and commercially manufactured exclusively for meal preparation (including portable barbeques), and when alight is placed in a stable position.</p> <p>The area within 3 metres from the outer perimeter of the barbecue is clear of flammable material or dry vegetation.</p> <p>A hose connected to the water supply, a 9-litre water fire extinguisher or water in a container of equivalent size is available for immediate use.</p> <p>A person is always present when the barbecue is alight who has the capacity and means to extinguish a fire.</p> |
| Driving or operating machinery over or near dry vegetation | <p>No</p> <p>Unless the work is essential, and the vehicle or machinery is free from faults and mechanical defects that could cause an outbreak of fire and is fitted with an efficient spark arrestor.</p> <p>Fire suppression equipment is carried and contains at least one knapsack spray pump, fully charged with water with a capacity of not less than 9L, or one 9L water fire extinguisher, fully charged and in working order.</p>   |
| Using equipment that generates heat, sparks or flame       | <p>No</p> <p>Hot work activities are banned on total fire ban days unless a fire permit covering the work has been issued by the relevant fire service/authority</p>   |
| Use of chainsaws to trim or fell trees and other tasks     | <p>No</p> <p>Unless the work is essential, and the chainsaw is free from faults and mechanical defects that could cause an outbreak of fire and is fitted with an efficient spark arrestor.</p> <p>At least 3 metres around the work area must be cleared of any flammable material and dry vegetation and is wetted down.</p> <p>A fire watcher must be in attendance at all times whilst the chainsaw is being used and be equipped with fire suppression equipment</p> <p>Fire suppression equipment contains at least one knapsack spray pump, fully charged with water with a capacity of not less than 9L, or one 9L water fire extinguisher, fully charged and in working order.</p>  |

| Site Activity   | Permitted on Total Fire Ban Days   |
|---|--|
| Using Dozers or graders to clear vegetation where rocks are present | <p>No</p> <p>History of blades striking rocks and creating sparks that have caused ignition of nearby grasses / vegetation.</p> <p>Unless the work is essential, and the vehicle or machinery is free from faults and mechanical defects that could cause an outbreak of fire and is fitted with an efficient spark arrestor.</p> <p>Water Cart is present, full and acting as a fire watch and has the ability to extinguish any flame through use of sprays or cannon.</p> |

### 16.1.7 Vegetation Management

All Vestas wind energy installations that are constructed within a bushfire management overlay or bushfire prone area must maintain vegetation to the requirements listed within any planning permit conditions.

In addition to any planning permit condition, the project site must carry out the following fuel management measures during the fire danger period.

- Long grass must be slashed to a height no higher than 300mm for vehicle and mobile plant trafficable areas and no higher than 100mm for pedestrian trafficable areas.
- Fire breaks of 10 metres in width must be established around compounds, site facilities and buildings, storage locations and substations. Fire breaks must be vegetation free with no obstructions, such as stored materials and be constructed using either mineral earth or non-combustible material such as crushed rock.

### 16.1.8 Fire Fighting Equipment

Firefighting equipment required for the risk management of grass and or bushfires shall be determined locally at the project site and documented within the Project Risk Assessment. Requirements for fire fighting equipment to be supplied by Lucas TCS and Vestas include

| Equipment  | Requirements  |
|--|---|
| 1 x 9 litre water fire extinguisher with a minimum rating of 3A                      | <p><b>Mandatory</b></p> <p>Must be carried or externally mounted on all machinery associated with the construction or operation of the windfarm, including those of contractors during the fire danger period, any day of high fire danger and days of total fire ban.</p> <p>The extinguisher must be ready for use by being fully charged with water and maintained at the correct pressure. A maintenance record tag must be clearly visible indicating the date of the last 6 monthly inspection.</p> |
| 1 x water firefighting knapsack spray pump with a capacity of not less than 9 litres | <p><b>Fire Extinguisher Alternative</b></p> <p>Can be used as an alternative to the 9 litre water (stored pressure) fire extinguisher. The knapsack must be ready for use by being in working order and fully charged with water.</p>   |

| Equipment   | Requirements  |
|---|---|
| Water firefighting trailer                              | <p><b>Recommended</b></p> <p>Suitable for work that requires a portable source of water for first attack firefighting purposes, this includes hot work or work using ground engaging tools on or near dry vegetation, or where there is a risk of wind carrying embers or sparks that can ignite dry vegetation.</p> <p>The water trailer must be equipped with a firefighting pump and motor, a suction fill kit to fill the tank from an external water source and a hose reel fitted with an adjustable firefighting nozzle.</p> |
| Firefighting skid unit                                  | <p><b>Water Fire Fighting Trailer Alternative</b></p> <p>Can be used as an alternative to the water firefighting trailer if site vehicles (tray and tub utes or light trucks) are not fitted with a tow hitch.</p> <p>The skid mounted tank must be equipped with a firefighting pump and motor, a suction fill kit to fill the tank from an external water source and a hose reel fitted with an adjustable firefighting nozzle.</p>   |
| Water cannon fire monitor and or firefighting hose reel | <p><b>Recommended</b></p> <p>Suitable for use on water trucks used for dust suppression which then can be deployed for first attack firefighting purposes or used as a standby fire appliance.</p> <p>Water cannons can be electric, pneumatic, hydraulic, or manually operated with a preference given to in-cab control systems. Hose reels must be fitted with an adjustable firefighting nozzle and equipped with a firefighting pump and motor.</p>  |

## 17. Corrective Actions

Corrective and preventative actions may be generated from a number of sources, including but not limited to incidents, audits, inspections and management reviews. Actions will be systematically managed to ensure items raised are recorded and closed. Where corrective and preventative action is of critical importance, Lucas TCS will retain evidence such as documents, photographs, personnel statements etc. on file to demonstrate completion of the action.

A Corrective and Preventative Actions Register, recording all corrective actions raised and closeout details will be developed and maintained within the QSE system by Lucas TCS. A corrective action register will be established for the Project which will cover compliance, environmental, safety and health actions. The register will include:

- Unique identification number
- Details of the action
- Date action raised
- Risk Rating
- Date when the action is closed
- Responsibility for action completion

Corrective Actions, when entered into the QSE System shall be assigned as per HSEC-PRO-02 – Corrective Action Procedure and be assigned to a responsible person by a set date for completion. A reviewer shall also be assigned to the action with the responsibility to review the full implementation of the action and

the effectiveness of the control to ensure that the action has achieved its objectives and mitigates the risks / hazards identified.

Corrective actions shall be defined in terms of Action, Responsibilities, Time and Signoff and shall follow SMART principals:

- **Specific** - recommendations are activities that can be undertaken by a work group and not general motherhood statements. e.g. "all people to take care"
- **Measurable** - the impact of recommendations must be measurable to determine if recommendations are being effective
- **Actionable** - recommendations are described fully and sufficiently detailed so they can be implemented
- **Achievable** - recommendations are feasible and practical.
- **Realistic** - recommendations must be relevant, proportional to the risk.
- **Timely** - recommendations must be completed in appropriate timeframes

All Corrective actions are recorded in the QSE System and the Project Managers, HSEC & Quality Manager and Chief Executive Officer both receive outstanding corrective action reports on a weekly basis to ensure prompt and effective follow up on outstanding actions. These corrective actions are reported on during the weekly HSEC statistics sent out each week and reported in Management Operations meetings.

## **18. Emergency Response Priorities**

During any emergency incident, the primary role of all involved teams is to Contain, Control and Make Safe the situation. In so acting, the Protection Priorities to be applied are:

- The safety and security of all people is our primary consideration
- Environmental protection is of secondary importance
- Protection of company assets, both tangible and intangible (e.g. reputation) is third.

When an incident occurs, the impacted group (field team) is authorised, and if able is expected, to initiate appropriate action without reference to any others. This may involve direct action or engagement with the Emergency Services. As soon as practicable, the party initiating the action is required to contact the Project Manager and Client Representative to confirm the situation and to discuss any additional support requirements. In turn, the Project Manager will act as the central coordinating body to report to, engage with and initiate response from necessary other parties.

### **18.1 Emergency Incident**

For the purpose of this plan, an emergency incident is any sudden, abnormal event requiring precise and timely operational action to control, contain and make safe the situation. The event may relate to people, property or any business activities.

Emergency Environmental incidents that have been identified as applicable to the Project are as follows:

- Natural Disasters
- Fire / Explosion
- Lightning
- Bushfire
- Environmental / Chemical Spill

## 18.2 Emergency Support Structure / Personnel

In the event that an emergency occurs, it is important that a clear chain of command is recognised, responding parties work cooperatively and that responsibilities of all directly affected and support personnel are clearly understood. In that context, the following principles are important:

- The people most directly impacted are authorised, able and equipped to initiate appropriate action in a timely manner. This will often involve the immediate affected work group. The initiating action may be undertaken directly by the affected work group through the Lucas TCS management, medical staff or require the direct involvement of site Emergency Response or the Emergency Services – police, ambulance, SES etc.
- The party initiating the response is appropriately supported by the project. The Lucas TCS Project Manager will provide this primary level of support and will act as the key link and primary communication conduit with any other appropriate stakeholders – Emergency Response Teams including Medical personnel, Client, Lucas TCS Management, Emergency Services etc.

## 19. Environmental Procedures & Practices

The main elements addressed by the Lucas TCS HSEC Management System as ongoing issues and addressed within Operational Procedures are:

### 19.1 Permit to Work System

Lucas TCS shall ensure that the Vestas Permit to Work System is complied with throughout the King Rocks Wind Farm Project to ensure that adequate systems of work are in place before and during all work activities.

Lucas TCS shall ensure that the Vestas Land Disturbance Permit is complied with at all times to ensure cultural heritage and flora and fauna risks, associated with land disturbance, to be managed during construction activities. Activities that may disturb land include off road vehicle or plant access, clearing and/or grubbing of vegetation, earthworks and trenching.

### 19.2 Washing of Plant

Weed seed, some insects and plant pathogens may travel almost sight unseen in mud or lodged in nooks and crannies on machinery, vehicles and other equipment. It is easy to overlook the risk of carrying weeds and diseases; the consequences however are not so subtle. Failure to wash down can result in vegetation loss, biodiversity of a site or permanent environmental damage such as the extinction of some plants, often incurring substantial cost to the business.

Lucas TCS will wash down and clean all plant after:

- Prior to Mobilisation to site ensuring that the Plant and Equipment is clean and passes a weed and seed inspection.
- After operating in an area affected by a weed or disease that is under containment
- Transporting weeds or soil known to be infected with weed seed or a plant pathogen
- Moving Machinery out of a Local area of Operation
- Moving Machinery between sites that are known to be contaminated to 'clean' weed free locations
- Moving Plant or Machinery to Environmentally sensitive areas
- Using Machinery along road sides or along waterways
- Using Machinery to transport soil and quarry materials

- Working near Heritage or Culturally Significant Sites

The washing of Plant, Vehicles and equipment will take place in such a way that wash water is contained within an impervious basin for treatment and / or disposal as appropriate.

Field wash down and cleaning may be required to contain weeds or plant pathogens to a particular area or where machinery is moved directly between field sites or prior to maintenance. Selection of the Wash down Areas on site shall be identified with consideration given to:

- Siting the wash down at the edge, or nearby, any areas where weeds or pathogens need to be contained. Choose sites where the land slopes back into an infested area or an adjacent area not susceptible to the problem.
- Ensuring contaminated run off will not enter any watercourse or water body, a buffer of at least 50m shall be maintained
- Avoiding sensitive vegetation or wildlife habitat e.g. remnant native vegetation and threatened species sites
- Selecting mud-free sites (e.g. well grassed, gravel, bark or timber corded) which are gently sloped to drain effluent away from the wash down area
- Allow adequate space to move tracked vehicles
- Potential hazards, e.g. power, traffic etc.
- Where there will be large quantities of effluent or there is a risk of extensive run-off, the wash down area should be bunded and a sump constructed to safely dispose of the effluent. Particular care shall be taken where the effluent is likely to be contaminated with oils and other hazardous substances.

Lucas TCS will ensure at all times that Weed management is undertaken through:

- Identify weeds and infestation zones within the work site/investigation period.
- Method of cleaning vehicles and machinery and cleaning date.
- Cleaning bay location and treatment date.
- Contaminated fill stockpile, treatment type and treatment date.

### 19.3 Hazardous Substance Management

All Hazardous Substances that are brought to the project site shall have the SDS supplied upon purchase and shall be reviewed by the Project Management / Supervisory Personnel or HSEC Department personnel for risks to the environment and to ensure that appropriate spill protection is in place.

Lucas TCS employees will from time to time be required to use a variety of substances in various forms. These substances may present a risk to human health and / or the environment if not appropriately managed and controlled. Therefore, Lucas TCS will develop and implement a system to identify hazardous substances, assess the risks arising from their use or storage, implement measures to control or minimize exposure and monitor the effectiveness of these control measures. Hazardous Substances shall be managed on all Lucas TCS Projects as per HSEC-PRO-061 – Hazardous Substance Management

All Hazardous Substances that are brought to the project site shall have the SDS supplied upon purchase and shall be reviewed by the Project Management / Supervisory Personnel or HSEC Department personnel for risks to the environment and to ensure that appropriate spill protection is in place.

Safety Data sheets shall be provided for all substances with the exception of the following unless required by a client or site:

- Hazardous chemicals in batteries when incorporated in Plant

- Hazardous chemicals in portable firefighting or medical equipment for use in a workplace
- Therapeutic goods designed for intentional intake by or administration to humans
- Consumer domestic chemicals supplied in domestic quantities and used for their intended purpose in the workplace. E.g. Dishwashing liquid, air freshener, hand wash etc.

All Substances shall be added to the site Hazardous Substance Register and SDS sheets placed in the folders where the substance is used. Storage of all Hazardous Substances shall be in accordance with AS1940 where necessary, utilising cupboards and bunded facilities to minimise the impacts to the environment in the event of a leak or spill. Removal of contaminated containers and Substances from site shall be in accordance with the SDS disposal considerations.

| Element   | Description   |
|-----------|---|
| Objective | To minimise impacts arising from site activities and storage, handling and spill response with regards to hazardous substances.   |
| Target    | No impact from site activities and hydrocarbon spills during the course of the project.   |
| Controls  | <ul style="list-style-type: none"> <li>• No hydrocarbon waste products including oils shall be disposed of on-site other than those materials in which there is a designated recycling depot or storage facility.</li> <li>• Current Safety Data Sheets are to be maintained onsite and are current within 5 years of the current date for all hazardous substances brought to site. Copies of an up to date SDS Register shall be maintained on site and available to all workers.</li> <li>• Plant &amp; Equipment shall be inspected on a regular basis to ensure that fuel, oil or lubricants do not leak from machinery.</li> <li>• No Chemical, fuel or lubricant storage areas shall be located within an area subject to flooding or within 50m of natural or built drainage lines or on slopes greater than 1:10</li> <li>• All Environmentally Hazardous Substances are managed in accordance with Legislation</li> <li>• Fuel usage to be recorded for all equipment utilised on site including light vehicles and ancillary plant &amp; equipment</li> <li>• All hydrocarbons including oils, solvents, greases and fuels shall be stored in bunded containers / areas</li> <li>• All storage containers to be utilised are double skinned (self-bunded)</li> <li>• All storage areas will be bunded and have a capacity to retain 120% of the largest container and at least 25% of the total volume of all substances stored in the event of a spill.</li> <li>• Bunds will be maintained free of stormwater and hazardous substances prior to rain events where practicable.</li> <li>• Maintenance and servicing of plant &amp; equipment shall be undertaken over an impervious surface, segregated from stormwater drainage to minimise the risk of contaminants leaving the site.</li> <li>• All waste oils from construction machinery shall be regularly removed and disposed of off-site in accordance with current regulatory requirements.</li> <li>• All waste oils and filters to be removed off-site shall be contained on-site prior to disposal, using appropriate storage containers or facilities</li> </ul> |

| Element    | Description   |
|------------|---|
|            | <p>until removed off-site, including the covering of containers/facilities to prevent possible spillage.</p> <ul style="list-style-type: none"> <li>• Maintain a high quality of housekeeping and ensure that materials are not left where they can be washed or blown away to become litter.</li> <li>• Provide hydrocarbon spill kit bins for construction workers and staff at locations where they are regularly required i.e. workshop.</li> <li>• Regular inspection shall be undertaken to ensure hydrocarbons, oils or waste does not escape from the site into neighbouring compounds.</li> <li>• All workers shall be trained in hydrocarbon spills and clean up procedures.</li> <li>• All refuelling bays to be constructed to enable drainage and containment of all spills</li> <li>• Mobile refuelling vehicles to be equipped with double skinned vessels or equivalent containment system</li> </ul> |
| Monitoring | <ul style="list-style-type: none"> <li>• Bunded storage areas shall be checked regularly to ensure they are fit for purpose and have suitable containment for the quantity of substances.</li> <li>• All waste containment and disposal activities shall be logged, including type and volumes of materials and location of licensed receiving facility.</li> <li>• Regular audits will be conducted by Lucas TCS to ensure compliance</li> </ul>   |
| Reporting  | <ul style="list-style-type: none"> <li>• Releases of hazardous substances are reported and investigated, with corrective actions managed in accordance with incident reporting and investigation procedures.</li> <li>• Non-conformance and complaint details shall be forwarded to Lucas TCS as soon as practicable.</li> <li>• Regulatory notifications undertaken where storage thresholds are triggered.</li> <li>• Fuel and hydrocarbon usage to be reported to Client</li> </ul>  |

### 19.3.1 Refuelling of Plant & Equipment

Where refuelling is to occur in fixed refuelling locations, permanent signage and traffic management shall be in place at these locations along with bunded locations to ensure that all potential contamination is contained within the refuelling area. All personnel involved in the refuelling process are to ensure that all hazards have been identified and appropriate controls established, prior to commencing the refuelling. The following controls shall be in place in static refuelling locations

- All fuel storage tanks shall comply with AS1940 and be bunded according to requirements of Environmental legislation, Client and Lucas TCS procedures
- Spill Kits shall be available and stocked with sufficient spill containment equipment at all refuelling areas
- All refuelling activities to be supervised by personnel at all times, operators to remain with vehicle at all times.
- All Plant & Light vehicles are to be switched off prior to refuelling
- Approved fire resistant anti-static hoses shall be used for all refuelling.

- Fire Extinguishers shall be provided at the refuelling sites in addition to the extinguishers on vehicles or fixed facilities
- No smoking or ignition sources at refuelling stations.
- No chemical, fuel and lubricant storage areas shall be located within 20m of natural or built drainage lines, or on slopes greater than 1:10

### 19.3.2 Mobile Refuelling

Mobile fuel truck or trailer operator is to contact the plant operator to arrange location and time of refuelling. The Fuel Truck operator to park the fuel truck next to the plant to be refuelled ensuring:

- The operator is aware the refuelling is to occur and ensure the plant is switched off
- All plant is on flat stable ground prior to commencing and drip trays or adequate temporary bunding to be placed under filling points
- There are no hazardous activities that present a risk to the refuelling personnel or the environment
- The refuelling operation will not adversely affect other work activities or sensitive environments such as habitats etc.
- The procedure is conducted on disturbed ground well away from waterways and drains (minimum 50m)
- Operator to ensure that they remain at the refuelling point throughout the duration of the refuelling operation and maintain visual contact with the pump and hose at all times.
- Spill kits are maintained in serviceable condition on all refuelling trucks and trailers
- No chemical, fuel and lubricant storage areas shall be located within 20m of natural or built drainage lines, or on slopes greater than 1:10

## 19.4 Erosion & Sediment Control / Stormwater Management

Lucas TCS is aware that soil erosion and the generation of sediment during construction activities cannot be entirely prevented and as such sound planning is required to reduce the potential for erosion control measures and effective stormwater management strategies ensuring that these reduce the impact of erosion and sedimentation both on and off site. Lucas TCS has identified a number of Environmental Aspects and Impacts that must be managed throughout the course of the Project that require assessment and controls to ensure that the impact on the environment and the local area is minimised

A Project Risk Assessment is conducted prior to works commencing and shall include

- The potential for the environment to be adversely affected
- Selection of appropriate equipment
- Selection of appropriate Sediment and Run-Off control measures
- Stockpile Management
- Disposal of Waste

Stormwater management will be undertaken in compliance with the Stormwater Management Manual of Western Australia as well as the Best Practice Erosion and Sediment Control. Stormwater management shall be effectively achieved by:

- Describing measures to be implemented to minimise erosion and sedimentation during construction activities
- Ensuring no unlawful degradation of surface and ground water occurs because of construction

- Effectively managing surface water outside and within the King Rocks Wind Farm by implementing effective erosion and sediment controls as well as water discharge procedures
- Ensuring appropriate measures are implemented to comply with relevant legislation
- Guiding workers and subcontractors on the management of soil, surface water and ground water quality within the project and outside vicinity during construction.

Erosion and sediment control procedures shall be adopted to ensure minimal erosion and movement of sediment through the stormwater system. Controls shall be identified prior to works commencing in any area where the potential for environmental impacts exists and controls shall be inspected on a regular basis as outlined in HSEC-PRO-062 - Sediment & Erosion Control.

Soil erosion and sediment control shall include but is not limited to the following details:

- Staging of operations and sequence of works.
- Diversion of upstream water around the site.
- Provision of temporary drains and catch drains.
- Application of diversion, dispersal and/or retention, measure to concentrate flows to control and dissipate stormwater through the site without damage.
- Spreader banks or other structures to disperse concentrated runoff.
- Temporary treatments such as contour ploughing or bunding to disturbed areas and long-term stockpiles.
- Restoration of disturbed areas in progress with the works.
- Use of mulch materials to protect disturbed or exposed areas where suitable.
- Diversion of stormwater to existing site drainage at all site areas and access and haulage tracks, borrows pits, stockpiles and storage areas and compound areas.
- Not obstructing any waterways
- Take all necessary precautions to prevent heading up of flood waters and / or damage to the works from the effects of water

| Element   | Description   |
|-----------|---|
| Objective | Identify, Assess and control risks arising from erosion and sedimentation generated from Lucas TCS Operations |
| Target    | No Erosion and / or Sedimentation impacts during the project  |

| Element  | Description  |
|----------|--|
| Controls | <ul style="list-style-type: none"> <li>• All Lucas TCS and Contractors to undergo an environmental induction prior to work commencing, including:             <ul style="list-style-type: none"> <li>• High risk erosion periods and management actions utilised to control erosion and sedimentation during these periods.</li> <li>• Awareness of the importance to maintain erosion and sediment controls</li> <li>• The requirement to notify Supervisors / Managers if erosion and sediment controls require maintenance</li> <li>• No dewatering activities to be undertaken where the water will reach a waterway, or offsite. Records to be kept of all dewatering activities.</li> <li>• Notification of environmental incidents</li> </ul> </li> <li>• Site office and car park areas and haul roads to be stabilised with clean rock (preferably placed over geofabric) to establish hard stand and stabilised access areas.</li> <li>• Minimise areas of unstable soils vulnerable to run off and erosion by appropriate staging of construction and stabilisation activities.</li> <li>• Sediment controls to be implemented at the earliest possible time including             <ul style="list-style-type: none"> <li>• Sediment basins and retention ponds</li> <li>• Check dams</li> <li>• Kerb inlet sediment traps</li> <li>• Modular sediment barriers</li> <li>• Sediment fences</li> <li>• Buffer Zones</li> <li>• Rock pads</li> </ul> </li> <li>• Ensure stabilised site entrances through clean rock pads and use rumble grids where practicable to prevent soil from being tracked onto the local road network.</li> <li>• Identify appropriate areas for plant and equipment washdown, located at least 50m from drainage lines</li> <li>• Erosion and sediment control measures identified for the management of construction activities will be recorded on the Site Specific Environmental Plans (SSEPs), which are diagrammatic representations of where the ESC measures</li> <li>• Erosion and Sediment Control devices are installed in accordance with the Stormwater Management Manual before construction activities commence or progressively as construction activities develop and the site conditions change.</li> <li>• Stormwater run-off will be directed around the site where practicable via swale drains.</li> <li>• All vehicles will be kept to well define access routes. No traffic will be permitted off of the designated work area</li> <li>• Clearly identify areas that may be subject to disturbance and delineate those areas for the purpose of ensuring that no disturbance occurs beyond those areas.</li> </ul> |

| Element    | Description  |
|------------|--|
|            | <ul style="list-style-type: none"> <li>Proposed clearing area, stockpile location, estimated volume and recovery methods to be included in clearing permits</li> <li>Sediment control measures including drains, diversions and silt fences will be installed along identified natural and constructed drainage lines before construction commences as required.</li> <li>Sediment control devices will be installed downstream of areas of disturbed soils when applicable.</li> <li>All grubbed and stripped topsoil will be stockpiled and maintained for use in rehabilitation.</li> <li>Stockpiles will be located at least 30 metres from drainage lines and natural waterways. Stockpile heights shall not exceed 1.5 metres.</li> <li>The number of stockpiles, areas and the time stockpiles that are exposed will be minimised.</li> <li>Stockpiles and batters or other exposed surfaces that are to remain exposed to erosion for more than 28 days shall be covered to prevent erosion.</li> <li>Sediment controls will be established around stockpiles as necessary.</li> <li>Ensure that existing creeks and waterways are free from sedimentation through the provision of sedimentation controls such as diversions, bunds or silt fences.</li> <li>Mulch shall be used in flat / low flow surfaces to stabilise disturbed soils.</li> <li>Where trees are required to be removed more than 2 months in advance of earthworks, only that part of the tree that is above ground level will be removed, and the roots will remain intact.</li> </ul> |
| Monitoring | <ul style="list-style-type: none"> <li>All construction activities will be monitored for compliance</li> <li>All erosion and sediment control devices shall be visually inspected on a regular basis, as per the Environmental Checklists</li> <li>Erosion and Sediment Control Measures to be inspected prior to expected serious rainfall events, where greater than 32mm within 24 hours is forecast</li> <li>Erosion and Sediment Control Measures to be inspected prior to expected serious rainfall events, where greater than 25mm of rainfall has been recorded in the site rainfall gauge.</li> <li>Erosion and Sedimentation inspections undertaken following rain events greater than 15mm in 24 hours</li> <li>Adjoining roadways shall be visually inspected on a regular basis for evidence of sediment carted from the site.</li> <li>The effectiveness of the Environmental Management Plan and Site-Specific Environmental Plans will be reviewed on a regular basis</li> </ul>   |

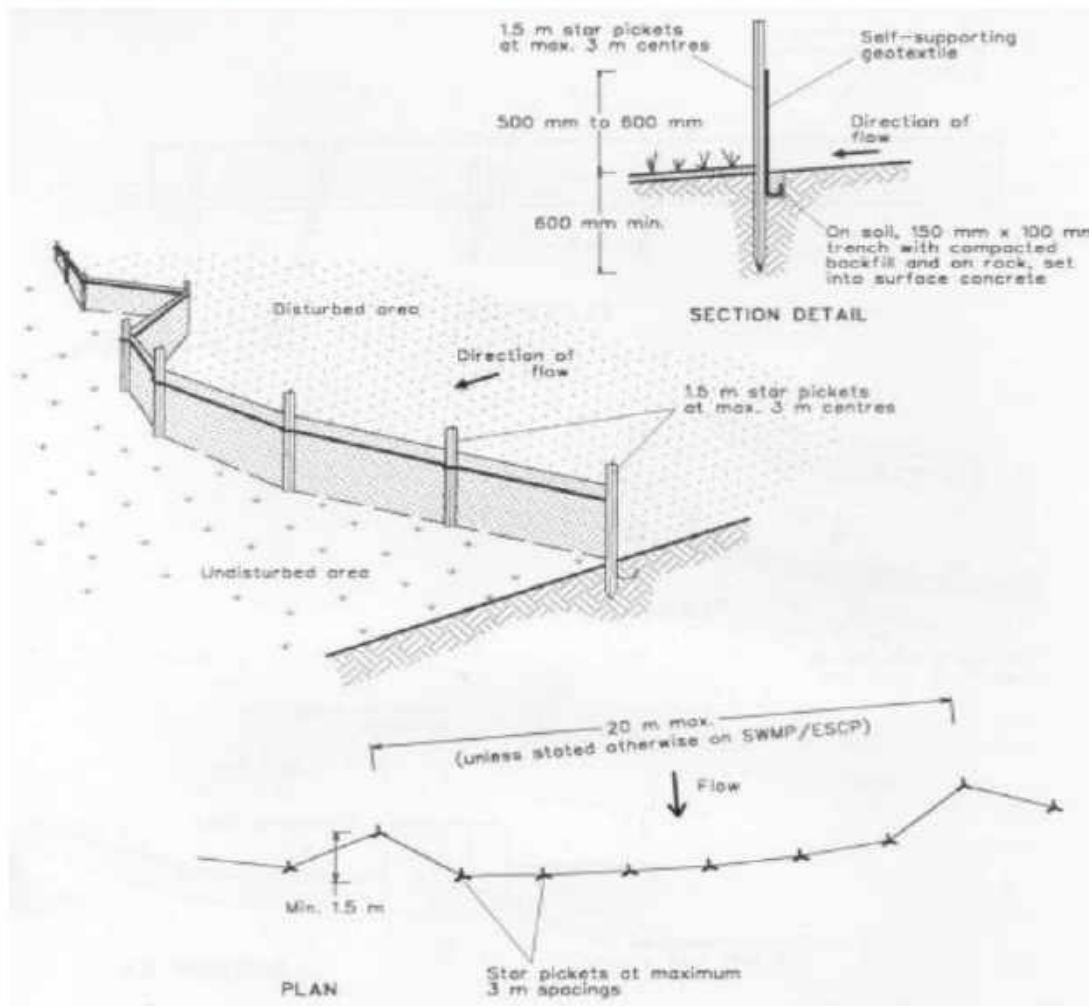
| Element            | Description   |
|--------------------|---|
| Reporting          | <ul style="list-style-type: none"> <li>A log of the effectiveness of the erosion and sediment control devices will be prepared, including recommended improvements to the system where appropriate.</li> <li>Notification shall be undertaken to Vestas immediately of any incident that may have caused or threatened serious environmental harm or material environmental harm</li> <li>Environmental Checklists shall be conducted daily, weekly and monthly and uploaded into the Lucas TCS Myosh System</li> </ul> |
| Corrective Actions | <ul style="list-style-type: none"> <li>Erosion and sediment control devices will be cleared, repaired or replaced whenever inspections show signs of non-compliance or ineffective capability or capacity.</li> <li>Where erosion and sediment control devices are found to not be in accordance with the EMP, work in the affected area will cease and corrective actions taken prior to recommencing works.</li> </ul>  |

#### 19.4.1 Reporting

The Lucas TCS onsite Supervisor / Manager will be responsible for modifying or stopping the activities generating erosion or sedimentation until corrective actions have been determined. Instances of excessive erosion or sedimentation, or weather conditions that increase the potential of impact on local residents will be reported to Vestas as an environmental incident.

The Project Manager will review all reported incidents relating to erosion and sediment control and determine corrective or preventive actions required. Corrective and preventive actions will be implemented and monitored visually on site to ensure they are effective.

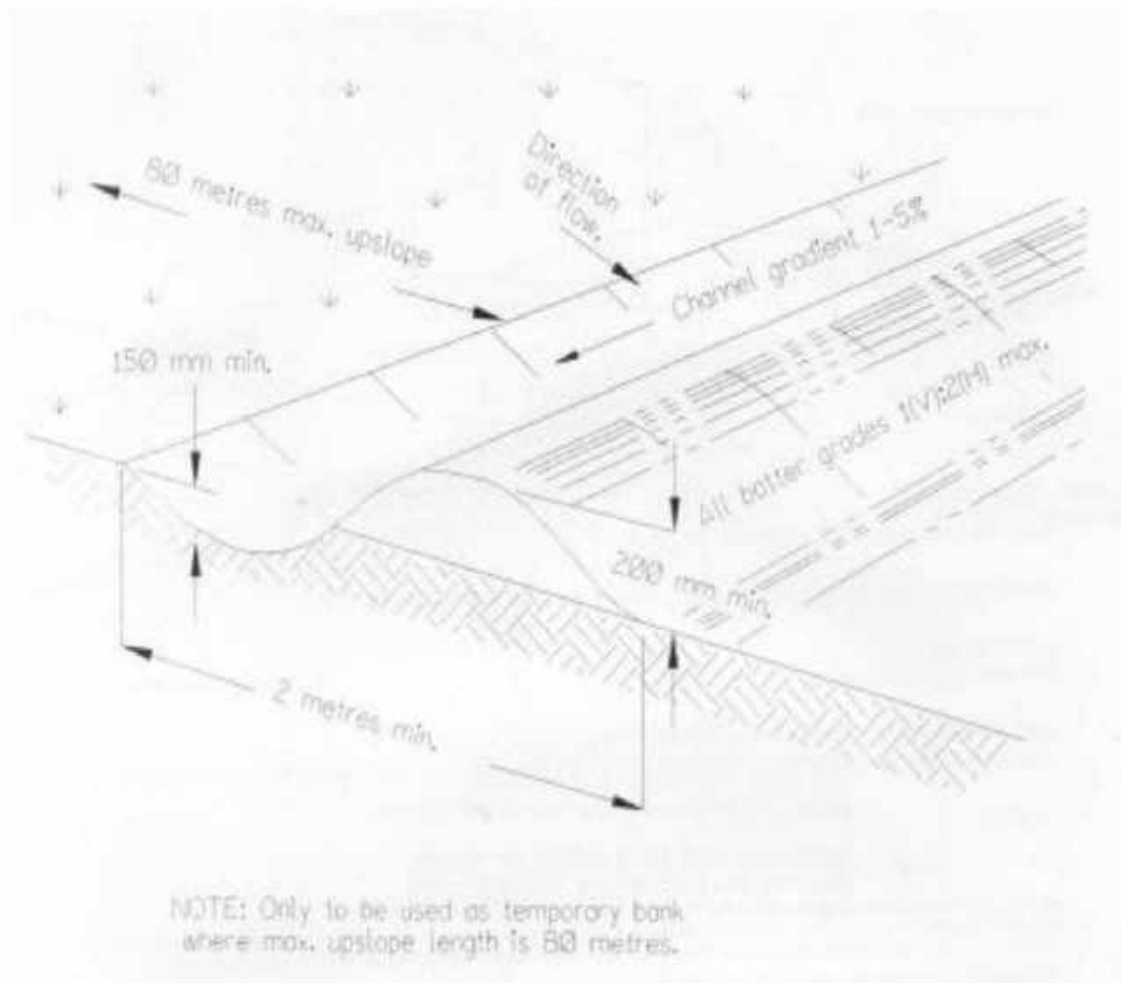
## 19.4.2 Erosion & Sediment Control Example 1 – Sediment Fence



### Construction Notes

- Construct sediment fence as close as possible to parallel the contours of the site
- Drive star pickets into the ground 3 metres apart
- Dig a 150mm deep trench along the upslope line of the fence for the bottom of the fence to be entrenched
- Backfill trench over base of fabric.
- Fix self-supporting geotextile to upslope side of posts with wire ties or as recommended by geotextile manufacturer
- Join sections of fabric at a support post with a 150mm overlap

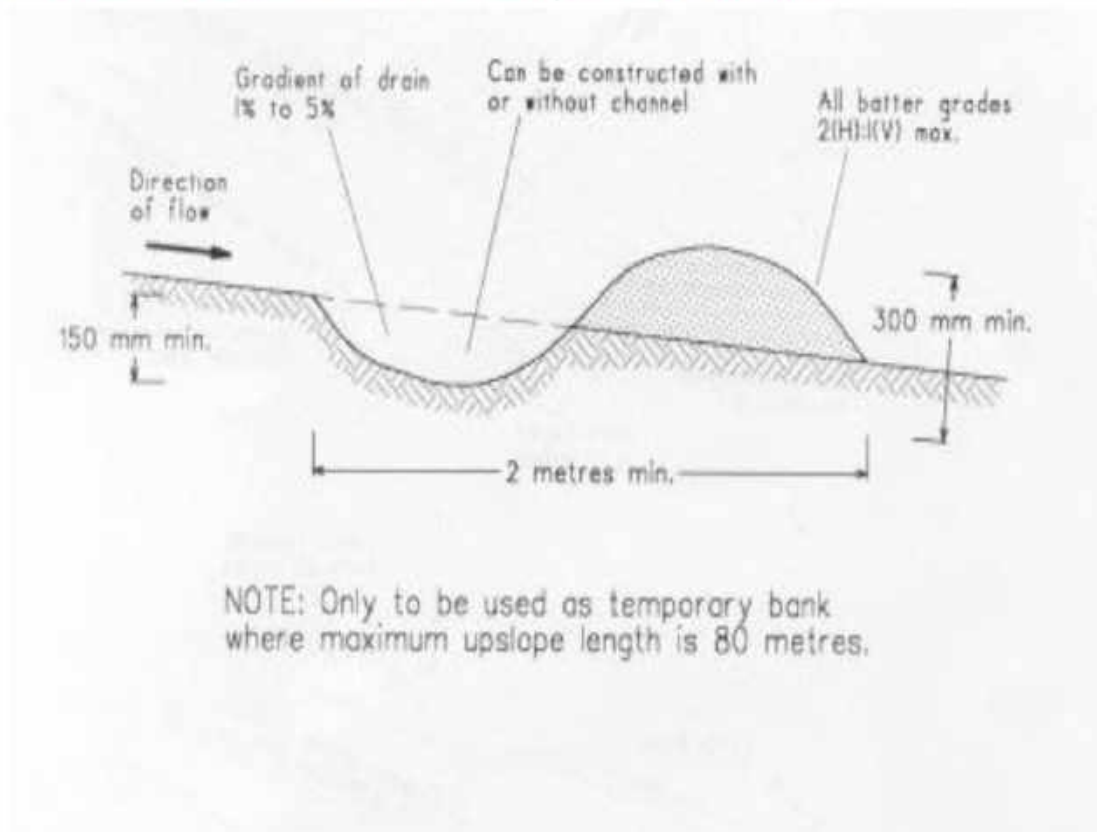
### 19.4.3 Erosion & Sediment Control Example 2 – Catch Drains



#### Construction Notes

- Construct along gradient as specified
- Maximum spacing between banks shall be 80 metres
- Drains to be of parabolic or trapezoidal cross section and not V-shaped
- Earth banks to be adequately compacted in order to prevent failure
- Construction is of a temporary nature and shall be completed at the end of a day's work or immediately prior to forecasted rain events
- All outlets from disturbed lands are fed into a sediment basin or similar
- Discharge run-off collected from undisturbed lands onto either a stabilised or an undisturbed disposal site within the same sub-catchment area from which the water originated
- Compact with a suitable implement in situations where they are required to function for more than five days
- Earth banks to be free of projections or other irregularities that will impede normal flow

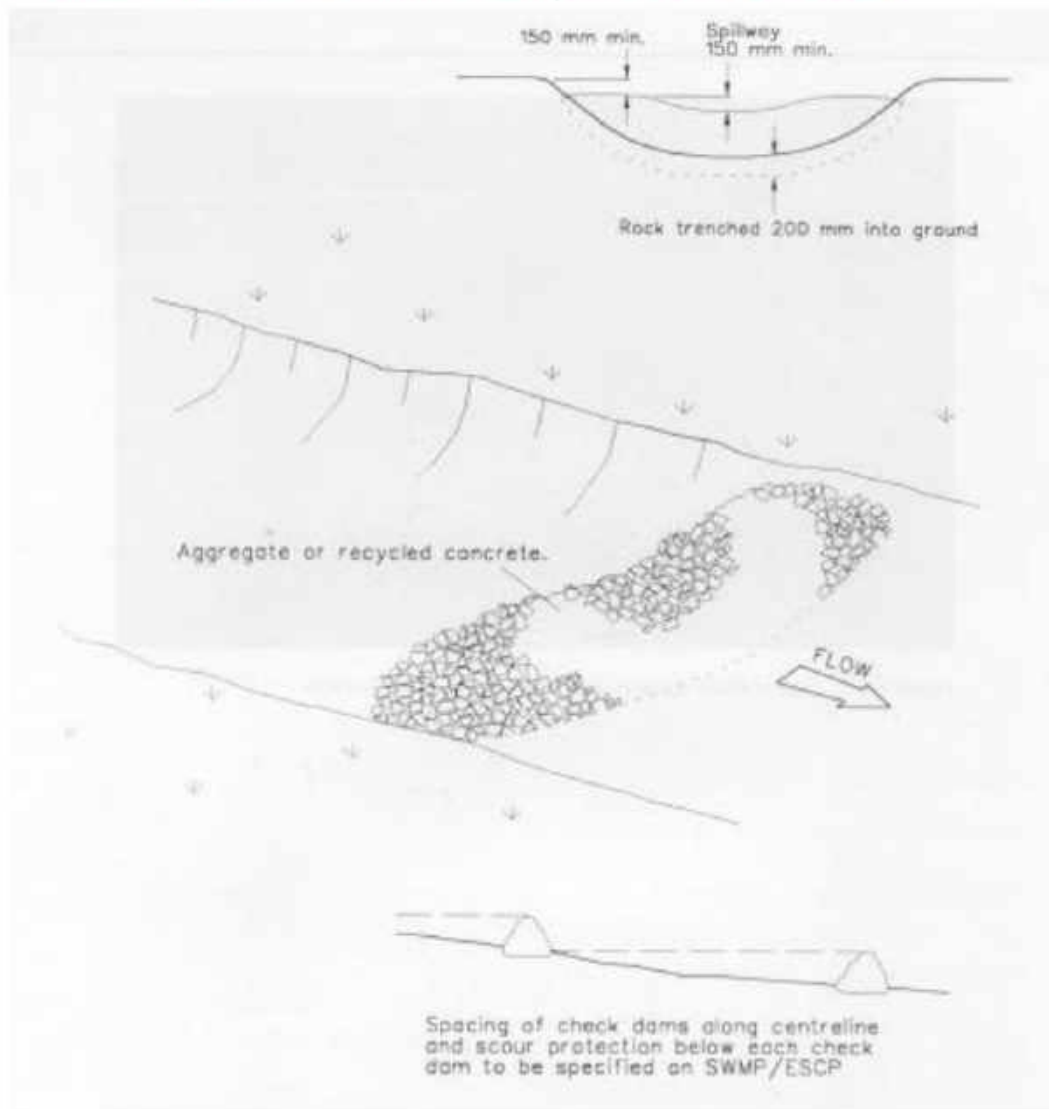
#### 19.4.4 Erosion & Sediment Control Example 3 – Earth Banks



#### Construction Notes

- Construct with gradient of 1 percent to 5 percent
- Avoid removing trees and shrubs if possible
- Drains to be circular, parabolic or trapezoidal cross section and not V-shaped
- Earth banks to be adequately compacted in order to prevent failure
- Permanent or temporary stabilisation of the earth bank to be completed within 10 days of construction
- All outlets from disturbed lands are to feed into a sediment basin or similar
- Discharge run-off collected from undisturbed lands onto either a stabilised or an undisturbed disposal site within the same sub-catchment area from which the water originated
- Compact bank with a suitable implement in situations where they are required to function for more than five days
- Earth banks to be free of projections or other irregularities that will impede normal flow

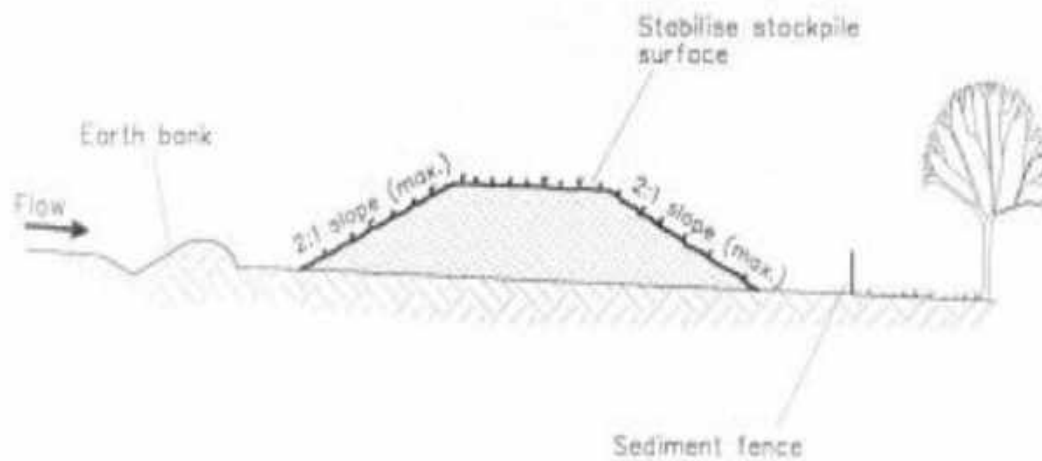
#### 19.4.5 Erosion & Sediment Control Example 4 – Rock Check Dam



##### Construction Notes

- Trench structure 200mm into the ground surface wherever the structure contacts the bed / base. Fill trenches to 100mm above ground surface to reduce the risk of undercutting
- Ensure the height of the spillway is less than 1 metre above the floor
- Space checks so that the toe of the upstream dam is level with the spillway of the next downstream check dam

#### 19.4.6 Erosion & Sediment Control Example 5 – Stockpiles



##### Construction Notes

- Locate the stockpile at least 5m from existing vegetation, concentrated water flows, roads and hazard areas.
- Construct on the contour as a low, flat, elongated mound.
- Where there is sufficient area topsoil stockpiles shall be less than 2 metres in height
- Construct earth bank on the upslope side to divert run-off around the stockpile and a sediment fence 1 to 2 metres downslope of the stockpile.

## 19.5 Noise Control and Vibration

Noise shall be controlled on sites as per HSEC-PRO-063 – Noise Pollution & Control Procedure. Regular maintenance and selection of appropriate plant shall be undertaken as well as installation of barriers between the noise and the receiver where required. Lucas TCS shall ensure that Noise is considered in all construction activities and schedules as to not adversely impact the public or wildlife.

Vibration risks shall be assessed and controlled as per the HSEC-PRO-021 – Vibration Control Procedure and shall include at the commencement and planning stages of the work, selection of appropriate plant and methodologies to minimise the vibration risks to surrounding environments.

| Element   | Description   |
|-----------|---|
| Objective | To minimise nuisance noise and vibration emissions throughout Project activities  |
| Target    | Minimise construction noise generated for the duration of the construction phase  |
| Controls  | <ul style="list-style-type: none"> <li>Working hours shall be restricted to the hours approved for the project being Monday to Saturday 7am to 7pm. Works may take place outside of these hours where it is required to finish work that needs completion once started such as foundation concrete pouring.</li> <li>Approval shall be sought from the Shire of Kondonin through Vestas for all works that are proposed outside of these hours including Sundays and Public Holidays. A continuous Sunday works for Civil scope is considered for a period of 6 months from the date of BoP commencement. Examples of work include internal access road works, hardstand, foundation, concrete pour, anchor assembly &amp; quality inspections.</li> <li>Mitigation to reduce community impacts on these days shall include: <ul style="list-style-type: none"> <li>Shorter work duration</li> <li>Minimal work force &amp; equipment to avoid heavy traffic near the residential areas and complies with noise</li> <li>Workforce travel or vehicles use the route with lesser residential areas to reduce community disturbances</li> </ul> </li> <li>Equipment, vehicles and machinery will be maintained; loose components, rattling covers, worn bearings etc. should be replaced as soon as possible to reduce levels of nuisance noise.</li> <li>Vehicle mufflers will be fitted to all heavy and light vehicles</li> <li>Locate noisy plant, Site Access Roads and site compounds as far away as possible from noise sensitive receptors</li> <li>Plant and equipment shall be turned off when not in use – no idling policy</li> <li>Machnes generating excessive noise shall be tagged out of service until repairs or modifications undertaken</li> <li>Orienting Plant known to emit noise strongly in one direction so that noise is directed away from noise sensitive areas</li> <li>Limiting Truck movements away from sensitive noise receptors</li> <li>Ensuring that Project Employees adopt noise mitigation practices, such as ensuring that tailgates are cleared and locked at the point of</li> </ul> |

| Element            | Description  |
|--------------------|--|
|                    | <ul style="list-style-type: none"> <li>unloading, shutting down or throttling down machines that are used intermittently in the intervening periods between works; etc.</li> <li>Using noise attenuating enclosures for stationary items of plant normally operating continuously, such as generators and compressors.</li> </ul>  |
| Monitoring         | <ul style="list-style-type: none"> <li>No routine qualitative noise monitoring is required. However, if noise complaints are received, qualitative or quantitative monitoring may be required to confirm complaint.</li> <li>Sound Level Meters available for assessment of noise generating activities where required</li> </ul>  |
| Reporting          | <ul style="list-style-type: none"> <li>Non-conformances and complaints shall be logged and include the date, time, name and contact number (where relevant) subject of complaint or non-compliance and weather conditions.</li> <li>The date, time and nature of high noise activities shall be logged.</li> <li>Non-conformance and complaint details shall be forwarded to the Client as soon as practicable.</li> <li>In the event that qualitative noise monitoring is required, the results shall be kept in the office of Lucas TCS and available for inspection at any time during normal working hours.</li> </ul> |
| Corrective Actions | <ul style="list-style-type: none"> <li>In the event that nuisance noise becomes the basis for consistent complaints that are not considered frivolous or vexatious, strategies for noise abatement shall be considered and implemented where practicable.</li> </ul>   |

Lucas TCS is aware that any construction related caused structural damage to a building or structure identified shall be the responsibility of Lucas TCS to arrange for the repairs of damage required in a manner that is consistent with the character and fabric of the item. Where approval under the Development Act is required, this shall be obtained by Lucas TCS prior to any rectification or repairs of damage being undertaken. Repairs shall be determined and documented by a suitably qualified heritage architect.

Lucas TCS shall undertake appropriate community consultation regarding construction noise in areas where sensitive receptors are present as outlined in the Operational Instruction 21.7 or as required by the regulatory authority.

## 19.6 Air Quality & Dust Pollution

Air quality and dust generation shall be assessed ongoing on all Lucas TCS worksites and control measures placed as described in HSEC-PRO-064 – Dust & Air Pollution. Controls shall include the dust suppression on all worksites through the use of Water Carts and Lucas TCS shall investigate the requirement for chemical stabilisers where required to ensure that dust is kept to a minimum. Regular maintenance and servicing of all plant and equipment shall be undertaken to ensure that vehicle and exhaust emissions are minimised.

Dust control measures:

- Water bowser to be used to suppress dust throughout the site.

- All personnel and supervisors shall keep disturbed surface areas to a minimum by developing and clearing sites in stages. Where possible full topsoil strip will be discouraged to ensure that disturbed areas are minimized.
- Where wind fencing is appropriate Lucas shall use such products to minimise dusts being blown from the worksite and affecting surrounding areas.
- Where possible Lucas shall commence revegetation as soon as possible after construction is completed to reduce the amount of erosion and dust from recently cleared areas.
- Where appropriate, Lucas will investigate the need for and use of chemical stabilisers to minimise dust at its operations.
- All traffic shall remain on approved and established tracks / roads unless authorised by the Site Manager. Speed restrictions shall be enforced and where dust minimisation is extremely important, restriction of traffic on the tracks / roads shall be undertaken.
- Stockpiles or materials shall be covered or watered where required to prevent windblown dusts leaving the worksite and affecting surrounding areas.

| Element   | Description   |
|-----------|---|
| Objective | To minimise the adverse impact of dust generation arising from Project activities   |
| Target    | Minimise dust impact for the duration of the construction phase.  |
| Controls  | <ul style="list-style-type: none"> <li>• Watering equipment shall be readily available and used on-site as required Throughout Project.</li> <li>• All dust generating areas shall be watered as required to suppress dust throughout the Project</li> <li>• Stockpiles shall be regularly watered or be fenced to contain windblown material</li> <li>• Stockpiles shall be located away from areas susceptible to disturbance by wind</li> <li>• Truck loads shall be covered</li> <li>• stabilise materials to be stockpiled for longer than a period of 1 month by grass seeding, covering or other appropriate means to prevent generation of dust;</li> <li>• Progressive vegetation of the site as work proceeds as applicable</li> <li>• minimise the extent of exposed, stripped surface until covered with appropriate fill material</li> <li>• Equipment, vehicles and machinery will be maintained so that diesel emissions remain within acceptable limits and do not emit to the atmosphere visible smoke for any period greater than 15 consecutive seconds for plant not registered for use on public roads; and 10 seconds for plant registered for use on public roads</li> <li>• Dust generating activities shall be avoided or minimised, wherever practical, during windy conditions.</li> <li>• Activities shall cease in situations where dust emissions cannot be adequately controlled.</li> </ul> |

| Element            | Description  |
|--------------------|--|
|                    | <ul style="list-style-type: none"> <li>• Not permit the emission of odorous substances or particulates, which create or are likely to create objectionable conditions for the public; and</li> <li>• Drivers are to obey the on-site speed limit and adopt a driving practice where dust generation is minimised.</li> <li>• Dust complaints shall be reported to the client as an incident</li> <li>• Adverse impacts from dust on vegetation, fauna or heritage sites outside of the disturbance zone shall be reported to the client as an incident</li> <li>• Community contact form shall be utilised where contact with the community is made</li> <li>• Observation and Complaint Register shall be completed where community contact forms are completed.</li> </ul> |
| Monitoring         | <ul style="list-style-type: none"> <li>• Dust emissions and potential dust generating activities and areas shall be monitored visually throughout Project activities.</li> <li>• Monitor and review activities for non-compliances or complaints.</li> <li>• Formal dust monitoring including monthly dust records collected from dust monitors</li> </ul>   |
| Reporting          | <ul style="list-style-type: none"> <li>• Non-conformances and complaints shall be logged and include the date, time, name and contact number (where relevant) subject of complaint or non-compliance and weather conditions.</li> <li>• Non-conformance and complaint details shall be forwarded to the client as soon as practicable.</li> </ul>  |
| Corrective Actions | <ul style="list-style-type: none"> <li>• Dust generating areas shall be watered to achieve compliance targets.</li> </ul>  |

## 19.7 Waste Management

Waste – in its widest sense waste is anything that is discarded by an operation. It includes effluent discharges and atmospheric emissions, as well as solid waste and contaminated liquid waste. Types of waste that are expected to be generated during the course of the project include:

- Oils and Grease from plant & Equipment
- Tyres and Batteries
- General waste such as paper, cardboard, plastics & General putrescible waste
- Sewage effluent.
- Hazardous materials and contaminated items such as soil, oil filters and rags.

Shown in the diagram to the right is the Waste Hierarchy which Lucas attempts to manage all waste by on site.

Greater value is placed on the reduction and elimination as this means no waste, and none of all the upstream effort made to produce raw materials, process form and deliver them.

Reuse of whole products such as overhaul of engines and the like as well as heavy machinery, pumps, compressors and large IT and office equipment

The recycling of materials is an important strategy for Lucas particularly through paper, glass, scrap metals and aluminium cans on projects.

The aim of Lucas Waste Management is to minimise the amount of materials and products that are disposed of at landfill and approved disposal sites

A series of environmental objectives have been developed to mitigate the environmental impacts of waste resulting from Lucas activities. These include:

- Procurement of materials, aimed at minimising the generation of waste from the use of these materials
- Re-use and recycling of materials to be undertaken wherever practicable and feasible,
- Provide appropriate signage and receptacles to direct segregation of wastes,
- Make recycling facilities available within the office, workshop and crib room areas for any viable recyclable materials including but not limited to glass, paper, aluminium cans and scrap metals.
- Provide designated bins and areas available for reusable materials including but not limited to oily waste, batteries, tyres, wooden pallets, glass, paper, aluminium cans and scrap metals.
- Adhere to the Environmental Management Plan and Hazardous Substance Management Procedures when handling, storing and transporting chemical & hydrocarbon wastes and for response procedures in relation to incidents or spills of these wastes
- Designated bins to be provided for general putrescible waste fitted with secure lids in all office, workshop or crib areas

Lucas TCS shall ensure that the site is kept clear of litter at all times.



| Element   | Description   |
|-----------|---|
| Objective | To minimise the potential for environmental impact of wastes generated on site.   |
| Target    | No contamination or environmental impact of the site by waste during the construction phase   |
| Controls  | <ul style="list-style-type: none"> <li>• Where possible Lucas TCS shall minimise the generation of waste through the use of the Waste Hierarchy</li> <li>• No waste products shall be disposed of on-site other than selected soil, rock and cleared vegetation originating from the site.</li> <li>• All waste materials from the construction phase shall be regularly cleaned from the site and disposed of off-site in accordance with current regulatory requirements.</li> <li>• All waste materials to be removed off-site shall be contained on-site prior to disposal, using appropriate storage containers or facilities</li> </ul> |

| Element            | Description  |
|--------------------|--|
|                    | <p>until removed off-site, including the covering of containers/facilities to prevent litter escaping from the site.</p> <ul style="list-style-type: none"> <li>• Maintain a high quality of housekeeping and ensure that materials are not left where they can be washed or blown away to become litter.</li> <li>• Waste and recyclables shall be segregated according to their chemical and physical characteristics or disposal method</li> <li>• No waste shall be disposed of in any trench, excavation or pit</li> <li>• Sufficient bins / skips to be provided at all worksites</li> <li>• Receptacles to be labelled with relevant waste type and be covered with fitted lids</li> <li>• Waste Collection points to be set up in all work areas and have the capacity to prevent waste cross contamination</li> <li>• Hydrocarbon contaminated soil to be segregated and placed in marked bins</li> <li>• Provide bins for construction workers and staff at locations where they consume food.</li> <li>• Regular inspection of the property boundary shall be undertaken to ensure litter or waste does not escape from the site into neighbouring properties.</li> </ul> |
| Monitoring         | <ul style="list-style-type: none"> <li>• Property boundaries shall be inspected regularly.</li> <li>• All waste containment and disposal activities shall be logged, including type and volumes of materials and location of licensed receiving facility.</li> </ul>   |
| Reporting          | <ul style="list-style-type: none"> <li>• Non-conformance and complaint details shall be forwarded to Lucas TCS as soon as practicable.</li> </ul>  |
| Corrective Actions | <ul style="list-style-type: none"> <li>• In the event of a non-conformance, containment and clean up action will be undertaken as soon as practicable.</li> <li>• If litter has escaped from the site or is negatively impacting the boundary, the litter shall be immediately collected and appropriately contained for disposal off-site.</li> </ul>   |

Wastes including asbestos (all chemical forms), low level contaminated soil, contaminated soil and water, oils, containers and bags containing hazardous compounds, detergents, paint sludge's and residues or pesticides, if not managed correctly may pose a threat to the life or health of living organisms due to their toxic properties. Other wastes in this category may pose a threat to the safety of humans or equipment due to explosive, reactive or corrosive properties. The disposal of such waste is identified in HSEC-PRO-066 – Contaminated Material Procedure and HSEC-PRO-069 – Disposal of Prescribed Waste Procedure.

Pumping of waste water shall be undertaken as per HSEC-PRO-065 - Pumping of Waste Water as shall involve the inspection and identification of contamination prior to determination of whether the waste water shall be pumped to an alternative location and allowed to evaporate, filtered prior to entry to the storm water system or where contamination is found, removed from site and disposed of in accordance with local regulatory requirements.

## 19.8 Cultural Heritage

Lucas TCS shall ensure that works avoid disturbance of cultural heritage sites, structures, or items of importance and shall create an Aboriginal & Cultural Heritage Management Plan for the Project. Native Title

### 19.8.1 Native Title

The project area is within the Ballardong Native Title Settlement Area and is subject to the Ballardong People Indigenous Land Use Agreement (ILUA), agreed to in 2015. The ILUA provides for the Noongar Standard Heritage Agreement (NSHA), which Synergy entered into in September 2022.

The transport route intersection upgrades will traverse through Gnaala Karla Booja Aboriginal Corporation lands. Their involvement will be required (through Synergy), where ground disturbance activities will take place at those intersections.

### 19.8.2 Heritage Management Background

Prior to the heritage survey being undertaken, AHA Logic undertook a desktop assessment of the survey area and surrounds to consider the heritage surveys that had been undertaken and any recorded Aboriginal sites. This assessment considered the results of searches of the Aboriginal Heritage Inquiry System (AHIS), the Register of Aboriginal Sites (Register) and National Native Title Tribunal (NNTT) databases. The search found that there are no recorded Aboriginal heritage sites or places of cultural heritage significance within 9km of the survey area. The nearest recorded site is Anderson Rocks 2, a site of significance recorded in 1981. There are approximately 15 recorded sites within 30km of the survey area.

Two Aboriginal heritage surveys have been undertaken over a very small area of land within the project area. These surveys were undertaken in the middle of the project area for the purpose of planning installation of linear infrastructure. No Aboriginal sites were recorded during these surveys. The information contained in these reports and of site recordings within 30km of the survey area indicate that Aboriginal sites are located in the large granite domes and outcrops. These sites include engravings, paintings and gnamma holes. Further, a granite outcrop containing a shallow gnamma hole was identified in an area fenced off from land use outside of the survey area. The Ballardong representatives identified this place to be a place of cultural value and requested that the area not be impacted by future land uses.

| Element   | Description   |
|-----------|---|
| Objective | To ensure protection of identified Aboriginal heritage sites or places of cultural heritage significance  |
| Target    | To ensure that all heritage sites or places of cultural heritage significance both within and outside of the project boundary are not impacted by construction activities   |
| Controls  | <ul style="list-style-type: none"> <li>All Cultural Heritage information reviewed on the location aboriginal or European heritage sites in the area for proposed traffic routes and any clearing required, prior to mobilisation</li> <li>Erect exclusion zones as directed for all known areas</li> <li>Known heritage places will be identified and protected from unauthorised disturbance by erecting a physical barrier, such as a mesh fence. The fence will be erected at the edge of the exclusion zone or no go zone.</li> <li>Exclusion zones will be implemented prior to any works commencing in the area.</li> <li>Permit to disturb or equivalent will be signed off by Vestas</li> </ul> |

| Element    | Description  |
|------------|--|
|            | <ul style="list-style-type: none"> <li>Where heritage item is discovered, all works shall cease and all workers informed of the find, areas to be barricaded and further actions required.</li> <li>All workers on site to be informed of the steps to be taken in the event of an unanticipated discovery. This shall include an immediate stop of all works.</li> <li>In the event of a find, exclusion area shall be set up with 10m buffer zone around the area. Lucas TCS Management to liaise with Vestas regarding nearby works.</li> </ul> |
| Monitoring | <ul style="list-style-type: none"> <li>Routine monitoring shall be undertaken to check the integrity and positioning of the bunting and fencing surrounding protected vegetation</li> <li>Flora protection zones and clearance permits to be monitored to ensure full compliance with client notification</li> </ul>   |
| Reporting  | <ul style="list-style-type: none"> <li>Non-conformance and complaint details shall be forwarded to the client as soon as practicable utilising incident reporting process</li> <li>Community Contact Form to be completed where member of the community raises issue</li> <li>Observation and complaint register updated</li> <li>All leaks and spills of hyper saline water to be reported to client as per incident reporting procedure</li> </ul>   |

Lucas TCS shall ensure that all personnel working onsite receive training relating to their responsibilities regarding cultural heritage and are made aware of any sites/areas, which must be avoided. Mark-up such sites/areas on a map and make available to all relevant personnel during site works. Where any other potential Cultural Heritage site, structure or item of importance is identified, works shall cease immediately and the Client notified. Works shall not recommence in the area until a clearance is received to do so.

### 19.9 Flora Management

Construction activities can have a significant impact on the environment and may affect large areas of vegetation, native fauna as well as the soil profile and stability of landforms. The protection of biodiversity, flora and fauna is specified in legislation at both state and commonwealth levels.

Rare & Priority Flora identified within the work area shall be identified and all staff will be made aware of the species through the site induction and through alerts placed on the crib room and office walls.

The Flora identified within the 360 Environmental desktop assessment includes 46 conservation significant flora species occurring within 25km of the Survey area. Threatened flora identified from the assessment includes:

- Acacia lanuginophylla** (T) is a dense to open, domed, erect or spreading shrub 0.5-1.2 m high with densely white-woolly branchlets, and yellow-green new shoots (CSIRO, 2021). This taxon is known from near Lake Bidby, and Lake Lockhart, growing in slightly saline sand over clay along drainage channels in low open scrub (CSIRO, 2021).
- Banksia sphaerocarpa var. dolichostyla** (T) is widespread across the region from Mt Holland (50 km to the East) and Southern Cross (150 km to the north) (Stratagen JBS&G, 2019). It is a

medium height shrub between 0.3 m to 2 m that flowers July to September. *Banksia sphaerocarpa* var. *dolichostyla* (T) can be distinguished from similar species in the field by blueish-green foliage, narrow linear toothless leaves with golden styles up to 65 mm long (others have 49-55mm long floral whorl).

- ***Eucalyptus steedmanii*** (T) is a medium height tree, growing 2 to 8 m high (with a maximum height of 12 m. This taxon is smooth bark *Eucalyptus* species growing in gravelly loamy sands over ironstone.
- ***Grevillea scapigera*** (T) is a prostrate shrub with shoots originating from below ground (suckering). The preferred habitat for this taxon is sandy or gravelly lateritic soils.
- ***Roycea pycnophylloides*** (T, EN) is a small perennial herb forming low mats up to 1 m wide. This taxon is typically found in saline flats with sandy soils, or clay.
- ***Tribonanthes purpurea*** (T) is a small herb growing 3-4 cm high. This taxon is restricted to granite rocks with seasonally wet soils in moss swards and herbfields (WAH, 2021).

Lucas TCS shall refrain from destroying, removing or clearing trees and shrubs to an extent greater than is necessary for the execution of the work under the contract. Areas to be cleared shall be inspected by Lucas TCS and the Superintendent's approval obtained before any trees or shrubs are removed, cleared or destroyed.

Lucas TCS shall take every reasonable precaution not to damage any tree, including its root system, which is nominated to be retained.

All construction activities, including storage of materials, vehicles, equipment or rubbish, must be kept away from existing trees which are to be retained. Before any excavation is carried out over roots of trees to be retained, obtain a ruling from the Superintendent as to whether the levels in the vicinity of the tree can be adjusted to protect the roots

Lucas TCS shall ensure that at all times throughout travel on the existing access tracks that all vehicles remain on the formed tracks at all times. This shall be included within site inductions and may also require adequate traffic management controls to be placed throughout mobilisation such as escort vehicles etc to ensure that there is no requirement for vehicles to leave the existing road.

Lucas TCS shall ensure that the Plant & Equipment arriving on site shall meet the requirements of the project and be submitted to checks for weed and seed.

| Element   | Description  |
|-----------|--|
| Objective | To minimise negative impacts on significant, protected or natural areas of vegetation on or adjacent to the site, and to comply with native vegetation conditions  |
| Target    | To ensure that the significant and protected area of vegetation that has been identified, is retained and not adversely affected by the construction works   |
| Controls  | <ul style="list-style-type: none"> <li>• That appropriate signage will be placed at prominent positions at each entrance to the worksite warning that trees and plantings are to be protected</li> <li>• Bulk materials and harmful materials will not be placed under or near trees or place spoil from excavations against tree trunks and prevent wind-blown materials such as cement from harming trees and plants.</li> </ul> |

| Element | Description   |
|---------|---|
|         | <ul style="list-style-type: none"> <li>• Not to remove topsoil from, or add topsoil to, the area within the drip line of trees.</li> <li>• If excavations are required near trees to be retained, give notice and obtain instructions and open up excavations under tree canopies for as short a period as possible.</li> <li>• Works are not to occur with areas under rehabilitation such as soil stabilisation or revegetation.</li> <li>• To protect areas adjacent to the tree drip line and submit proposals for an elevated platform to suit the proposed earthworks machinery and spread 100mm thick organic mulch to the whole of the area covered by the drip line of all protected trees.</li> <li>• Areas of significant and protected flora shall be identified prior to the commencement of works.</li> <li>• No vehicles shall be parked under the drip line of trees.</li> <li>• No materials or equipment shall be stored under or against trees, or on native grasses, shrubs and ground cover plants.</li> <li>• No placement of fill shall be undertaken underneath the drip line of trees unless indicated in drawings.</li> <li>• Minimise root damage of any excavations undertaken within the drip line of trees</li> <li>• All roots exposed in excavations shall be trimmed with a clean saw in accordance with AS4373</li> <li>• Where branches intrude onto the working area and are likely to be damaged during the construction of the works, the branches must be trimmed to the branch collar with a clean saw cut in accordance with AS 4373. If necessary, work close to trees must be carried out by hand to avoid damage by equipment.</li> <li>• All construction traffic shall be confined to designated access roadways.</li> <li>• No vehicle or pedestrian traffic shall be permitted beyond the boundary of the construction site unless along approved roadways or authorised to do so.</li> <li>• No trenching, excavation or storage to take place within identified protection zones.</li> <li>• Stockpiles shall be located no closer than 10 metres from designated or constructed drainage lines.</li> <li>• Prior to all clearance and ground disturbance a vegetation clearance permit shall be obtained and approved from the client</li> <li>• All staff inducted in site induction including environmental induction</li> <li>• All mature trees removed to be stockpiled for use in rehabilitation activities</li> <li>• Recreational activities outside of project area not to be permitted</li> <li>• All protected vegetation visibly demarcated within 50m of disturbance areas</li> <li>• Known invasive flora populations demarcated and signed</li> <li>• Specific work protocols developed in high risk areas of invasive flora</li> </ul> |

| Element            | Description   |
|--------------------|---|
|                    | <ul style="list-style-type: none"> <li>Invasive flora inspections undertaken on daily basis as part of HSE inspections</li> <li>Construction materials utilised within invasive flora areas to remain within specified area and not transported to other areas of the project</li> <li>All pipelines to be monitored and checked regularly for leaks / spills of hyper saline water.</li> <li>All vegetation cleared shall be mulched except for weeds and vegetation within a phytophthora infested area.</li> </ul> |
| Monitoring         | <ul style="list-style-type: none"> <li>Routine monitoring shall be undertaken to check the integrity and positioning of the bunting and fencing surrounding protected vegetation</li> <li>Flora protection zones and clearance permits to be monitored to ensure full compliance with client notification</li> </ul>  |
| Reporting          | <ul style="list-style-type: none"> <li>Non-conformance and complaint details shall be forwarded to the client as soon as practicable utilising incident reporting process</li> <li>Community Contact Form to be completed where member of the community raises issue</li> <li>Observation and complaint register updated</li> <li>All leaks and spills of hyper saline water to be reported to client as per incident reporting procedure</li> </ul>  |
| Corrective Actions | <ul style="list-style-type: none"> <li>Corrective action shall be undertaken in accordance with the outcomes of the inspections or notification by other project personnel.</li> </ul>  |

### 19.9.1 Weed Management

There are key construction activities that are undertaken on the King Rocks Wind Farm that have the potential to impact flora, fauna and habitats or could result in the introduction or spread of weeds including

- Clearing of vegetation
- Stockpiling material
- Works in proximity to vegetation to be protected from construction activities, including earthworks, the operation of plant & equipment and ancillary activities including car parking and material storage

The disposal or movement of topsoil may result in the spread of invasive weed species or plant disease. As such Lucas TCS shall:

- Ensure that weed propagules or weed infested topsoil material are not imported into the Site.
- Clean all earth moving machinery of soil and vegetation prior to entering and prior to leaving the Site.
- Ensure that the work area is checked for proclaimed pest plants prior to undertaking activities likely to disturb soil & vegetation.
- Not import weed infested material into the work zone
- Not spread pest plants through mulching activities

- Dispose of pest plants at a licensed waste disposal site

There were seven introduced species recorded during the 360 Environmental Survey including

- *Aira cupaniana* - Silver Hair Grass
- *Lolium sp.* - Ryegrass
- *Solanumnigrum* – Black Nightshade
- *Bromus sp.* – Brome Grass
- *Raphanus raphanistrum* – Wild Radish
- *Taraxacum khatoonae* - Dandelion
- *Poa annua* – Annual Bluegrass

There were no Weeds of National Significance nor Declared Pests. Further to this there was no mention of any Dieback (*Phytophthora cinnamomi*) being present.

Lucas TCS will ensure that workers on the King Rocks Project are informed of the pest species on the project and their identification through inductions, toolbox meetings etc.

Lucas TCS shall notify Vestas, of any new infestations of proclaimed pest plants and weeds in the work zone. Due to there being no known Weeds of National Significance, noxious weeds, nor the presence of Dieback, there will be no washdown between the two properties that the wind farm is located on.

| Element    | Description  |
|------------|--|
| Objective  | To avoid the spread of registered weed species into unaffected areas.  |
| Target     | Carry out construction activities without increasing the weed distribution and avoid spreading registered weeds into unaffected areas.   |
| Controls   | <ul style="list-style-type: none"> <li>• Clean all earth moving machinery of soil and vegetation prior to entering and prior to leaving the site;</li> <li>• Ensure that all plant &amp; equipment that enters the site for construction activities has been inspected before entry to verify that it is clear and free of soil and the potential of seed deposits.</li> <li>• Inform the Client immediately in the event of an outbreak of any identified weed or introduced species;</li> <li>• Ensure that weed propagules or weed infested topsoil materials are not imported onto the Site;</li> <li>• Ensure that the Work Zone is checked for proclaimed pest plants prior to undertaking activities likely to disturb soil and vegetation;</li> <li>• Vehicles to remain on access and haul roads;</li> <li>• Not spread pest plants through mulching activities;</li> <li>• Dispose of pest plants at a license waste disposal site.</li> </ul> |
| Monitoring | <ul style="list-style-type: none"> <li>• Regular visual inspections shall be carried out throughout the contract zone to ensure registered weed species are contained only within the already affected areas.</li> </ul>   |

| Element            | Description   |
|--------------------|---|
|                    | <ul style="list-style-type: none"> <li>Weed hygiene checklists completed as part of the site access authorisation process. Photos of the plant shall be taken through the process as evidence of cleanliness.</li> </ul>                      |
| Reporting          | <ul style="list-style-type: none"> <li>In the event of an outbreak of a registered weed the Client shall be notified immediately;</li> <li>Photo records shall be kept to ensure the original integrity of the site is maintained.</li> </ul> |
| Corrective Actions | <ul style="list-style-type: none"> <li>Corrective action shall be in accordance with the advice from the Client.</li> </ul>   |

### 19.10 Fauna Management

Lucas TCS shall ensure that the native or introduced fauna in the project area, identified within the project surveys and reported within the Environmental Plan are impacted neither negatively nor positively and that all waste and food scraps shall be secured and removed from sites where possible to prevent foraging by both native and introduced fauna.

Lucas TCS is committed to ensure that the native flora and fauna of a project is taken into consideration at both the planning and implementation stages with the intent that the protection of native flora and fauna is given high priority. The process of identification of flora and fauna and the implementation of protection strategies is outlined within the HSEC-PRO-067 – Flora and Fauna Inspection and Protection Procedure. Rehabilitation and Site protection is outlined within HSEC-PRO-068 – Site Protection and Vegetation Rehabilitation Procedure.

360 Environmental undertook a Biological Survey and Bird Strike Assessment for the project area in early November 2021. Fauna habitat mapping was then undertaken using a combination of field and desktop observations, which informed the more detailed field fauna survey effort. The field survey confirmed the presence of 109 flora taxa, none of which were listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999 or listed as rare or threatened under the Biodiversity and Conservation Act 2016, Eleven potential breeding habitat trees for the Carnaby's Cockatoo.

The Fauna Assessment identified 18 conservation significant terrestrial vertebrate fauna species potentially occurring within the Survey Area, comprising twelve birds, five mammals and one reptile. None of these species were recorded in the subject site during the survey.

Vestas have committed to creating No Go Zones that will be fenced at all times with high UV stabilised long lasting flagging tape and signage. These No Go Zones shall remain in place throughout the construction on the King Rocks Wind Farm to ensure that plant and vehicles do not enter the No Go Zones.

Lucas TCS shall ensure that all workers on the Project are aware of the No Go Zones and the barricaded areas through inductions, site orientations and regular toolbox training sessions.

| Element   | Description  |
|-----------|--|
| Objective | To minimise the negative impacts on fauna throughout the project |

| Element  | Description  |
|----------|--|
| Target   | Carry out construction activities with no disruption to wildlife corridors or destruction of native species. Zero fauna injuries or deaths throughout the project.   |
| Controls | <ul style="list-style-type: none"> <li>• All workers on the Project shall complete the site induction that includes: <ul style="list-style-type: none"> <li>• The significant flora and fauna species and the measures in place if a threatened species is encountered.</li> <li>• What No Go Zones (HGZ) are and why they are there</li> <li>• Awareness and importance on maintaining No Go Zone controls</li> <li>• The requirement to inform Vestas if the barricading around No Go Zones required maintenance</li> <li>• The notification process for incidents involving flora or fauna on the project.</li> </ul> </li> <li>• Ensure that No Go Zones are maintained and not entered</li> <li>• Ensure compliance with Vestas / Project clearing and land disturbance Permits</li> <li>• Where native animals may be entrapped in WTG open footings, ramps will be installed, to allow the animals to escape. The open footings will be inspected daily</li> <li>• Prior to ground disturbance, Environmental Safe Work Method Statements (ESWMS) specific to the activities and conditions of each work area, zone, or location shall be developed. The ESWMS shall include controls related to hazards and risks associated with <ul style="list-style-type: none"> <li>• Vegetation Clearing</li> <li>• Clearing &amp; Grubbing</li> <li>• Drainage Construction</li> <li>• Topsoil stripping and stockpiling</li> <li>• Earthmoving machinery cleaning</li> <li>• Weed Control</li> <li>• Waste Disposal</li> <li>• Disposal of Spill Materials</li> </ul> </li> <li>• Avoiding clearing of native vegetation where possible</li> <li>• Ensure appropriate waste management and housekeeping practices are maintained throughout the project</li> <li>• Vegetation stockpiles will be &lt;3m in height, and &lt;30m in length, to minimise dust generation</li> <li>• Vestas will be contacted in the unlikely event that sick, injured or orphaned fauna are found.</li> <li>• Sightings of significant native fauna not outlined by Environmental Management Plan to be reported to Vestas</li> <li>• All native vegetation will be cleared under the supervision of suitably qualified Fauna Spotter Catchers</li> </ul> |

| Element            | Description   |
|--------------------|---|
|                    | <ul style="list-style-type: none"> <li>Feeding or capture of fauna ( native or feral ) not to be undertaken on site</li> <li>Domestic waste at camps and crib rooms to be contained and made inaccessible to all fauna</li> <li>Open trenches to be inspected daily for fauna</li> <li>All road kills to be removed from roads and reported to client</li> <li>Trenches covered, fenced, ramped or bunded to prevent fauna entrapment / injury</li> <li>Turkeys nests utilised throughout the project site to be fenced to prevent fauna entrapment / injury</li> <li>Turkeys nests to include fauna egress by the way of barrier mesh</li> </ul> |
| Monitoring         | <ul style="list-style-type: none"> <li>Spotting of fauna shall occur during vegetation clearance works.</li> <li>Weekly environmental inspections shall be conducted to assess work area conditions, ensuring the effectiveness of installed controls related to all identified hazards and risks.</li> <li>Findings from environmental inspections to be entered into the Myosh System</li> <li>Records kept of all trapped, injured or deceased fauna collected during open trench inspections</li> </ul>   |
| Reporting          | <ul style="list-style-type: none"> <li>A record shall be made of all species injured or killed during Project Works</li> <li>Vestas to be contacted regarding all fauna related incidents</li> </ul>  |
| Corrective Actions | <ul style="list-style-type: none"> <li>Corrective action shall be in accordance with advice from Vestas.</li> </ul>   |

## 20. Notes

[illegible]

Head Office: Brookside Road, Darlington, South Australia, 5047  
Postal: PO Box 150 Brighton, South Australia, 5048  
T (08) 8179 4000  
[www.LucasTCS.com.au](http://www.LucasTCS.com.au)

