



# NEOEN Solar Farm Project

## Fire Management Plan

Doc ID: PL-EV-09  
Rev No.: 0  
Rev Date: 22/02/2017



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# 1 INTRODUCTION

## 1.1 Purpose

The purpose of this Fire Management Plan (FMP) is to provide a strategy to control flora and fauna impacts during construction in the NEOEN Solar Farm project.

This Fire Management Plan shall be read in conjunction with the *PL-EV-01 Environmental Management Plan*.

## 1.2 Document Responsibilities

This Fire Management Plan must be in place and operational prior to commencement of construction work.

The project dedicated HSE Coordinator in conjunction with the Project Director, will ensure that the plan is monitored, reviewed, maintained and updated as necessary and kept up to date during the course of the project.

One hardcopy of the Fire Management Plan and associated plans will be maintained by the HSE Coordinator (document controlled revision) for the duration of the contract.

## 1.3 Document Amendment and Distribution

This document shall be reviewed as follows:

- As requested by Management Review
- When there is a change of method and/or technology that may affect the accuracy of this document; or
- When there has been a significant event to which this document was relevant; or
- As a result of a Non Conformance resulting from an audit

Document amendments and distribution will be conducted as per detailed in the *PL-CO-01 Project Management Plan* and the *PL-QA-02 Records Management Plan*.

New and amended documentation issued after the initial approval and distribution of this plan to controlled copy holders shall be identified in the [FS-QA-RG-06 Document Control Register](#). Revision details shall be recorded in the Section 1.3.1 *Revision Status* of this plan.

All changes to documents shall be reviewed and approved by the same function that performed the original review and approval and as per the cover of this plan, unless specifically designated otherwise.

### 1.3.1 Revision Status

| Revision | Revision Date | Issued Date | Nature of modification |
|----------|---------------|-------------|------------------------|
| 0        | 2017/02/22    | 2017/02/22  | Issued to Tender       |
| 1        |               |             |                        |
| 2        |               |             |                        |
| 3        |               |             |                        |

|   |  |  |  |
|---|--|--|--|
| 4 |  |  |  |
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| 7 |  |  |  |

### 1.4 Discipline Specific Plans

The CMP is to be read in conjunction with the below mentioned Management Plans. The CMP includes the following Management Plans to be developed in the time frames as noted within the contract agreement and to enable site works to commence as quickly as possible:

- |   |   |
|---|---|
| PL-CO-01 Project Management Plan                    | PL-HR-03 Industrial Relations Management Plan |
| PL-CO-02 Project Execution Plan                     | PL-HS-01 Safety Management Plan               |
| PL-CO-03 Pre-Launch Management Plan                 | PL-HS-02 Traffic Management Plan              |
| PL-CO-04 Risk Management Plan                       | PL-HS-03 Office Emergency Management Plan     |
| PL-CO-05 Emergency Management Plan                  | PL-EV-01 Environmental Management Plan        |
| PL-CO-06 Training Management Plan                   | PL-EV-02 Flora and Fauna Management Plan      |
| PL-CO-07 BYCA Objectives and Targets                | PL-EV-03 Weed Management Plan                 |
| PL-CO-08 Contract Management Plan                   | PL-EV-04 Soil and Water Management Plan       |
| PL-CO-09 Cost Control Management Plan               | PL-EV-05 Air Quality Plan                     |
|   | PL-EV-06 Noise and Vibration Management       |
| PL-CO-10 Stakeholder Management Plan                | Plan  |
|   | PL-EV-07 Cultural Heritage Plan               |
| PL-CO-11 Construction Methodology Plan              | PL-EV-08 Waste and Energy Management Plan     |
| PL-CO-12 Site Management Plan                       | PL-EV-10 Visual Amenity Management Plan       |
| PL-CO-13 Site Establishment Management Plan         | PL-QA-01 Quality Management Plan              |
| PL-CO-14 Earthworks Management Plan                 | PL-QA-02 Records Management Plan              |
| PL-CO-15 Commissioning and Handover Management Plan | PL-DE-01 Design Management Plan               |
| PL-HR-01 Resources Management Plan                  | PL-PC-01 Procurement Management Plan          |
| PL-HR-02 Aboriginal Participation Plan              |   |

## 2 DEFINITIONS

|             |   |
|-------------|---|
| <b>BYCA</b> | Bouygues Construction Australia Pty Ltd                       |
| <b>EPBC</b> | Environment Protection and Biodiversity Conservation Act 1999 |
| <b>EMP</b>  | Environmental Management Plan (PL-EV-01)                      |
| <b>FMP</b>  | Fire Management Plan (PL-EV-09)                               |

## 3 ORGANISATION

### 3.1 *Responsibilities and Authorities*

The Project Organisational chart and overall roles and responsibilities are outlined in the EMP. The key responsibilities for Fire Management are as follows:

#### 3.1.1 Project Manager

- Ensuring appropriate resources are available for the implementation of the FMP
- Making sure emergency contacts are communicated through all work sites, and are up to date
- Ensuring that emergency drills are planned and conducted, and are debriefed afterwards

#### 3.1.2 HSE Coordinator

- Responsible for providing assistance and advice to the Project Engineers and site team to fulfil the requirements of this Plan, assessing data from inspections, monitoring and reporting, and providing project-wide advice to ensure consistent approach and outcomes are achieved
- Responsible for providing necessary training for project personnel to cover fire prevention and emergency preparedness and response
- Ensure that the personnel is advised of Fire Ban Days and relevant controls are in place
- The HSE Coordinator is also responsible for the review and update of this Plan

#### 3.1.3 General Superintendent

- Responsible for developing/revising the construction schedule in consultation with the HSE Coordinator to minimise the risks of fire
- Identifying, analysing and treating the risks before commencing works each day and ensuring that the appropriate controls are implemented and effective; thus controls may be increased or decreased as required
- Ensuring all flora and fauna controls are implemented and effective in controlling impacts

#### 3.1.4 All Workers on Site

In relation to Fire management, all workers on site are required to:

- Implement and maintain all applicable control measures
- Report any potential and/or actual incidence of fire
- Follow the emergency management procedures and plans

### 3.2 *Legal Requirements*

The following Acts, Regulations and Standards are applicable to this Project:

- *Environmental Planning and Assessment Act 1979*
- *Rural Fires Act 1997*
- *Planning for Bush Fire Protection 2006*

### **3.3 Contractual Requirements**

BYCA have identified the most critical Environmental Contractual requirements for the project, these are:

Site specific requirements are captured in the following:

- Appendix 1 – Parkes
- Appendix 2 – Griffith
- Appendix 3 – South Keswick
- Appendix 4 - Narromine

## **4 COMPETENCE, TRAINING AND AWARENESS**

As stated in the EMP all project personnel, subcontractors and consultants will receive training in the group and personal environmental obligations during the *Site Inductions* and *Toolbox Talks*. From time-to-time staff may also attend specific training sessions, when necessary, by the HSE Coordinator.

Examples of topics that will be covered during project induction and toolboxes include:

- Minimizing the risks of fire controls
- Hot work permits

## **5 FIRE MANAGEMENT**

### **5.1 Objectives**

The environmental objectives with regard to the fire management during construction are:

- Minimize the risk of a fire originated on the project and the project vicinity
- Ensure measures are in place to appropriately response in the event of a fire

### **5.2 Potential Environmental Impacts**

The potential impacts of the Project associated with fire management during the construction phase are:

- Hot works that may cause fire
- Mulch piles from clearing and grubbing
- Increase to fire fuel loading from clearing and grubbing
- Vehicle use and parking
- Disturbance to notable flora species
- Displacement/injury/death to notable fauna species that potentially exist in the area
- Removal/damage to fauna habitat
- Displacement/injury/fatality of fauna
- Smoking and careless disposal of cigarettes on site
- Site maintenance activities such as mowing, slashing and using other petrol powered tools

### 5.3 Management and Contingency Mitigation Measures

The following Fire Management measures will be implemented:

- This FMP will be implemented, revised and updated as required
- Report immediately to relevant authorities any incident that initiated or could initiate fire, as per the *PR-CO-04 Incident Management Procedure*
- Regular inspection of the works to ensure procedures and precautions are in place to minimise risk to human health and the environment
- The development of a contingency response if monitoring indicates a risk to sensitive receptors or human health
- Implement any specific conditions applied to the project by regulatory authorities
- Use of hot work permits
- Correct storage of Hazardous substances as per the *PR-CO-03 Risk and Hazard Management Procedure*
- Correct disposal of waste as per the *PL-EV-08 Waste and Energy Management Plan*
- Development and implementation of the project *PL-CO-02 Emergency Management Plan*

The success of management strategies will be reviewed on a regular basis to confirm its continued suitability for the site. Should the risk to the environment or to human health change during the construction period, management options will be reviewed.

## 6 IDENTIFY AND ASSESS

### 6.1 Fire Sensitive Areas

Refer to the following for site specific information:

- Appendix 1 – Parkes
- Appendix 2 – Griffith
- Appendix 3 – South Keswick
- Appendix 4 - Narromine

## 7 IMPLEMENT CONTROLS

### 7.1 Fire Management Control Measures

Project mitigation and management measures for fire impacts during construction are outlined in the table below:

| Source/Reference        |                |        |
|-------------------------|----------------|--------|
| Mitigation Measure      | Responsibility | Timing |
| <b>Pre-Construction</b> |                |        |

|   |                        |                  |
|---|------------------------|------------------|
| Incorporate discussion on fire impacts and mitigation measures into Site Induction  | General Superintendent | Pre-Construction |
| <b>General Construction</b>   |                        |                  |
| Fire Management Plan to be followed   | General Superintendent | Ongoing          |
| Mulch piles from cleared vegetation shall be inspected daily for risk of combustion   | General Superintendent | As applicable    |
| All hot works and other high fire risk activities require daily approval from General Superintendent prior to commencement. This includes hot work permits and inspections to ensure appropriate controls are available and implemented to prevent and response to fire | General Superintendent | Ongoing          |
| Vehicle access shall be maintained so that no vehicles are driving and/or parking in long grass   | General Superintendent | Ongoing          |
| Fire extinguishers are to be located at high risk areas   | General Superintendent | Ongoing          |
| Fire danger ratings and total fire bans will be monitored via the NSW Rural Fire Service website and adhered to at all times  | General Superintendent | Ongoing          |
| Water tank/s will be provided at each site for the RFS as required  | General Superintendent | Ongoing          |
| If burn offs are required the relevant permits will be obtained from Council and the RFS prior to work commencing   | General Superintendent | Ongoing          |
| Asset Protection Zones (APZ's) will be maintained in accordance with the conditions of approval and <i>Planning for Bush Fire Protection 2006</i>   | General Superintendent | As applicable    |
| In the event of a fire that becomes outside BYCA's capacity to manage, RFS will be notified. BYCA will assist by providing all available on-site fire management equipment (fire extinguishers, water tanks, water cart, trained personnel, machinery, etc.)            | General Superintendent | As applicable    |

These measures are consistent with the *Safety Management Plan* and *Emergency Management Plan* for the project.

## 8 INSPECT AND TEST

### 8.1 *Monitoring, Inspection and Reporting*

Daily visual inspections of the construction site will be undertaken by the HSE Coordinator and construction personnel to identify any potential flora and fauna management issues. Any actions to be undertaken as a result of site inspections will be recorded in the *FS-QA-RG-02 Corrective & Preventative Actions Register*.



All inspections will be conducted as per the *PL-EV-01 Environmental Management Plan*.

## 9 RECORDS

A record shall be maintained as per *PR-QA-07 Document Control and Record Management Procedure*.

**Appendix 1**      **Parkes**

**Appendix 2**      **Griffith**

**Appendix 3**      **South Keswick**

**Appendix 4**      **Narromine**