BERYL SOLAR FARM

ENVIRONMENTAL MANAGEMENT STRATEGY



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DOWNER

PREPARED BY:



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APPENDIX A

First Solar Environmental Policy

APPENDIX B

Downer Environmental Sustainability Policy





Abbreviations

BMP Biodiversity Management Plan
BOS Biodiversity Offset Strategy

BSF Beryl Solar Farm

CEMP Construction Environmental Management Plan

CoA Condition of Approval
CFP Chance Finds Protocol

CHMP Cultural Heritage Management Plan
CNMP Construction Noise Management Plan
DMP Decommissioning Management Plan
DPE Department of Planning and Environment

DPI Department of Primary Industries

EEC Endangered Ecological Community

EIS Environmental Impact Statement

EPA Environment Protection Authority

EMS Environmental Management Strategy

EPC Engineering, Procurement and Construction

ERP Emergency Response Plan

FRNSW Fire and Rescue NSW

FSPL First Solar Pty Ltd

HP Haulage Plan

LEMC Local Emergency Management Committee

LP Landscaping Plan

MWRC Mid Western Regional Council

MM Mitigation Measure

OEH Office of Environment and Heritage

OEMP Operations Environmental Management Plan

PCT Plant Community Type

RAP Registered Aboriginal Parties

RFS Rural Fire Service

RMS Roads and Maritime Services
SWMP Soil and Water Management Plan

TMP Traffic Management Plan
WAE Works As Executed





Introduction

1.1 APPROVED PROJECT

The Beryl Solar Farm (BSF) was granted development consent on 5 December 2017 (SSD 8183).

The approved General Layout is shown below.



Figure 1: Approved Layout
Source: Development Consent SSD 8183

1.2 APPLICANT

First Solar Pty Ltd (FSPL) is the BSF Applicant.

1.3 EPC CONTRACTOR

Downer is the Engineering Procurement and Construction (EPC) contractor engaged by FSPL to build the BSF.





1.4 STRATEGY FUNCTION

This Environmental Management Strategy (EMS) has been prepared to satisfy a Condition of Approval (CoA). Specifically, Schedule 4 CoA (1) requires:

Environmental Management Strategy

- 1. Prior to the commencement of construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
- (a) provide the strategic framework for environmental management of the development;
- (b) identify the statutory approvals that apply to the development;
- (c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
- (d) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise;
 - respond to any non-compliance;
 - respond to emergencies; and

(e) include:

- copies of any plans approved under the conditions of this consent; and
- a clear plan depicting all the monitoring to be carried out in relation to the development.

Following the Secretary's approval, the Applicant must implement the Environmental Management Strategy.

Pursuant to the definition in the Department of Planning and Environment's (DPE) Development Consent, construction is defined as:

The construction of the development, including but not limited to the carrying out of any earthworks on site and the construction of solar panels and any ancillary infrastructure (but excludes any upgrades to the public road network and site entry required under this consent, installation of fencing, artefact survey, overhead line safety marking, geotechnical drilling and/or surveying.

Operation is defined as:

The operation of the development, but does not include commissioning, trials of equipment or the use of temporary facilities.

The operation of the development in this EMS is taken to mean when the BSF is generating electricity into the grid.





1.5 STRUCTURE

The structure and scope of this EMS has been prepared consistent with the specification in DPE's consent to facilitate cross referencing for review.

Table 1.1 - EMS Structure

Section	Content	
2	Provides the strategic framework for environmental management of the BSF	
3	Identifies the statutory approvals that apply to the BSF.	
4	Identifies the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the BSF.	
5	Describes the procedures that would be implemented to keep the local community and relevant agencies informed about the operation and environmental performance of the BSF.	
6	Specifies the procedures that would be implemented to receive, handle, respond to and record complaints.	
7	Describes the procedures that would be implemented to resolve any disputes that may arise.	
8	Describes the procedures that would be implemented to respond to any non-compliance.	
9	Describes the notification procedures that would be implemented in the event of an incident.	
10	Describes how and when the Emergency Response Plan will be prepared so that there are procedures to respond to emergencies.	
11	Explains the program for the conduct and reporting of monitoring to be carried out in relation to the BSF.	

1.6 STRATEGY REVISION

Downer and FSPL will update this Environmental Management Strategy (EMS) and associated plans to the satisfaction of the Secretary prior to carrying out any upgrading or decommissioning activities at the site.

This EMS and associated plans will also be reviewed and, if necessary, revised within one month of:

- an incident report being reported to DPE (refer Section 9); or
- any modification to the existing development consent conditions.

Any changes to the management plans will be approved by the Secretary, before implementing the changes, and in consultation with relevant agencies.





Strategic Framework

ENVIRONMENTAL STRATEGY 2.1

A strategy is a plan of action designed to achieve an overall aim.

Downer and First Solar's aim is to design, construct, operate, upgrade and decommission the BSF in full compliance with the Minister's Development Consent.

Schedule 2 CoA (2) states:

The Applicant must carry out the development:

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

In the context above, Environmental Impact Statement (EIS) includes the Mitigation Measures (MM) made in both the

- Beryl Solar Farm Environmental Impact Statement (nghenvironmental, April 2017); and
- Beryl Solar Farm Submissions Report (nghenvironmental, July 2017).

The environmental management objective is to therefore comply with all CoA and MM.

PLAN OF ACTION 2.2

The plan of action is clear. It is to identify all CoA and MM that require an environmental deliverable and ensure that these are prepared at the appropriate stage of the development, prepared in consultation with relevant stakeholders, secure the requisite approvals, and then are diligently implemented.

The mechanism for achieving this is for a clear delineation of contractually enforced responsibilities between the Applicant (FSPL) and the EPC Contractor (Downer) and identifying the key environmental hold-points that must be achieved before the BSF can be built, operated, upgraded and decommissioned.

Table 2.1 provides a summary of these key hold points. It provides a full and complete listing of all plans/actions that must be prepared and/or undertaken throughout the life of the development. It includes clarification of what third party consultation and/or approval is required in the preparation and sign-off on these plans, and is based on compliance with the CoA and MM.

These hold points provide the framework and reference for checks that obligations (CoA) and commitment (MM) are known and acted upon.





Table 2.1 – Environmental Hold Points

Plan	Reference	Compliance Requirement
PRIOR TO CONSTRUCTION		
Final Layout Plans	CoA5 Schedule 2	Detailed plans of the final layout (including details on the siting of solar panels and ancillary infrastructure) must be submitted to the Department of Planning and Environment
Construction Certificate	CoA 9 Schedule 2	Obtain Construction Certificate(s) for proposed building works, pursuant to Part 4A of the <i>Environmental Planning and Assessment Act 1979</i> .
Notification of Works	CoA 8 Schedule 2	Notify the Department of Planning and Environment in writing of the date of commencement of construction.
		If construction is to be staged, the Department of Planning and Environment must be notified in writing prior to the commencement of the relevant stage, identifying the development that would be carried out during the relevant stage.
Landscaping Plan	CoA 11 Schedule 3	Preparation of a Landscaping Plan to the satisfaction of the Department of Planning and Environment, and prepared in consultation with the Office of Environment and Heritage and Mid Western Regional Council.
Biodiversity Management Plan	CoA 15 Schedule 3	Preparation of a Biodiversity Management Plan to the satisfaction of the Department of Planning and Environment, and prepared in consultation with the Office of Environment and Heritage.
	ММ	The scope of the CoA BMP will cover the MM Flora and Fauna Management Plan and Groundcover Management Plan.
Salvage and Relocate	CoA 23 Schedule 3	Salvage and relocate Aboriginal heritage items to a suitable alternative location in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010).
Chance Finds Protocol	CoA 22 Schedule 3	Preparation of a Chance Finds Protocol in consultation with the Aboriginal Stakeholders and to the satisfaction of the Office of Environment and Heritage.
	ММ	The Chance Find Protocol forms part of the MM Cultural Heritage Management Plan
Community Consultation Plan	ММ	The Community Consultation Plan will continue to be implemented throughout the life of the BSF, and include protocols to keep the community updated about the progress of the BSF; inform relevant stakeholders of potential impacts and respond to any complaints received.





Table 2.1 – Environmental Hold Points

Plan	Reference	Compliance Requirement
PRIOR TO CONSTRUCTION		
Road Dilapidation Report	ММ	A Road Dilapidation Report must be prepared and include audits of the road formation and/or pavement condition to be undertaken prior to construction.
Traffic Management Plan	CoA 8 Schedule 3 MM	Traffic Management Plan (developed in consultation with MWRC and RMS), inclusive of a Haulage Plan (developed with input from the roads authority).
Construction Environmental Management Plan	ММ	Preparation of a Construction Environmental Management Plan, inclusive of a: - Spill Response Plan, - Flood Risk Contingency Plan - Soil and Water Management Plan - Construction Noise Management Plan (Note: The MM requires that all impacted landowners also should have the opportunity to participate and provide feedback during the development of this construction noise management plan) - Bushfire Management Plan - Waste Management Plan
WITHIN 6 MONTHS FROM COMMENCE	EMENT OF CONSTRUCT	ION
Independent Audit	CoA 5 Schedule 4	Commission an Independent Environmental Audit, led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary and carried out in consultation with the relevant agencies. Within 3 months of commencing this Audit, unless otherwise agreed by the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests It, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary.





Table 2.1 – Environmental Hold Points

Plan	Reference	Compliance Requirement	
PRIOR TO OPERATION			
Work as Executed Plans	CoA 7 Schedule 2	Plans must be submitted to the Department of Planning and Environment.	
Notification of Works	CoA 8 Schedule 2	Notify the Department of Planning and Environment in writing of the date of commencement of operations.	
		If operation is to be staged, the Department of Planning and Environment must be notified in writing prior to the commencement of the relevant stage, identifying the development that would be carried out during the relevant stage.	
Occupation Certificate	CoA 9 Schedule 2	Obtain Occupation Certificate(s) for use of the building works, pursuant to Part 4A of the <i>Environmental Planning and Assessment Act 1979</i> .	
Emergency Response Plan	CoA 28 Schedule 3	Preparation of an Emergency Response Plan in consultation with the Rural Fire Service and Fire & Rescue NSW.	
Notification LEMC	CoA 27 Schedule 3	Notify the Local Emergency Management Committee following construction and prior to commencement of operations.	
Buffer plantings	CoA 10A) Schedule 3	The vegetation to provide a buffer for visual mitigation must be planted prior to commencement of operations.	
Road Dilapidation Report	MM	A Road Dilapidation Report must be prepared and include audits of the road formation and/or pavement condition at the completion of construction.	
Operations Environmental Management Plan	EMS	Preparation of an Operations Environmental Management Plan.	
WITHIN TWO YEARS OF COMMENCIN	G DEVELOPMENT		
Retirement of Credits	CoA 13 Schedule 3	Unless otherwise agreed by the Department of Planning and Environment, retire the requisite number and class of biodiversity credits to the satisfaction of OEH.	
		Note: For the purposes of this EMS, and in the absence of definitions in the consent, the date of commencing development is assumed to be the date advised in the notification made to the Department of Planning and Environment prior to commencement of construction consistent with CoA 8 Schedule 2.	
	ММ	In light of the Biodiversity Conservation Act and transitional arrangements (post the BSF consent December 2017), the retirement of credits will be through a mechanism comparable to the MM <i>Biodiversity Offset Strategy</i> and <i>Biodiversity Offset Plan</i> .	
THREE YEARS AFTER CONSTRUCTION	THREE YEARS AFTER CONSTRUCTION START (AUGUST 20201)		
Visual Impact Management Plan	MM	A post construction audit is to be undertaken to assess the effectiveness of the screening layout with reference to the final constructed infrastructure and augment the former as required, and involve the most affected landowners (relevant to medium impact view locations).	





Table 2.1 – Environmental Hold Points

Plan	Reference	Compliance Requirement	
FUTURE UPGRADING OF SOLAR PANELS AND ANCILLARY INFRASTRUCTURE			
Revised Layout Plans	CoA 6 Schedule 2	Plans must be submitted to the Department of Planning and Environment incorporating the proposed upgrades.	
Work As Executed Plans	CoA 7 Schedule 2	WAE plans must be submitted to the Department of Planning and Environment following any upgrades.	
Notification of Works	CoA 8 Schedule 2	Notify the Department of Planning and Environment in writing of the date of commencement of upgrading.	
		If upgrading is to be staged, the Department of Planning and Environment must be notified in writing prior to the commencement of the relevant stage, identifying the development that would be carried out during the relevant stage.	
CESSATION OF OPERATIONS			
Notification of Works	CoA 8 Schedule 2	Notify the Department of Planning and Environment in writing of the date of cessation of operations.	
DECOMMISSIONING			
Notification of Works	CoA 8 Schedule 2	Notify the Department of Planning and Environment in writing of the date of commencement of decommissioning.	
		If upgrading is to be staged, the Department of Planning and Environment must be notified in writing prior to the commencement of the relevant stage, identifying the development that would be carried out during the relevant stage.	
Decommissioning Management Plan	MM	Preparation of an Decommissioning Management Plan, inclusive of a: Rehabilitation Plan Waste Management Plan Traffic Management Plan (developed in consultation with MWRC and RMS) Haulage Plan (developed with input from the roads authority) Bushfire Management Plan	
Road Dilapidation Report	MM	A Road Dilapidation Report must be prepared and include audits of the road formation and/or pavement condition at the completion of decommissioning.	
WITHIN 18 MONTHS OF CESSATION	OF OPERATIONS		
Rehabilitated site	CoA 30 Schedule 3	Rehabilitate the site to the satisfaction of the Department of Planning and Environment.	





Statutory Approvals

Statutory approvals include licences, permits, consents and/or authorisations that are required, pursuant to legislative obligations, prior to undertaking specific activities.

Approvals relevant to the BSF are listed below.

Table 3.1 – Statutory Approvals

Approval	Act	Comment
s.68 Approval	Local Government Act 1993	Prior to installation of an onsite sewerage treatment system to service the permanent site office and maintenance building, a s.68 approval is required to carry out a sewerage work.
		Portable chemical toilets are proposed for the construction workforce. No s.68 approval is required in this circumstance.
Construction and Occupation Certificates	Environmental Planning and Assessment Act 1979	For proposed building works.
s.99 Exemption Rural Fires Act 1997		If proposed, prior to conducting any Hot Works in a Total Fire Ban an exemption must be obtained from the Commissioner of the NSW Rural Fire Service (RFS).
Ecosystem credit retirement	Biodiversity Conservation Act 2016	The quantum and mechanism for retiring ecosystem credits is now different to those identified in CoA 13 Schedule 3 and determined by the <i>Biodiversity Offsets Scheme</i> and the <i>Biodiversity Conservation Regulation 2017</i> .
s.45 Notice of Proposal Electricity Supply Act 1995		Work carried out by a network operator and comprising the erection, installation, extension or alteration of electricity works on any land is exempt from the requirement for an approval under the Local Government Act 1993, except in relation to buildings, however, no such work (other than routine repairs or maintenance work) may be carried out unless: notice of the proposal to carry out the work has been given to the local council, and the local council has been given a reasonable opportunity (being not less than 40 days from the date on which the notice was given) to make submissions to the network operator in relation to the proposal, and the network operator has given due consideration to any submissions so made.





Environmental Management

4.1 REQUIREMENT

This section of the strategy identifies the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the BSF.

4.2 DEVELOPMENT APPLICANT

4.2.1 ULTIMATE RESPONSIBILITY

FSPL is the development Applicant and as such has ultimate responsibility and accountability to ensure that the BSF is designed, built, operated, upgraded and decommissioned in accordance with the Development Consent.

FSPL's Project Manager has full authority to ensure these obligations are met.

A copy of FSPL's Environmental Policy is provided in **Appendix A**.

4.2.2 WEBSITE

FSPL also has responsibility to provide up to date information on the BSF on its dedicated website: http://www.firstsolar.com/en-AU/Resources/Projects/Beryl-Solar-Farm (refer **Section 5**).

4.3 DOWNER

Downer is the Engineering, Procurement and Construction Contractor with the responsibility to build the BSF for FSPL.

Downer's contractual obligations do not extend to the operation, upgrading or decommissioning of the BSF. The contractual requirements do, however, extend to the design and construction of the BSF in compliance with FSPL's Development Consent. This responsibility extends to all employees and/or subcontractors engaged by Downer to build the BSF.

Downer's Project Manager has full authority to ensure these obligations are met.

A copy of Downer's Environmental Sustainability Policy is provided in **Appendix B**.

4.4 FUTURE RESPONSIBILITIES

The entities that will have responsibilities to operate, upgrade and decommission the BSF are yet to be engaged by FSPL.

Notwithstanding, those entities will assume relevant responsibilities and accountability to either operate, upgrade or decommission the BSF in compliance with the existing Development Consent.

These responsibilities will be specified and incorporated into the Operations Environmental Management Plan and Decommissioning Management Plan prior to the BSF either being operated, upgraded or decommissioned.





Stakeholder Engagement

5.1 ACCESS TO INFORMATION

FSPL will keep the local community and relevant agencies informed about the operation and environmental performance of the development by providing up to date information on the BSF on its dedicated website:

http://www.firstsolar.com/en-AU/Resources/Projects/Beryl-Solar-Farm

5.2 WEBSITE

The BSF website will make the following information publicly available as relevant to the stage of the development:

- Environmental Impact Statement.
- Final layout plans for the development;
- Current statutory approvals for the development.
- Proposed staging plans for the construction, operation or decommissioning (if relevant).
- How complaints about the development can be made;
- A complaints register.
- Any other matter required by the Secretary.





Complaints Management

6.1 SCOPE

This section describes the procedures that would be implemented to receive, handle, respond to and record complaints;

6.2 MEANS OF MAKING A COMPLAINT

Prior to the commencement of construction Downer will ensure that the following contact details are available for the community to make a complaint:

- A 24 hour telephone number.
- A postal address to which written complaints may be sent.
- An email address to which electronic complaints may be transmitted.

These details will be provided on the on the BSF website by First Solar.

6.3 HOW ANY COMPLAINT WILL BE HANDLED

6.3.1 CONSTRUCTION

Any complaint received will be immediately logged in a Complaints Register.

As soon as is practicable Downer will investigate the cause of the complaint and identify actions required to avoid a recurrence. Regardless of circumstance this initial response will be completed with 24 hours of receiving the complaint.

If so requested when the complaint was received, Downer will also make contact with the complainant to discuss the issue, the cause and advise them of the actions taken to avoid a recurrence.

This investigation and contact will be fully documented on a *Complaint Record* maintained by Downer and the *Complaints Register* will be updated and uploaded by FSPL onto its website.

6.3.2 OPERATION

Any complaint received will be immediately logged in a *Complaints Register*.

As soon as is practicable the BSF Operations Manager will investigate the cause of the complaint and identify actions required to avoid a recurrence. Regardless of circumstance, this initial response will be completed with 24 hours of receiving the complaint.

If so requested when the complaint was received, the Operations Manager will also make contact with the complainant to discuss the cause and advise them of the actions taken to avoid a recurrence.

This investigation and contact will be fully documented on a *Complaint Record* maintained by the BSF Operations Manager and the *Complaints Register* will be updated and uploaded by FSPL onto its website.





6.4 RECORDING COMPLAINTS

Any and every complaint will be documented through maintaining an up to date *Complaints Register* (cross referenced against a *Complaint Record*).

6.4.1 COMPLAINTS REGISTER

The Complaints Register will record:

- A complaint reference number.
- The date and time the complaint was received.
- Whether the complainant wanted to be contacted.
- Nature of the complaint.

For the life of the development the *Complaints Register* will be updated on a weekly basis and listed on the BSF website.

As the *Complaints Register* will be a publicly available document, it is not proposed to include details of who the complainant is on this register.

6.4.2 COMPLAINTS RECORD

The Complaints Record will record:

- the date and time of the complaint;
- the means by which the complaint was made (telephone, mail or email);
- any personal details of the complainant that were provided, or if no details were provided a note to that effect;
- the nature of the complaint;
- any actions taken in relation to the complaint, including timeframes for implementing the action;
- if no action was undertaken in relation to the complaint, the reasons why no action was taken;
- if the complainant wanted to be contacted, whether the action taken was considered acceptable to the complainant.

A copy of every *Complaints Record* will be filed and held on-site and, on request, be provided to:

- the Department of Planning and Environment; or
- Environment Protection Authority;
- Mid Western Regional Council; or
- the complainant.

As the *Complaints Record* will contain information on who made the complaint, it is not proposed to make this information publicly available on the BSF website.





Dispute Resolution

7.1 COMMITMENT

In the event that the procedure for investigating and responding to a complaint, including the implementation of measures for avoiding a recurrence can not be resolved and a dispute does arise, Downer (during construction) and FSPL (during operations) propose the following.

- Advise both DPE and MWRC that there is a dispute.
- Provide both DPE and MWRC with copies of the relevant complaint history, including relevant documentation in the form of *Complaints Record*(s).
- Engage a specialist with expertise relevant to the issue at hand to investigate the dispute and provide recommendations for resolution.
- Advise the third party in dispute, DPE and MWRC, in writing, as to when the dispute investigation will be completed.
- Provide the third party, DPE and MWRC a copy of the dispute investigation report, inclusive of Downers/FSPL's intentions with regards to the implementation of the recommendations for resolution.





Non-Compliance

8.1 COMMITMENT

A failure to comply with a Condition of Approval (CoA), Mitigation Measures (MM) or statutory approval will constitute a non-compliance.

8.2 RESPONSE

In the event of a non-compliance Downer (during construction) and First Solar (during operations) will undertake the following five steps, consistent with the guidance advice for *ISO 14001 – Environmental management systems*.

Table 8.1 - Non-compliance Response

Step	Action		
React	React to the non-compliance and, as applicable,		
	 Take action to control and correct it. Deal with the consequences, including mitigating adverse environmental impacts. 		
Evaluate	Evaluate the need for action to eliminate the cause of the non-compliance in order that it does not re or occur elsewhere by:		
	 Reviewing the non-compliances. Determining the cause of the non-compliances. Determining if similar non-compliances exist, or could potentially occur. 		
Act	Implement any action required.		
Review	Review the effectiveness of any corrective action taken.		
Change	Make changes to the environmental management plans, if necessary.		

8.3 CORRECTIVE ACTION

Any non-compliance will trigger a *Corrective Action* appropriate to the significance of the effect of the non-compliance. Downer (during construction) and First Solar (during operations) will retain documented information as evidence of the nature of the non-compliance and any subsequent actions taken, and the results of the *Corrective Action*.

8.4 NOTIFICATION

Consistent with the Minister's development consent Schedule 4 CoA 4, the Department will be notified in writing to compliance@planning.nsw.gov.au within 7 days after Downer/FSPL becomes aware of any non-compliance.

The notification will:

- identify the development (Beryl Solar) and the application number (SSD 8183);
- set out the condition of consent that the development is non-compliant with;
- the way in which it does not comply;
- the reasons for non-compliance (if known); and
- what actions have been done, or will be, undertaken to address the non-compliance.





Incident Management

9.1 MATERIAL HARM

The Minister's development consent defines an incident as:

An occurrence or set of circumstances that causes or threatens to cause material harm.

The Minister's development consent defines material harm as harm that:

involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or

results in actual or potential loss of property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

This definition of 'material harm' is consistent with the definition in s.147 of the *Protection of the Environment Operations Act 1997* and the associated legal obligations to notify the Environment Protection Authority (EPA) where a 'pollution' incident occurs such that material harm to the environment is caused or threatened.

9.2 IMMEDIATE RESPONSE

Any incident that occurs that causes or threatens to cause material harm will be reported immediately to Downer's Construction Manager (during construction)/FSPL's Operation's Manager (during operations).

Upon receiving notification of an incident, the Construction Manager/Operations Manager (or their nominee if off-site at the time of the incident) will immediately attend the incident and:

- Isolate the area affected by the incident;
- Stop works around the area;
- Implement containment measures to prevent the impact of the incident spreading; and
- Make a determination as to whether the incident has caused or threatens to cause material harm.





9.3 EXTERNAL NOTIFICATIONS

9.3.1 DUTY TO REPORT

If the Construction Manager/Operations Manager (or their nominee if off-site at the time of the incident) has determined the incident has caused or threatens to cause material harm, he/she will, pursuant to requirements under Part 5.7 (Duty to notify pollution incidents) of the *Protection of the Environment Operations Act 1997 immediately* notify the EPA.

The EPA will be notified (verbally) and provided the following relevant information.

- the time, date, nature, duration and location of the incident;
- the location of the place where pollution is occurring or is likely to occur;
- the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known;
- the circumstances in which the incident occurred (including the cause of the incident, if known);
 and
- the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known.

The EPA may direct Downer/FSPL to notify such other persons of the incident as the EPA requires.

9.3.2 NOTIFICATIONS

Following EPA notification Downer/FSPL would then immediately notify DPE and MWRC.

Consistent with the Minister's development consent Schedule 4 CoA 3, the DPE will be notified in writing to compliance@planning.nsw.gov.au and:

- identify the development (Beryl Solar) and the application number (SSD 8183); and
- set out the location and nature of the incident.

Specific to the DPE notification the following is noted.

- DPE notification will be undertaken immediately after the EPA has been notified, not immediately after Downer/FSPL becomes aware of the incident.
- MWRC will be notified verbally.

This initial notification to DPE and MWRC would be for information purposes alone and Downer/FSPL would continue to concentrate on responding to any instruction or request from the EPA.

9.4 INCIDENT INVESTIGATION

9.4.1 AVOID RECURRENCE

As soon as the incident has been contained and external notifications undertaken Downer/FSPL will then undertake an incident investigation. One purpose of the investigation will be to identify and understand the cause of the incident with a view to modifying procedures to avoid the potential for a recurrence. The types of preventative actions taken could include revision to a Construction Work Method Statement or undertaking targeted Environmental Due Diligence sessions at tool box meetings prior to works re-commencing.

9.4.2 RESTORATION

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





9.5 INCIDENT REPORTING

9.5.1 DOCUMENTATION

Any environmental incident will be recorded on an *Environmental Incident Report* and an updated *Environmental Incidents Register* will be maintained.

Each Environmental Incident Report will include details on:

- the date, time and duration of the incident;
- clarify whether there was material harm to the environment;
- detail the nature of the incident;
- climatic conditions;
- the location of the incident;
- pollutants involved;
- circumstances in which the incident occurred; and
- corrective action taken; external notification (EPA).

9.5.2 DISSEMINATION

For an incident in which material harm has or could have resulted and the EPA has been notified, Downer/FSPL will provide reporting to the EPA as may be instructed, in accordance with the timeframes that may be so specified by the EPA.





Emergency Response

10.1 REQUIREMENT

The Minister's consent requires that an Emergency Response Plan (ERP) be prepared in consultation with the Rural Fire Service (RFS) and Fire and Rescue NSW (FRNSW) prior to commencement of operations.

10.2 OPERATIONS EMERGENCY RESPONSE PLAN

CoA Schedule 4 (28) requires:

Emergency Response Plan

Prior to the commencement of operations, the Applicant must prepare an Emergency Response Plan for the development in consultation with the RFS and Fire & Rescue NSW. This plan must identify the fire risks and controls of the development, and the procedures that would be implemented if there is a fire on site or in the vicinity of the site. Two copies of the plan must be kept on site in a prominent position adjacent to the site entry point at all times.

10.3 EMERGENCY MANAGEMENT COMMITTEE

Following preparation of the ERP and prior to commencing operations, FSPL will notify the relevant Local Emergency Management Committee (LEMC).





Performance Monitoring

11.1 MONITORING PROGRAM

A suite of monitoring will be undertaken for the BSF development. This will include:

- monitoring designed to ensure compliance with the Minister's Development Consent and the commitments made in this Environmental Management Strategy; and
- monitoring designed to ensure that on-ground mitigation measures, procedures and work practices that will be detailed in specific environmental plans are not only being implemented, but are effective in achieving requisite environmental outcomes.

11.2 MANAGEMENT REVIEWS

FSPL will conduct two types of management reviews to ensure compliance with the Minister's Development Consent and the commitments made in this Environmental Management Strategy.

11.2.1 PROGRAMMED REVIEWS

For the duration of the construction, FSPL will undertake quarterly management compliance reviews. The focus of these reviews will be on the implementation of the commitments made in this Environmental Management Strategy and compliance with the Development Consent. Each management review will be documented and posted onto the Beryl Solar Farm website.

Post construction FSPL will undertake annual management compliance reviews.

11.2.2 TRIGGERED REVIEWS

Separate to these programmed reviews FSPL will conduct a management review in the event of the following three circumstances:

- 1. There is an **environmental incident** with circumstances that have caused or threatened to cause material harm to the environment. Refer **Section 9.1** for the definition of material harm.
- 2. In the event that the procedure for investigating and responding to a complaint, including the implementation of measures for avoiding a recurrence, can not be resolved to the satisfaction of a third party, and a **dispute has arisen**.
- 3. Any modifications to the existing Development Consent (5 December 2017).





11.3 ENVIRONMENTAL PLANS

Table 11.1 identifies the various environmental plans required by either Conditions of Approval or Mitigation Measures identified in the *Response to Submissions* (nghenvironmental, July 2017).

Each of these plans will identify procedures and work practices designed to minimise adverse environmental impacts and comply with the Minister's development consent. They will each include, where appropriate, performance criteria and the targeted monitoring.

Table 11.1 - Environmental Plans

Plan	When
Community Consultation Plan	Life of the BSF
Landscaping Plan	Before construction.
Biodiversity Management Plan	Before construction
Cultural Heritage Management Plan	Before construction
Traffic Management Plan, inclusive of Haulage Plan	Before construction.
Construction Environmental Management Plan, inclusive of: - Spill Response Plan, - Flood Risk Contingency Plan - Soil and Water Management Plan - Construction Noise Management Plan - Bushfire Management Plan - Waste Management Plan	Before construction
Emergency Response Plan	Before operation
Operations Environmental Management Plan	Before operation
Visual Impact Management Plan	Before operation
Decommissioning Management Plan	Before decommissioning

Any changes to these management plans will be approved by the Secretary, before implementing the changes, and in consultation with relevant agencies.

11.4 MONITORING SCHEDULE

As each of the above plans are prepared and approved an updated Monitoring Schedule will be collated and posted onto the Beryl Solar Farm website. This Monitoring Schedule will incorporate specific monitoring requirements detailed in each of these plans so as to provide a single reference document that summarises all monitoring requirements associated with the BSF development.



DATE: 7/08/18

References

Department of Infrastructure Planning and Natural Resources (2004) Guideline for the Preparation of Environmental Management Plans

International Organization for Standardization (2015) ISO 14001:2015(E) Environmental management systems – Requirements with guidance for use

nghenvironmental (July 2017) Beryl Solar Farm - Submissions Report

nghenvironmental (April 2017) Beryl Solar Farm - Environmental Impact Statement



Appendix A
FIRST SOLAR ENVIRONMENTAL **POLICY**

Appendix B

DOWNER ENVIRONMENTAL
SUSTAINABILITY POLICY