Metz Solar Farm

ENVIRONMENTAL MANAGEMENT STRATEGY



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Abbreviations

ARC	Armidale Regional Council
APZ	Asset Protection Zone
BMP	Biodiversity Management Plan
CEMP	Construction Environmental Management Plan
CoA	Condition of Approval
DMP	Decommissioning Management Plan
DPE	Department of Planning and Environment
DPI	Department of Primary Industries
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EPC	Engineering, Procurement and Construction
ERP	Emergency Response Plan
ETL	Electricity Transmission Line
ESCP	Erosion and Sediment Control Plan
IPPL	Infinergy Pacific Pty Ltd
kV	Kilovolt
MSF	Metz Solar Farm
MW	Megawatt
OEH	Office of Environment and Heritage
OEMP	Operations Environmental Management Plan
RAV	Restricted Access Vehicle
RAP	Registered Aboriginal Parties
RCRI	RCR Infrastructure
RFS	Rural Fire Service
RMS	Roads and Maritime Services
SoC	Statement of Commitments
SWMP	Soil and Water Management Plan
TMP	Traffic Management Plan





Introduction

1.1 APPROVED PROJECT

The Metz Solar Farm (MSF) was granted development consent (SSD 7931) on the 18th of July 2017. The approved consent allows for the development of a large scale solar farm at 1821 Grafton Road, Metz, to be constructed within the approved 'array area' as illustrated in the 'General Layout of Development' presented in Appendix 1 of the Development Consent. A copy of the 'General Layout of Development' is provided below (Figure 1).

1.2 STRATEGY FUNCTION

This Environmental Management Strategy 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 required under this consent, installation of fencing, artefact survey, overhead line safety marking geotechnical drilling and/or surveying).

In addition, it should be noted that this Environmental Strategy has been drafted in line with the 'Terms of Consent' under Schedule 2 of the Development Consent which states:

TERMS OF CONSENT

- 2. The Applicant must carry out the development:
 - (a) generally in accordance with the EIS; and
 - (b) in accordance with the conditions of this consent.

Note: The general layout of the development is shown in Appendix 1.



- 3. If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this consent must prevail to the extent of any inconsistency.
- 4. The Applicant must comply with any requirement/s of the Secretary arising from the Department's assessment of:
 - (a) any strategies, plans or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; and
 - (c) the implementation of any actions or measures contained in these documents.

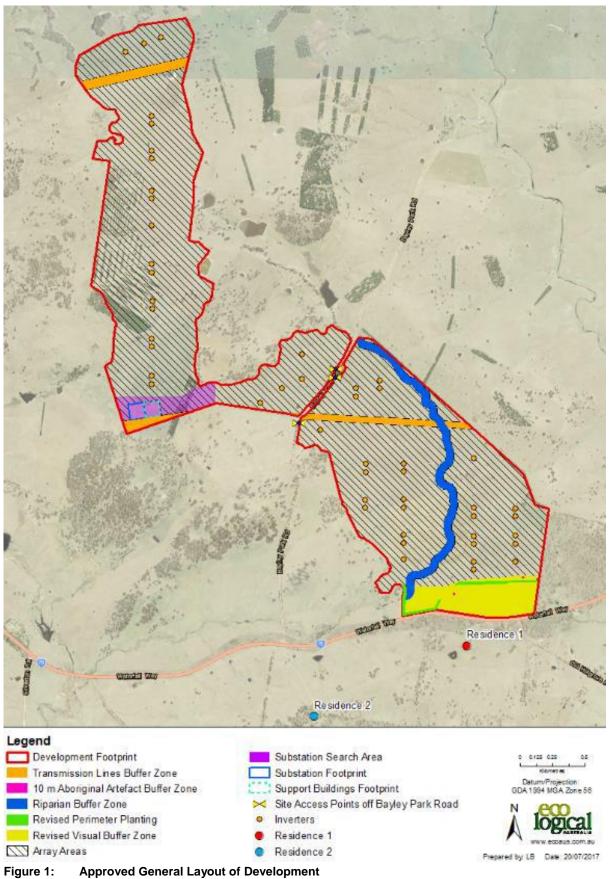
1.3 **PROPONENT**

The development proponent/applicant is Infinergy Pacific Pty Ltd (IPPL).

1.4 EPC CONTRACTOR

RCR Infrastructure (RCRI) is the proposed Engineering, Procurement and Construction Contractor which would have the responsibility to build the MSF. RCR is currently engaged in pre- construction planning.





Source: Appendix 1, General Layout of Development. Development Consent SSD 7931



1.5 STRUCTURE

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

- Section 2 provides the strategic framework for environmental management of the development.
- **Section 3** identifies the statutory approvals that apply to the development.
- **Section 4** describes the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development.
- Section 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 development.
- **Section 6** describes the procedures that would be implemented to receive, handle, respond to and record complaints.
- **Section 7** describes the procedures that would be implemented to resolve any disputes that may arise.
- **Section 8** describes the procedures that would be implemented to respond to any non-compliance.
- **Section 9** describes the procedures that would be implemented to respond to emergencies.
- Section 10 includes a list of those plans that require approval under the conditions of the Development Consent.
- Section 11 provides a plan depicting all the monitoring to be carried out in relation to the development.



Strategic Framework

2.1 ENVIRONMENTAL STRATEGY

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

IPPL's aim is to design, construct, operate, upgrade and decommission the MSF in compliance with the 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, the EIS includes Statements of Commitment (SoC) made in both the

- Metz Solar Farm Environmental Impact Statement (EcoLogical, March 2017), and
- Additional information supporting the Metz Solar Farm Environmental Impact Statement (EcoLogical, June 2017).

The environmental management objective is to therefore comply with the CoA and SoC.

2.2 PLAN OF ACTION

The plan of action is simple. It is to identify all CoA and SoC that require an environmental deliverable and ensure that these are prepared at the appropriate stage of the development. Deliverables will be prepared in consultation with relevant stakeholders, requisite approvals will be secured, and then they will be diligently implemented.

The mechanism for achieving the plan of action is for a clear delineation of contractually enforced responsibilities between the Applicant (IPPL) and the EPC Contractor (RCRI) along with identifying key environmental hold-points that must be achieved before the MSF can be constructed, operated, upgraded or decommissioned.

Table 2.1 provides a summary of the key hold points. It provides a full and complete listing of all plans that must be prepared 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 of these plans, and is based on compliance with the CoA and SoC.



Table 2.1 – Environmental Hold Points

Plan	Reference	Compliance Requirement	
PRIOR TO ROAD UPGRADES			
Traffic Management Plan	CoA Schedule 3 (6)	Preparation of a Traffic Management Plan to the satisfaction of the Department of Planning and Environment and prepared in consultation with the Roads and Maritime Service and Armidale Regional Council.	
PRIOR TO CONSTRUCTION			
Groundwater Dependent Ecosystem Mapping	SoC	Mapping of Groundwater Dependent Ecosystems along Limerick Creek.	
Final Layout Plans	CoA Schedule 2 (5)	Plans must be submitted to the Department of Planning and Environment including details on the siting of solar panels and ancillary infrastructure.	
Construction Certificate	CoA Schedule 2 (9)	Obtain Construction Certificate(s) for proposed building works, pursuant to Part 4A of the Environmental Planning and Assessment Act 1979.	
Notification of Works	CoA Schedule 2 (8)	Notify the Department of Planning and Environment in writing of the date of commencement of construction.	
Landscaping Plan	CoA Schedule 3 (8)	Preparation of a Landscaping Plan to the satisfaction of the Department of Planning and Environment, and prepared in consultation with the Roads and Maritime Service, Office of Environment and Heritage, Armidale Regional Council and Residence R1.	
	SoC – Visual Amenity	Note: The Landscaping Plan will satisfy the SoC's Visual Buffer Landscaping Plan.	
Biodiversity Management Plan	CoA Schedule 3 (11)	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.	
		Note: The Biodiversity Management Plan, as specified by the Department of Planning and Environment, must include measures to be implemented to rehabilitate and revegetate temporary disturbance areas. The objective of the Vegetation Reinstatement and Management Plan made as a SoC was to make sure groundcover is reinstated after disturbance during construction and preserved and managed during the operational life of the solar farm. The Biodiversity Management Plan will satisfy the SoC's Vegetation Reinstatement and Management Plan.	
Chance Finds Protocol	CoA Schedule 3 (18)	Preparation of a Chance Finds Protocol in consultation with the Aboriginal Stakeholders and to the satisfaction of the Office of Environment and Heritage.	



Table 2.1 – Environmental Hold Points

Plan	Reference	Compliance Requirement
PRIOR TO CONSTRUCTION		
Construction Environmental Management Plan	SoC	 Preparation of a Construction Environmental Management Plan, inclusive of a Spill Response Plan Biodiversity Management Plan, Erosion and Sediment Control Management Plan Cultural Heritage Management Plan Traffic Management Plan Construction Noise and Vibration Management Plan Bushfire Management Plan Health and Safety Plan Air Quality Management Plan Waste Management Plan Community Consultation Plan Note: A SoC is to prepare the Construction Environmental Management Plan in consultation with Department of Primary Industries – Water. Whilst the SoC states this CEMP will be submitted to the Department of Planning and Environment for approval, it is understood that the Department's approval is only required for the Environmental Management Strategy [refer CoA Schedule 4 (1)].
PRIOR TO OPERATION		
Work as Executed Plans	CoA Schedule 2 (7)	Plans must be submitted to the Department of Planning and Environment.
Notification of Works	CoA Schedule 2 (8)	Notify the Department of Planning and Environment in writing of the date of commencement of operations.
Occupation Certificate	CoA Schedule 2 (9)	Obtain Occupation Certificate(s) for use of the building works, pursuant to Part 4A of the Environmental Planning and Assessment Act 1979.
Emergency Response Plan	CoA Schedule 3 (25)	Preparation of an Emergency Response Plan in consultation with the Rural Fire Service and Fire & Rescue NSW.
Operations Environmental Management Plan	SoC	 Preparation of an Operations Environmental Management Plan, inclusive of a Spill Response Plan Biodiversity Management Plan Erosion and Sediment Control Management Plan Cultural Heritage Management Plan Construction Noise and Vibration Management Plan Health and Safety Plan Air Quality Management Plan Waste Management Plan Note: Whilst the SoC states this OEMP will be submitted to the Department of Planning and Environment for approval, it is understood that the Department's approval is only required for the Environmental Management Strategy [refer CoA Schedule 4 (1)].



Table 2.1 – Environmental Hold Points

Plan	Reference	Compliance Requirement	
WITHIN TWO YEARS OF COMMENCIN	WITHIN TWO YEARS OF COMMENCING DEVELOPMENT		
Retirement of Credits	CoA Schedule 3 (10)	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: The date of commencing development will be the date advised in the notification made to the Department of Planning and Environment, consistent with CoA Schedule 2 (8).	
FUTURE UPGRADING OF SOLAR PAN	IELS AND ANCILLARY II	NFRASTRUCTURE	
Revised Layout Plans	CoA Schedule 2 (6)	Plans must be submitted to the Department of Planning and Environment incorporating the proposed upgrades.	
Notification of Works	CoA Schedule 2 (8)	Notify the Department of Planning and Environment in writing of the date of commencement of upgrading.	
DECOMMISSIONING			
Notification of Works	CoA Schedule 2 (8)	Notify the Department of Planning and Environment in writing of the date of commencement of decommissioning.	
Decommissioning Management Plan	SoC	 Preparation of an Decommissioning Management Plan, inclusive of a Spill Response Plan Biodiversity Management Plan Erosion and Sediment Control Management Plan Cultural Heritage Management Plan Construction Noise and Vibration Management Plan Health and Safety Plan Air Quality Management Plan Waste Management Plan Note: Whilst the SoC states this DMP will be submitted to the Department of Planning and Environment for approval, it is understood that the Department's approval is only required for the Environmental Management Strategy [refer CoA Schedule 4 (1)]. 	

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 MSF are listed below.

Approval	Act	Comment
s.138 Permit	Roads Act 1993	Prior to undertaking site access treatment works on both Waterfall Way and Bayley Park Road. The relevant road authority is RMS for the former and ARC for the latter.
s.68 Approval	Local Government Act 1993	 Prior to installation of a septic tank to service the office 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).
Credit acquisition/retirement	Threatened Species Conservation Act 1995	Contingent on either acquiring or retiring credits under the Biobanking Scheme (as opposed to making payment into an offset fund or providing supplementary measures) – and contingent on changes with the imminent <i>Biodiversity Conservation Act.</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.

Table 3.1 – Statutory Approvals



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 MSF.

4.2 DEVELOPMENT APPLICANT

Infinergy Pacific Pty Ltd (IPPL) is the development applicant and as such has ultimate responsibility and accountability to ensure that the MSF is designed, constructed, operated, upgraded and decommissioned in accordance with the Development Consent.

IPPL's Development Director has full authority to ensure these obligations are met.

In the event that the MSF is sold to a new entity at some point in the future, that entity would assume all responsibilities and accountability to manage the MSF in compliance with the existing Development Consent.

4.3 EPC CONTRACTOR

The EPC Contractor will have the responsibility to design and construct the MSF for IPPL in full compliance with the Development Consent. The EPC Contractor will have the required authority to ensure the obligations set out under the Development Consent are met. These obligations will extend to all employees and/or sub-contractors engaged during the design and / or construction of the MSF.

4.4 FUTURE RESPONSIBILITIES

The entities that will have the responsibility to operate, upgrade and decommission the MSF are yet to be engaged by IPPL.

Notwithstanding this, these entities once selected will assume relevant responsibilities and accountability to operate, upgrade or decommission the MSF in compliance with the Development Consent.

The necessary responsibilities will be specified and locked in when known, and incorporated into the Operations Environmental Management Plan and Decommissioning Management Plan prior to the MSF being operated, upgraded or decommissioned.



Stakeholder Engagement

5.1 ACCESS TO INFORMATION

IPPL 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 MSF on a dedicated website (<u>www.metzsolarfarm.com</u>).

5.2 WEBSITE

The MSF 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; and
- 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 the roads upgrades IPPL 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; and
- an email address to which electronic complaints may be transmitted.

These details will be:

- advertised in the Armidale Express on at least one occasion prior to the commencement of construction;
- included in a flier drop to 150 residents in Hillgrove and the wider local area; and
- provided on the on the MSF website.

6.3 HOW ANY COMPLAINT WILL BE HANDLED

6.3.1 CONSTRUCTION

Any complaint received will be immediately logged in a *Complaints Register* and passed on to RCRI's Site Environmental Officer (SEO).

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

If so requested when the complaint was received, the SEO 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.

6.3.2 OPERATION

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

As soon as is practicable the MSF 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 within 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.



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; and
- the nature of the complaint.

For the life of the development the *Complaints Register* will be updated on a weekly basis and listed on the MSF 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; and
- 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;
- Armidale 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 MSF 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 cannot be resolved to the satisfaction of a third party, and a dispute does arise, IPPL propose the following.

- Advise both DPE and ARC that there is a dispute.
- Provide both DPE and ARC 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 ARC, in writing, as to when the dispute investigation will be completed.
- Provide the third party, DPE and ARC a copy of the dispute investigation report, inclusive of IPPL'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), Statement of Commitment (SoC) or statutory approval will constitute a non-compliance.

In the event of a non-compliance IPPL will undertake the following five steps, consistent with the guidance advice for *ISO 14001 – Environmental management systems*.

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

 Table 8.1 – Non-compliance Response

REPORTING OF ENVIRONMENAL INCIDENTS CAUSING MATERIAL HARM

Reporting of environmental incidents will meet the requirements of Condition 3, Schedule 4. It will also follow obligations to report on material harm to the environment as defined in the NSW POEO Act 1997, in line with the Act's definition of 'material harm to the environment'.

In the case of an incident that consists 'material harm to the environment', immediately, and as soon as corrective actions have commenced and the immediate issue is under control, the site management team, or employee/person engaged in the activity, will notify the Secretary and any other relevant agencies of the incident.

Within 7 days of the date of the incident, the Applicant will provide the Secretary and any relevant agencies with a detailed report on the incident.

Examples of an environmental incident that results in 'material harm to the environment' could be:

- An uncontained spill into a water course resulting in actual harm to the health or safety of human beings or to the ecosystem(s) that is not trivial; or
- A breech of CHMP protocol, resulting in damage to an objective of aboriginal heritage value.



CORRECTIVE ACTION

Any non-compliance or environmental incident will trigger a Corrective Action appropriate to the significance of the effect of the non-compliance.

IPPL 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.



Emergency Response

9.1 REQUIREMENT

This section of the environmental management strategy describes how and when procedures will be in place to respond to emergencies through the development of two management plans, to be prepared in consultation with relevant stakeholders.

9.2 CONSTRUCTION BUSHFIRE MANAGEMENT PLAN

A SoC is to prepare a Bushfire Management Plan prior to construction activities commencing, and for this plan to be prepared in consultation with the Rural Fire Service and Fire and Rescue NSW. The principles behind this Construction Bushfire Management Plan will be based on the commitments made and the consultation undertaken to date with the Rural Fire Service. These include the following:

- A 10 metre defendable space (Asset Protection Zone) will be incorporated in the final design plans for the solar array panels and infrastructure layout plan that will permit unobstructed vehicle access around the solar array panels and/or infrastructure; and
- The land within the solar array panels/infrastructure will be managed to an APZ standard.

9.3 OPERATIONS EMERGENCY RESPONSE PLAN

CoA Schedule 3 (25) 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.

IPPL has also made a SoC that this Emergency Response Plan will

- Specifically addresses foreseeable on-site and off-site fire events and other emergency incidents, (e.g. fires involving solar panel arrays, bushfires in the immediate vicinity or potential hazmat incidents);
- Detail the appropriate risk control measures that would need to be implemented in order to safely mitigate potential risks to the health and safety of firefighters and other first responders (including electrical hazards). Such measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the photovoltaic system (either in its entirety or partially, as determined by risk assessment); and
- Consider other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site.

Two copies of this Emergency Response Plan will be stored in a prominent Emergency Information Cabinet located in a position directly adjacent to the site's main entry points.

IPPL has also made a SoC that once constructed and prior to operation, the operator of MSF will make contact with the relevant local emergency management committee (LEMC).



Environmental Plans

Provided below is a summary of all environmental plans that require submission to and/or approval from a third party stakeholder.

Table 10.1 – Environmental Plans

Plan	Parties to be consulted	Submitted to/Approved by
PRIOR TO ROAD UPGRADES		
Traffic Management Plan	Roads and Maritime Service Armidale Regional Council.	To the satisfaction of the Department of Planning and Environment.
PRIOR TO CONSTRUCTION		
Final Layout Plans	-	Submitted to the Department of Planning and Environment.
Landscaping Plan	Roads and Maritime Service Office of Environment and Heritage Armidale Regional Council Residence R1.	To the satisfaction of the Department of Planning and Environment.
Biodiversity Management Plan	Office of Environment and Heritage.	To the satisfaction of the Department of Planning and Environment.
Chance Finds Protocol	Aboriginal Stakeholders.	To the satisfaction of the Office of Environment and Heritage.
Construction Environmental Management Plan	Department of Primary Industries – Water.	Submitted to the Department of Planning and Environment.
PRIOR TO OPERATION		
Work as Executed Plans	-	Submitted to the Department of Planning and Environment.
Emergency Response Plan	Rural Fire Service Fire & Rescue NSW.	-
Operations Environmental Management Plan	-	Submitted to the Department of Planning and Environment.
FUTURE UPGRADING OF SOLAR PANELS AND ANCILLARY INFRASTRUCTURE		
Revised Layout Plans	-	Submitted to the Department of Planning and Environment.
DECOMMISSIONING		
Decommissioning Management Plan	-	Submitted to the Department of Planning and Environment.



Monitoring Plan

11.1 PERFORMANCE MONITORING

The intent with respect to monitoring compliance against the Development Consent will include both a high level management review of the effectiveness of this Environmental Management Strategy, complemented with very specific monitoring of on-ground procedures and work practices that will be detailed in the various environmental plans required as a precursor to construction, operations, upgrading and decommissioning of the MSF.

11.2 MANAGEMENT REVIEW

IPPL will conduct two types of management reviews. An overview of these is provided below.

11.2.1 ROUTINE REVIEW

On at least one occasion during construction, operations, upgrading and decommissioning IPPL will conduct a routine management review. The focus of the review will be on the effectiveness of this Environmental Management Strategy in achieving compliance with the Development Consent.

11.2.2 TRIGGERED REVIEW

Separate to the routine review, IPPL 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; or breached or exceeded the limits or performance measures/criteria in the Development Consent.
- 2. In the event that the procedure for investigating and responding to a complaint, including the implementation of measures for avoiding a recurrence cannot be resolved to the satisfaction of a third party, and a **dispute has arisen**.
- 3. Any modifications to the existing Development Consent (18 July 2017).

11.3 PLAN COMPLIANCE

The suite of plans to be prepared at various stages of the development (refer **Section 2.2**) will each contain procedures, responsibilities and performance measures for managing environmental impacts, whether it be during construction, operations, upgrading or decommissioning.

The three overarching plans, being the Construction Environmental Management Plan, Operations Environmental Management Plan and Decommissioning Management Plan will each provide a collated summary of the requisite monitoring required in that plan.



References

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

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

EcoLogical (March 2017) Metz Solar Farm Environmental Impact Statement

EcoLogical (June 2017) Additional information supporting the Metz Solar Farm Environmental Impact Statement