

# Bango Wind Farm

Southern Tablelands, New South Wales

## Pollution Incident Response

## Management Plan

EPL 21286

Lachlan Valley Way

YASS NSW 2582


Rev C

21/07/2020



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## Document Controls

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<b>Approval:</b>		

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BWF Nominees Pty Ltd	CWP Renewables Pty Ltd

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## 1. Introduction

The Bango Wind Farm (the Project) is an approved renewable energy project located approximately 25 km north of Yass and approximately 25km south of Boorowa. The Project consists of up to 46 wind turbines each with a maximum height of 200m from foundation to the uppermost blade tip. The Project will also comprise access roads, internal electrical reticulation, temporary construction compounds, rock crushing facilities, concrete batching plant(s), a substation, an operations and maintenance facility, approximately 15 km of overhead transmission line and a switching station.

The Project will have a generation capacity of approximately 240 MW and will connect to the existing 132kV TransGrid transmission line oriented north-south east of the substation site. The Project will be constructed primarily on freehold land, as well as Crown and Council land across two Local Government Areas (LGAs) Yass Valley Council (YVC) and Hilltops Council (HTC). Land to be used for the Project is secured under lease and license arrangements. The Project will be constructed and operated by Bango Ridge Wind Farm Pty Ltd (BWF) with transmission infrastructure owned and operated by the network service provider.

Construction commenced in August 2019. Planning approval for Project is contained within compliance with the Development Consent (SSD-6686) and EPBC Approval 2013-6810. An Environmental Protection Licence (EPL 21286) was granted on 1 July 2019.

This Pollution Incident Response Management Plan (PIRMP) has been prepared as part of EPL 21286 and is designed to be a tool for project personnel to respond in a practised and well-planned manner in the event of a pollution incident at the Project.

The PIRMP will be used to manage the impact of a pollution incident to employees, neighbours, the wider community and the environment both on and off site.

The PIRMP ensures comprehensive and timely communication about a pollution incident to all personnel present at the Project, immediate neighbours, the Environmental Protection Authority (EPA) and other relevant agencies such as:

- NSW Department of Planning, Industry and Environment;
- Yass Valley Council;
- Hilltops Council;
- Ministry of Health;
- WorkCover Authority of NSW; and
- Fire and Rescue NSW.

The PIRMP minimises the risk of a pollution incident by firstly identifying the risks, putting measures in place to reduce the likelihood of an incident occurrence and finally planning and practising the response to a pollution incident.

This PIRMP forms part of the overarching Environmental Management Strategy for the project

and is to be read in conjunction with the Construction Environmental Management Plan for the project.

The PIRMP does not detail the procedure for treatment of injured persons or remediation of the environment following a pollution incident. These are covered in the Emergency Management Plan for the Bango Wind Farm prepared by the Engineering Procurement and Construction (EPC) contractor.

## **2. Scope of the Project**

### **2.1. Construction**

The scope of works to be performed during the construction phase of the project includes design and construction of 46 wind turbine generators (WTG's) including:

- Site entries and internal access track network;
- Hardstands and foundations;
- Electrical reticulation and ancillary facilities;
- Operations and Maintenance facility;
- Auxiliary works such as met mast connections, local public road works, etc;
- WTG design, manufacture and delivery to site;
- WTG erection, including mechanical and electrical installation.

The scope of works to be performed by the Grid Connector Contractor includes:

- Construction of 33/132kV Substation;
- 132kV Transmission line between the Substation and NSP connection.

### **2.2. Operations**

Once completed the wind farm will enter the operations phase. A Facility Manager will be located on site who will have the responsibility of managing the wind farm on behalf of the owners. They will have the responsibility for implementing this Plan during the operations phase. There will be a small staff between 10 and 14 who are responsible for daily maintenance and servicing of the turbines.

The project is located on the premises are shown in Table 1 Lot and DP for Premises.

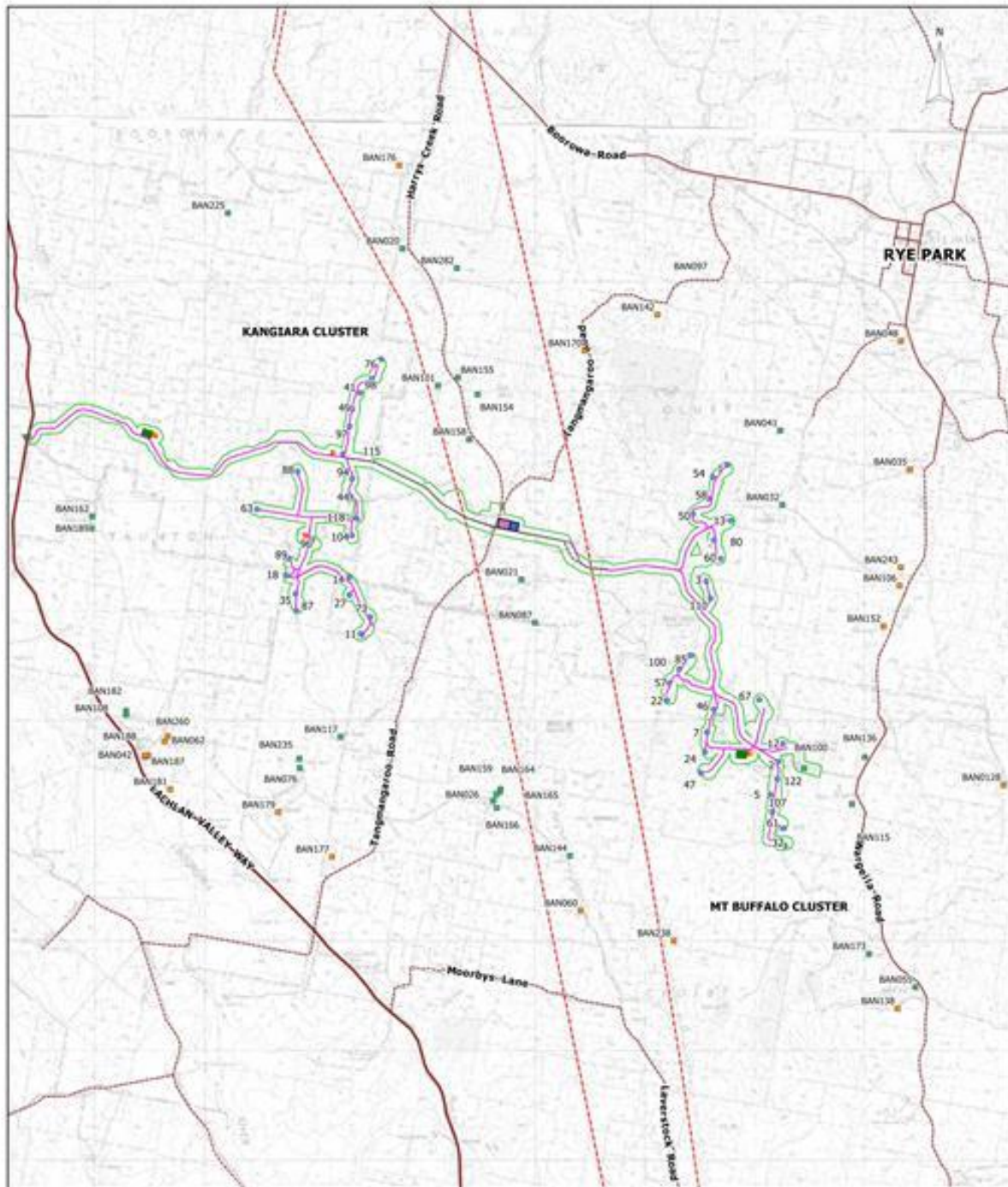


**Table 1 Schedule of affected Land**

<b>Lot</b>	<b>DP</b>	<b>Lot</b>	<b>DP</b>
1	83173	220	754135
13	113987	222	754135
5	240710	228	754135
1	625285	233	754135
2	625285	238	754135
1	625384	271	754135
2	625384	281	754135
3	625384	299	754135
1	742223	300	754135
31	754109	301	754135
48	754109	317	754135
115	754109	318	754135
139	754109	319	754135
242	754109	156	754143
263	754109	167	754143
268	754109	183	754143
279	754109	212	754143
287	754109	216	754143
297	754109	224	754143
309	754109	234	754143
87	754135	256	754143
88	754135	276	754143
162	754135	2 DP	802580
163	754135	2 DP	1048648
169	754135	2 DP	1187122
202	754135	3 DP	1187122
213	754135		

The land affected by EPL 21286 is shown in Figure 1 Location of Bango Wind Farm.

Figure 1 Project Infrastructure



LEGEND		COMPANY	
<b>Wind Farm</b> * WTC ▽ Main Site Access Option — Indicative Access Track — Overhead Transmission Line ○ Study Area <b>Residences</b> ■ Associated Residence ■ Non-Associated Residence		<b>BANGO WIND FARM PTY LTD</b> 	
<b>Construction Facilities</b> ■ Construction Compound Option ■ Concrete Batching Plant Option ■ Rock Crushing Facility Option ■ Collector Substation Option ■ Switching Station Option <b>Existing Infrastructure</b> - - - - Unsealed Road — Sealed Road - - - - 132 kV Transmission Line		<b>FINAL LAYOUT PLAN</b>	
DATE 15 MAY 2019		SCALE 1:68000	
DRAWN BY K OLD		DWG NO BAN-262	
CHECKED BY L CROSS		SHEET 1 OF 1	
0 8 km		REV A	
		VER 1	
		JOB NO 080811	
		SIZE A3	

### 3. Legal Requirements

The *Protection of the Environment Legislation Amendment Act 2011* introduced changes designed to improve the way pollution incidents are reported and managed in NSW. The changes apply to the holders of Environmental Protection Licences.

The requirements for PIRMP are set out in Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act 1997) and the *Protection of the Environment Operations (General) Regulation 2009*. In summary these provisions require that:

- all holders of an Environment Protection Licence prepare, implement and test a PIRMP;
- the plan includes the information detailed in the POEO Act 1997 (section 153C). These requirements are reproduced in Table 1;
- the plan must be kept at the premises to which the Environment Protection Licence relates.

**Table 2 Requirements for a PIRMP, Section 153C (d) Protection of the Environment Operations Act 1997**

Clause Number	Requirement	Section in this Plan
98 C (1) a	A description of the hazards to human health or the environment associated with the activity to which the licence relates	Appendix 1
98 C (1) b	The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood	Appendix 1
98 C (1) c	Details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity.	Section 6.1
98 C (1) d	An inventory of potential pollutants on the premises or used to carry out the relevant activity	Section 7
98 C (1) e	The maximum quantity of any	Section 7

Clause Number	Requirement	Section in this Plan
	pollutant that is likely to be stored or held at particular locations including underground tanks at or on the premises to which the licence relates	
98 C (1) f	A description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident	Section 8
98 C (1) g	<p>The names positions and 24 hour contact details of those key individuals who;</p> <ul style="list-style-type: none"> <li>• Are responsible for activating the plan</li> <li>• Are authorized to notify relevant Authorities under section 148 of the Act</li> <li>• Are responsible for managing the response to the pollution incident</li> </ul>	Section 13.1
98 C (1) h	Contact details of each relevant authority referred to in section 148 of the act.	Section 13.2
98 C (1) i	Details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of the premises in the vicinity of the premises to which the licence relates	Section 13.3
98 C (1) j	The arrangements for minimizing the risk of harm to any persons who are present where the scheduled activity is being undertaken	Section 14
98 C (1) k	A detailed map showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of	Figure 1 to 5

Clause Number	Requirement	Section in this Plan
	pollutants on the premises, and the location of stormwater drains on the premises,	
98 C (1) l	A description of how any identified risk of harm to human health will be reduced, including as a minimum, means of early warnings, updates and the action to be taken during or immediately following a pollution incident to reduce the risk,	Appendix 1 and Section 6.1
98 C (1) m	The nature and objectives of any staff training program in relation to the plan,	Section 14
98 C (1) n	The dates on which the plan has been tested and the name of the person who carried out the test,	Table 16
98 C (1) o	The dates on which the plan is updated,	Table of Revisions
98 C (1) p	The manner in which the plan is to be tested and maintained,	Section 16
<b>Other Requirements of the plan</b>		
	<p>Availability of the plan. The plan is to be available to an authorized officer on request and on the premises to which the licence relates or where the activities take place and to any person who is responsible for implementing the plan</p> <p>The plan is to be made publicly available within 14 days of its preparation in a prominent location on a publicly accessible website of the person who is required to prepare the plan</p>	Section 15
	Testing of the plan is to be carried out in such a manner as to ensure information included in the plan is accurate and up to date and the plan is capable of	Section 16

Clause Number	Requirement	Section in this Plan
	<p>being implemented in a workable and effective manner.</p> <p>The test is to be carried out at least once every 12 months and within one month of any pollution incident occurring in the course of an activity to which the licence relates so as to assess, in the light of an incident, whether information included in the plan is accurate and up to date and the plan is still capable of being implemented in a workable and effective manner.</p>	

#### **4. Definition of Pollution Incident**

The POEO Act 1997 defines a pollution incident as:

“...pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill, or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur.

It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.”

It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.”

The EPC is responsible for the design and construction of the Bango Wind Farm. The long-term operation will be undertaken by CWP Renewables.

The most likely environmental incidents that may be encountered include:

- Water pollution from construction activities
- Hydrocarbon spill that reaches natural watercourse. This could occur through:
  - Spillages when refuelling machinery
  - Leakage from diesel storage
  - Motor vehicle accident on site
  - Spillage from machinery breakdowns
- Air pollution from unusual vehicle emissions
- Chemical spill

This Plan considers both air and water-based pollution incident impacts. The site is managed in accordance with an Environmental Management System, Construction Environmental Management Plan which included management practices to effectively minimise the likelihood and impact of a pollution incident. However, pollution incidents may occur despite the best design and management methods being in place. Such accidental events are also covered in the Plan using incident response methods.

## 5. Duty to Notify

### 5.1. Requirement

The holder of an Environment Protection Licence is required to notify the relevant authorities if there is a risk of “material harm to the environment”.

Harm to the environment is material if:

1. It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
2. It results in actual or potential loss of property damage of an amount or amounts in aggregate exceeding \$10,000 (or such other amount as is prescribed by the regulations); and
3. 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.

Harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution.

Licence holders are required to report pollution incidents **immediately** (this means without delay) to **all** of the appropriate regulatory authorities.

These appropriate regulatory authorities are the:

- Environment Protection Authority;
- Department of Planning, Industry and Environment;
- Ministry of Health;
- WorkCover NSW;
- Yass Valley Council;
- Hilltops Council;
- Fire and Rescue NSW.

Failure to notify in accordance with the Act carries a maximum penalty of \$2 million.



## 6. Pre-emptive Actions Taken

Construction of the BWF is carried out in accordance with SSD 6686 and associated Management Plans that have been approved by NSW DPIE, including:

- Environmental Management Strategy
- Biodiversity Management Plan
- Heritage Management Plan
- Traffic Management Plan

These documents provide the principal reference for site environmental management during construction.

### Air

- Maintain compacted surface on site roads;
- Stabilise and rehabilitate all disturbed areas to prevent or minimise dust generation;
- Apply dust control measures during construction as required;
- Ensure vehicle speeds are below site speed limit during increased dust risk; and
- Ensure all vehicles are properly maintained to minimise emissions.

### Water

- Rehabilitate all construction works;
- Monitoring rehabilitation during construction to identify and rectify erosion and drainage issues;
- Regular equipment inspections and maintenance to detect and correct any potential oil or fuel leaks;
- Ensure procedures for safely handling oil, fuel and chemicals on site are in place;
- Store all hazardous liquids in suitable containment areas;
- Provision of suitable spill control equipment;
- Provision of training in containment and recovery procedures; and
- Monitoring of all systems over time to ensure effectiveness.

### Noise

- Compliance with approved working hours
- Layout design to achieve compliance
- Noise compliance assessments for operating wind farm
- Reporting of noise compliance results and any mitigation
- Complaint investigation and responses
- Operational controls to ensure noise compliance

### Waste management and soil contamination

- Separation of wastes
- Storage and handling procedures – covered waste storage skips or bins
- Waste classification where required
- Appropriate and compliant disposal of wastes
- Testing, storage and treatment or disposal of contaminated soil

### **Environmental Management**

- Ensure all hazards have been identified and are included in the Site Risk Register
- Ensure all hazards are appropriately addressed by suitable control measures (risks acceptable)
- Ensure that the management system provides regular inspections of the effectiveness of controls
- Maintain hazardous substances register on site and SDS for all listed items
- Reporting as required.
- Controls are outlined in the EMS and CEMP which address the hazards described in this PIRMP.
- Testing of the PIRMP within every 12 month period.

## 7. Inventory of Potential Pollutants

Civil construction by its nature has a limited list of typical pollution types which are required to be considered under the PIRMP. This list covers the main types of waste which could cause potential incidents found within the Project site a summary of potential pollutants is provided in Table 3.

**Sediment laden water:** Sediment generation is the primary source of pollution potential on site. A soil and water management plan has been developed by the EPC contractor and the plan details the types of erosion and sediment controls that are required to be implemented throughout the project to prevent offsite sedimentation impacts.

**Waste Oil:** All waste oil generated shall be stored in drums in the oil store / bunded area prior to transport off site for disposal.

**Diesel Oil:** Diesel is used on site to power the construction equipment and machinery. A limited amount will be stored on site in a double bunded Trans tank at the site compound, or other suitable nominated location. Additional fuel will be sourced via a commercial tanker.

**Table 3 List of typical main pollutants in the Bango Wind Farm Project**

Description	Comments
<b>Air Based Emissions</b>	
Dust	From machinery driving on haul roads and crushing of materials
Fire	Fire is not considered an environmental incident, but the smoke from the fire can be and can affect neighbours.
Noise	Emitted by plant and equipment.
Odour	Odour is not a major problem the Project site.
<b>Spill type emissions</b>	
Class 3 flammable liquids e.g. Fuels including petrol-based fuels and. Combustible Liquids (C1 & C2) Lubricants and hydraulic oils and other	For plant and equipment operations.
Other dangerous Goods classes e.g. <ul style="list-style-type: none"> <li>• Compressed gases</li> <li>• Corrosive substances</li> </ul>	Used for a variety of purposes on site, Usually in small quantities

<ul style="list-style-type: none"> <li>• Oxidizing substances</li> <li>• Toxics</li> <li>• Other dangerous goods</li> </ul>	
Insulating Oil	Stored in suitable containers Used in accordance with MDS
Hydraulic Oil	Stored in suitable containers Used in accordance with MDS
Cleaning agents	Stored in suitable containers Used in accordance with MDS
Sewage effluent	Pumped out of tanks
Coolant	Stored in suitable containers Used in accordance with MDS
<b>Other emissions</b>	
Wastes	Storage of wastes and wastes containing chemicals
Treated packaging	Removed from site

## 8. Inventory of Safety Equipment

The tables below provide an inventory of the safety equipment and other devices available on site to minimise the risks to human health, the environment and to contain/control a pollution incident at BWF.

### 8.1. Construction phase

Curing the construction phase of the wind farm there is a higher risk of a pollution incident due to the nature of construction and the type and number of plant and equipment on site.

### 8.2. Operations phase

During operation of the wind farm there will be a greatly reduced potential for an environmental incident due to the number of staff on site and the type of works undertaken.

**Table 4 Pollution control equipment available**

Product	Location Construction	Location Operations	Purpose
Spill Kits	Compound, Mobile fuel trucks Hardstands during pours / erection	O & M Facility	Control of minor spills
MSDS	Compound	O & M Facility	Provide data on chemicals
Drip trays	Fuel trucks	Fuel Cabinet	Control spillage when refuelling
Bunded containers	Works sites Compound	Fuel Cabinet	Used to store containers of chemicals, fuels and the like
First Aid Kits	Compound All vehicles	O & M Facility All vehicles	For administering first aid
Fire Extinguishers	Compound All vehicles	O & M Facility All vehicles	Control of any minor fire

### 8.3. Installed pollution control measures

The following measures will be used to prevent pollution to the environment when storing and handling various chemicals and substances:

**Table 5 Pollution control measures during construction and operations**

<b>Product</b>	<b>Storage/ control technique - Construction</b>	<b>Storage/ control technique - Operations</b>
Diesel Fuel	Mobile tanker delivering fuel to site.	Small volumes stored at O&M in cabinet
Lubricants	Storage in dedicated cabinets / containers at Compound during construction Transport around site in dedicated containers	Storage in dedicated cabinets / containers at O & M Facility Transport around site in dedicated containers
Coolants	Storage in dedicated cabinets / containers at Compound during construction Transport around site in dedicated containers	Storage in dedicated cabinets / containers at O & M Facility Transport around site in dedicated containers
Solvents	Storage in dedicated cabinets / containers at Compound during construction Transport around site in dedicated containers	Storage in dedicated cabinets / containers at O & M Facility Transport around site in dedicated containers
Paint	Stored in original container	Stored in original container
LPG	Certified storage vessels to Australian codes and standards	Certified storage vessels to Australian codes and standards
Herbicides	Transport around site in dedicated containers Application by qualified operators Application in accordance with label.	Transport around site in dedicated containers Application by qualified operators Application in accordance with label.
Soil	Installation of temporary erosion and sediment control measures, per erosion and sediment control plans. Maintenance of constructed permanent drainage features and controls.	Installation of erosion and sediment control measures. Maintenance of permanent drainage features and controls.

## **9. Actions to be taken before, during and immediately after a pollution incident**

### **9.1. Actions to minimise a pollution incident**

The following actions have been undertaken or are ongoing and aim to minimise an event from which a pollution incident may result:

- A Pollution Incident Risk Assessment has been undertaken and is included in Appendix 1. This assessment was used by Bango Wind Farm Pty Ltd to identify the risks associated with activity, put management measures in place to reduce the likelihood of any significant risks occurring and therefore minimise the likelihood of a pollution incident.
- Regular inspection of the integrity of chemical bundling, pipelines, containers and workshop areas Bango Wind Farm Pty Ltd to identify any potential for an incident due to wear and tear or physical damage on a regular basis. This combined with regular maintenance helps to minimise the likelihood of an incident.
- Staff Training in the storage and handling of liquids, clean-up of spills and emergency procedures helps to minimise the likelihood of an incident occurrence and prevents a small issue escalating into an incident.
- Bango Wind Farm Pty Ltd operates using a comprehensive Environmental Management System and Safety Plan. These plans help to ensure that Bango Wind Farm Pty Ltd operations are undertaken with full consideration and management of the risks involved and ensures that we operate in a planned, practiced way using correct standards and procedures.

### **9.2. Actions to be taken during a pollution incident**

In the event of a pollution incident the following actions will be taken:

- Ensure Personal Safety.
- Assess the necessity for evacuation. If evacuation is required, then evacuation will be undertaken in accordance with the relevant site evacuation procedure.
- Undertake emergency response other than evacuation.
- If safe and possible to do so, undertake immediate measures to prevent further impacts from the pollution incident (ie. stop the leak or spill)
- If safe and possible to do so, undertake immediate measures to contain the spilled/leaked material and prevent spread.
- Contact the Appropriate Regulatory Authorities (ARA) (refer to Section 10).
- Take direction from ARA if provided.
- If required seek assistance from specialist consultants.

### **9.3. Ensure Personnel Safety**

If a pollution incident occurs the first priority is to ensure personnel safety, visually assess the situation and if there is significant risk to human health, undertake proceedings to evacuate the site.

If evacuation is not required, the area shall be isolated and segregated to prevent personnel coming in contact with the incident. Barriers are to be erected, and other isolation measures implemented where available. If possible, isolate the release by turning off valves safely.

The area supervisor is to be informed so that senior management can also be advised. Two-way radio will be used for communication on site during construction and operations. This method of communication will be used to alert personnel working on site of the occurrence of a pollution incident. It is a fast and effective way to communicate so that personnel can ensure their personal safety.



## 10. Notification of Authorities

**Immediately** after The Contractor's Site Manager is aware of a pollution incident a "Bango Wind Farm Pty Ltd Key Contact" will notify all authorities listed in section 12 of this plan.

The following protocol will be followed for notification of pollution incidents:

### 10.1. Protocol

1. Call 000 if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, NSW Police and NSW Ambulance Service are the first responders and responsible for providing emergency assistance.
2. If the incident does not require an initial combat agency, or once the 000 call has been made, notify the relevant authorities in the following order:
  - a. The Environment Protection Authority (via the Pollution Hotline);
  - b. Department of Planning, Industry and Environment;
  - c. The Ministry of Health (via the Goulburn Public Health Unit);
  - d. WorkCover NSW;
  - e. Yass Valley Council;
  - f. Hilltops Council; and
  - g. Fire and Rescue NSW

The information that is required to be notified is as follows:

- a) The time, date, nature, duration and location of the incident,
- b) The location of the place where pollution is occurring or likely to occur,
- c) The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,
- d) The circumstances in which the incident occurred (including the cause of the incident),
- e) The action taken and proposed to be taken to deal with the incident and any resulting pollution or threatening pollution, if known,
- f) Any other information prescribed by regulations.

Notification is required **immediately**. Any information required that is not known at the time of the incident can be notified when it becomes known.

### 10.2. Consultation of the MSDS

If the pollution incident involves the use of a product for which an MSDS is available then upon notification of a pollution incident, the MSDS shall be consulted to obtain information to help in the management of the incident which may include recovering the product and performing the clean-up. In certain instances, specialised outside help may be needed. The MSDS will also provide information on the appropriate PPE to be worn if it is decided to approach the release.

### **10.3. Notification of Neighbours**

Neighbours will be contacted directly via the phone in the event of a pollution incident, if there is risk of harm to their safety.

## **11. Actions following a pollution incident**

### **11.1. Clean up and Recovery**

Following a pollution incident key personnel will develop a clean-up and recovery plan. It may be possible to undertake this, using resources on site or depending on the situation may require the engagement of emergency services or professional clean-up crews with breathing apparatus and sophisticated recovery plant.

### **11.2. Incident Report**

During construction the Contractor's Site Manager for the Balance of Plant and TransGrid for the Sub-Station will undertake a comprehensive investigation of any pollution incident event and complete and Incident Report (template in Appendix 2). Within 7 days of the incident this report will be issued to authorities. During operations this will be undertaken by the Facility Manager.

## 12. Contact Details

### 12.1. Bango Wind Farm key contacts

The people listed in Table 6 are responsible for activating this plan.

Notifications to the appropriate regulatory authorities is the responsibility of CWP. In the absence of a CWP representative being on site then the EPC Project or Site Manager will inform CWP directly of an incident so that the appropriate notification can take place.

**Table 6 Bango Wind Farm Key Contacts**

KEY CONTACT	POSITION	CONTACT DETAILS (24Hrs)
Jonathan Post	CWP Project Manager	[REDACTED]
Malcolm Moore	CWP Site Representative	[REDACTED]
Alana Gordijn	CWP Environmental Officer	[REDACTED]
Christian Flessner	EPC Project Manager	[REDACTED]
Simon Povey	EPC Site Manager	[REDACTED]
Robert Sinclair	EPC Environmental Site	[REDACTED]
Gavin Casson	Downer Project Manager	[REDACTED]
Josh Lind	Downer Construction Manager	[REDACTED]
Andrew Galland	Downer Snr Enviro Advisor	[REDACTED]
Milos Popadic	Transgrid Project Manager	[REDACTED]
John Lusk	Transgrid Site Manager (Sub)	[REDACTED]
Andrew Bush	Transgrid Site Manager (OHL)	[REDACTED]

### 12.2. Appropriate regulatory authorities

The table below provides contact information for the appropriate regulatory authorities. All Appropriate Regulatory Authorities are to be contacted in the event of a pollution incident and are contained in Table 7.

**Table 7 Appropriate Regulatory Authorities - Contact Details**

Regulatory Authority	Key Contact	Contact Details
Environment Protection Authority	EPA Environment Line Queanbeyan Office	131 555 (02) 6229 7002
Department of Planning, Industry and Environment	DPE Compliance 24-hour line Katrina O'Reilly	1300 305 695 [REDACTED]
SafeWork NSW		131 050
NSW Ministry of Health via Goulburn Public Health Unit (PHU)	Goulburn PHU Tabitha Holliday	(02) 4824 1837 [REDACTED]
Yass Valley Council Council@yass.nsw.gov.au	Business Hours After Hours	(02) 6226 1477 (02) 6226 1477
Hilltops Council mail@hilltops.nsw.gov.au		1300 445 586
Fire and Rescue NSW		1300 729 579
Fire, Police, Ambulance (Emergency only)		000

### 12.3. Communicating with host properties & neighbours

In the event of a Pollution Incident occurring on site, the nearest, potentially affected hosts/neighbours will be contacted. Table 8 provides details of the hosts and closest neighbours to the site.

**Table 8 Host contact details (not included in online version)**

Property	Status	Key Contact	Contact Details
Brooklands – Carwoola	Host	Rob Purves	[REDACTED]
		Ben Costa	[REDACTED]
The Pines	Host	Wal Archer	[REDACTED]
		Kate Archer	[REDACTED]
Woolangobra	Host	Kerry Rayner	[REDACTED]

		Roger Rayner	████████████████████
Clear View	Host	Dermott McGrath	████████████████████
Clear View South	Host	Danny McGrath	████████████████████
The Springs	Host	Peter Thompson	████████████████████
Yambacooona	Host	John McGrath	████████████████████
		Jeremy McGrath	████████████████████
Mt Buffalo	Host	Tom Gunthorpe	████████████████████
Taff Hill	Host	Tom McGrath	████████████████████

### 13. Training

The following training will be undertaken to ensure that the PIRMP is well understood and that all staff are familiar with the requirements of the plan and the key steps to manage a pollution incident:

- The requirements of the PIRMP will be included as part of the Site Induction process for all staff working on the Project regardless of their employer.
- All site personnel will be tool boxed on the requirements of the PIRMP and what their obligations are.

#### **14. Access to the PIRMP**

This plan will be kept on the premise to which the EPL relates. It will be kept in hard copy with the EPL at the compound offices of the Project and at the substation compound offices. Following construction, a copy will be placed in the Operations and Maintenance Building. A copy of the PIRMP and EPL will be placed on the Project's web page and associated digital presences.

The PIRMP will be accessible to anyone who has the legal authority to view in accordance with the provisions of the POEO Act.

## 15. Testing the PIRMP

The PIRMP will be tested annually, with the first test being undertaken within the first 6 months of construction and annually thereafter.

Testing of the PIRMP will include:

- A desktop review of the plan to ensure that the information is accurate and up to date.
- A drill exercise to simulate one of the potential incidents identified within the risk assessment in Appendix 1.

As it is a requirement of the legislation, this plan will also be tested within one month of any pollution incident occurring on site.

**Table 9 Register for Testing the PIRMP**

<b>Date of Test</b>	<b>People Involved</b>	<b>Comments/Outcomes</b>	<b>Modification to PIRMP</b>
26/3/2020	Malcolm Moore Patric	Desktop test undertaken to meet annual testing requirements.	Section 2.1, 8.1, 8.2, 12, 12.1 Table 4,6, 8
21/07/2020	Alana Gordijn	Desktop review and test following actual pollution incident (21/06/2020)	Section 1, 7, 9.2, 10.1, 12.1, 12.2,



# Appendix 1

## Pollution Incident Risk Assessment

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A risk assessment was undertaken on site with the EPC Contractor. The primary objectives of the risk assessment were to:

- Use the risk assessment to identify key environmental issues to be addressed in the PIRMP.
- Use a risk assessment as input into the preparation of control measures for wind farm construction and operation;
- Prioritise identified environmental risks through a risk ranking process;
- Identify recommended actions to minimise or reduce risk; and
- Document the process and the results

The review process was based on the framework detailed in ISO 31000:2009 Risk Management - Principles and guidelines. The main tasks in the process were:

1. Context – Scope, Background “What is the study area and why are we doing this?”
2. Identify – Brainstorming, Modified Hazard and Operability Study (HAZOP), etc.
3. Analyse – Available data – “How big is the problem?”
4. Assess – Priority setting – “What are the Critical Issues?”
5. Assess – Risk Ranking – “What is the combination of consequence and likelihood?”
6. Treat – Control analysis – “A solution.”
7. Monitor & Review – Action items and inclusion of Risks and Treatment Strategies in Risk Management plans.

Three identified risks were then assigned a probability and a consequence rating according to the ratings outlined in Table A1 – Probability Considerations and Table A2 – Consequence Ratings. These probability and consequence considerations were then assigned a risk in accordance with Table A3 – Risk Ranking Table.

**Table A1 – Probability Considerations**

Likelihood (L)		
A	Almost certain	Happens often
B	Likely	Could easily happen
C	Possible	Could happen and has occurred elsewhere
D	Unlikely	Hasn't happened yet but could
E	Rare	Conceivable, but only in extreme circumstances

**Table A2 – Consequence Ratings**

Consequence (C)		
1	Extreme environmental harm	Widespread catastrophic impact on environmental values of an area
2	Major environmental harm	Widespread substantial impact on environmental values of an area
3	Serious environmental harm	Widespread and considerable impact on environmental values of an area
4	Material environmental harm	Localised and considerable impact on environmental values of an area
5	Minimal environmental harm	Minor impact on environmental values of an area

**Table A3 – Risk Ranking Table**

	Probability				
	A	B	C	D	E
1	1 (H)	2 (H)	4 (H)	7 (M)	11 (M)
2	3 (H)	5 (H)	8 (M)	12 (M)	16 (L)
3	6 (H)	9 (M)	13 (M)	17 (L)	20 (L)
4	10 (M)	14 (M)	18 (L)	21 (L)	23 (L)
5	15 (M)	19 (L)	22 (L)	24 (L)	25 (L)

	Intolerable
	As low as reasonably practical
	Tolerable

A risk assessment was undertaken on site with the EPC Contractor.

**Table A4 BWF - Risk Assessment – Examples of Pollution Incident Risks**

Work step or facility	Hazards	Risk	Risk Score	Mitigation Strategies (Control Measures)	Residual Risk Score	Control Measure Responsibility
Construction of BWF						
Civil works	Soil erosion	Erosion and sedimentation	Medium	Preparation of Erosion and Sediment Control Plans Ongoing monitoring and rectification works by BOP Contractor to fulfil rehabilitation requirements	Low	EPC Manager
Civil works	Air emission	Reduction in air quality	Medium	Implementation of dust management strategies Visual inspections of plant and equipment for excessive emissions (smoke) No burning of vegetation on site	Low	EPC Manager
Civil works	Water Pollution	Reduction in water quality	Medium	Preparation of Erosion and Sediment Control Plans Ongoing monitoring and rectification works by BOP Contractor to fulfil rehabilitation requirements	Low	EPC Manager
Civil works	Fuel spill	Reduction in water quality	Medium	Low volumes of oil, Inspections to detect leakage, Spill oil recovery, Maintenance of plant and equipment	Low	EPC Manager
Civil works	Concrete spill	Reduction in water quality	Medium	Preparation of Erosion and Sediment Control Plans Ongoing monitoring and rectification works by BOP Contractor to fulfil rehabilitation requirements	Low	EPC Manager
Civil and WTG Installation	Onsite sewage spill	Reduction in water quality	Medium	Septic system approved by Council for operations. Checks on operation of systems. Fencing out of disposal areas	Low	EPC Manager

Work step or facility	Hazards	Risk	Risk Score	Mitigation Strategies (Control Measures)	Residual Risk Score	Control Measure Responsibility
Transport	Fuel Spill	Reduction in water quality	Medium	Classification, designated storage areas, Bunding, spill control procedure, Spill control equipment	Low	EPC Manager
Transport	Structural damage to road / culvert resulting in water pollution	Reduction in water quality	Medium	Drive to road conditions; Ensure roads fit for purpose; Preventative maintenance on culverts; Guideposts and signage;	Low	EPC Manager
WTG Installation	Packaging	Increased pollution on site	Low	Reduce waste, Classify waste Store waste in closed bins or cover to minimise chance of being blown around site	Low	EPC Manager
WTG Installation	Coolant spill	Reduction in water quality	Medium	Classification, designated storage areas, Bunding, Spill control procedure, Spill control equipment	Low	EPC Manager
WTG Installation	Fuel spill	Reduction in water quality	Medium	Classification, designated storage areas, Bunding, spill control procedure, Spill control equipment	Low	EPC Manager
Site Rehabilitation	Inadequate stabilisation / vegetation coverage	Erosion and sedimentation	Medium	BMP Section 4.6 Site Rehabilitation. Ongoing monitoring and rectification work by BOP Contractor to fulfil rehabilitation requirements Condition 41 Schedule 3 of Conditions of Approval.	Low	EPC Manager

Work step or facility	Hazards	Risk	Risk Score	Mitigation Strategies (Control Measures)	Residual Risk Score	Control Measure Responsibility
Site Rehabilitation	Weeds	Weed infestations	Medium	BMP Section 4.8 Weed Control. Ongoing monitoring and rectification work by BOP Contractor to fulfil rehabilitation requirements Condition 41 Schedule 3 of Conditions of Approval.	Low	EPC Manager
Construction of substation						
Site Rehabilitation	Inadequate stabilisation / vegetation coverage	Erosion and sedimentation	Medium	TG CEMP Section 6.4 Site Rehabilitation. Ongoing monitoring and rectification work by TG Contractor to fulfil rehabilitation requirements and fulfil Condition 41 of Schedule 3 of Conditions of Approval.	Low	TG Manager
Site Rehabilitation	Weeds	Weed infestations	Medium	TG CEMP Section 6.4, Site Rehabilitation. Ongoing monitoring and rectification work by TG Contractor to fulfil rehabilitation requirements and fulfil Condition 41 Schedule 3 of Conditions of Approval.	Low	TG Manager
Erosion of disturbed ground	Soil erosion and sediment transfer / weeds	Intense rain event	Medium	TG CEMP Section 6.4 Effective erosion and sediment control. Stabilised all disturbed areas. Rehabilitation Programme. Routine weed management	Low	TG Manager
Material storage	Fuel, oil, chemicals	Soil contamination	Medium	Classification, Storage in designated storage areas, Bunding, Adoption of spill control procedure, Access to spill control equipment	Low	TG Manager

Work step or facility	Hazards	Risk	Risk Score	Mitigation Strategies (Control Measures)	Residual Risk Score	Control Measure Responsibility
Waste Management	Oil, chemicals, rags, plastics, steel, wood, other	Soil contamination, amenity, visual	Medium	Classification, designated waste areas, labelling, recycling, appropriate/legal disposal	Low	TG Manager
Operation of substation						
Large transformer 33kV/132kV	Loss of large oil volume	Soil or water pollution	Medium	Design includes location within substantive concrete bund and inground oil/water separator. Regular inspection and maintenance	Low	TransGrid
Oil Water Separator	Ineffective operation	Oil discharge to soil and waters	Low	Regular inspection and maintenance, Keep clean	Low	TransGrid
Transformer Oil Cleaning	Leakage / Loss of oil volume	Soil or water pollution	Medium	Established maintenance procedure undertaken by specialist contractors. Adequate controls put in place during activity.	Low	TransGrid
Hazardous substance storage	Storage of waste oil and chemicals	Spillage to soil and waters	Low	Storage of relatively small amounts of hazardous substances, oil and chemicals.	Low	TransGrid
Sewage system on-site	Leakage to waters	Failure of pipework	Low	Septic system approved by Council for operations. Checks on operation of systems.	Low	TransGrid
Small plant equipment / auxiliary generator	Refuelling, servicing, wastes	Spillage of fuel or oil	Low	Fuel and oil handling procedures, Spill response equipment on hand. Auxiliary/backup generator is banded.	Low	TransGrid

Work step or facility	Hazards	Risk	Risk Score	Mitigation Strategies (Control Measures)	Residual Risk Score	Control Measure Responsibility
Waste	Inappropriate disposal	Pollution, Fines, penalties	Medium	Minimal waste during operations. Clearly defined waste handling processes, Separation of wastes, Use of waste licensed contractor	Low	TransGrid
Operation of and Maintenance of Wind Farm						
Turbine Coolant system (320L per turbine)	Loss of chemical from coolers	Soil or water pollution	Medium	Use of Biodegradable coolant, Regular inspections and maintenance. Procedure for top-up of coolant to avoid spills	Low	Facility Manager
Turbine oil and grease systems and servicing	Leak or Spill of oil or grease	Contaminate soil or water	Low	Low volumes of oil, Inspections to detect leakage, Spill recovery procedure Maintenance of plant	Low	Facility Manager
Erosion of disturbed ground	Soil erosion and sediment transfer / weeds	Intense rain event	Medium	Effective erosion and sediment control. Stabilised all disturbed areas. Rehabilitation Programme. Routine weed management	Low	Facility Manager
Material storage	Fuel, oil, chemicals	Soil contamination	Medium	Classification, designated storage areas, Bunding, Adoption of spill control procedure, Access to spill control equipment	Low	Facility Manager
Waste Management	Oil, chemicals, rags, plastics, steel, wood, other	Soil contamination, amenity, visual	Medium	Classification, Designated waste areas, Labelling, Recycling, Appropriate/legal disposal	Low	Facility Manager



Work step or facility	Hazards	Risk	Risk Score	Mitigation Strategies (Control Measures)	Residual Risk Score	Control Measure Responsibility
Various	Bushfire	Impact from bushfire	Medium	Bushfire Risk Management Plan, Fire-fighting equipment on-hand (especially for hot works)	Low-Med	Facility Manager
Wind farm infrastructure	Equipment Fire	Ignition of bushfire. Harm to life & property	Medium	Bushfire Risk Management Plan, Control ignition source, Sensors and automated shutdown systems on turbines, Fire-fighting equipment on-hand (especially for hot works)	Low	Facility Manager
Vehicle movements	Air borne dust	Roads poorly maintained	Medium	Maintain road surfaces to limit dust generation when vehicles use road. Deploy water cart as required. Reduce vehicle speeds. Consider application of surfactants.	Low	Facility Manager
Access track maintenance	Erosion of tracks and adjacent land	Sediment transfer	Medium	Higher risk on steeper slopes and erodible soils. Ensure drains are lined to reduce flow velocity and prevent scouring of drain. Stabilise batters. Rehabilitation Programme. Flocculate sediment basins	Low	Facility Manager
Turbine coolant storage (O&M) and other chemical storage	Damage to storage container	Spillage of coolant	Low	Stored in appropriate manner on designated bunding adjacent to storage shed at O&M Compound	Lo	Facility Manager
Herbicide use on disturbed area	Inappropriate use/application	Spills, penalties	Low	Handling procedures, Contractor applying herbicides to be appropriately trained and certified. Review weather forecast prior to application.	Low	Facility Manager



# Appendix 2

## Incident Report – Template

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## Incident Report

Date Report Raised			
Raised By			
Date of Incident			
Description of Incident			
Corrective Action	Completed By	Due Date	
Preventative action	Completed By	Due Date	
Incident Report Closed out By:	Signed by Issuer		
Comments	Date		