

Bluff Point Wind Farm and Studland Bay Wind Farm Public Environmental Report 2019-2021

25 March 2022



Table of Contents

1. General Manager's Statement	4
2. This report and reporting period	5
3. Profile – Woolnorth Wind Farm Holding	6
4. Environmental Policy - Woolnorth Renewables	7
5. Activity Profile	8
5.1 Background	8
5.2 BPWF and SBWF	8
5.3 Plant and operations	12
5.4 Production capacity and actual production level	13
5.5 Raw material consumption	13
5.6 Product markets and sources of raw material	14
5.7 Pollution, greenhouse gas emissions and waste, and their control measures	14
5.8 The local environment	15
5.9 The regional environment	16
5.10 Changes to wind farm operations over the reporting period	16
6. Legislative requirements	17
6.1 Permit conditions	17
6.2 Relevant Environmental legislation	17
7. Environmental Management and Monitoring	19
7.1 Environmental Management Plans	19
7.2 Environmental Management System	20
7.3 Annual audit reports	20
7.4 Report on any changes made or intended to the activity or EMS in response to the annual audits	22
7.5 Public Complaints	22
7.6 Environmental Incidents (non-trivial) and non-compliances	23
7.7 Environmental procedure or process changes	23
7.8 Environmental Management activities and meetings	23
7.9 Specific actions under EMPCA	25
7.10 Any proceedings under Tasmanian or Commonwealth environmental legislation	25
7.11 Any other enforcement actions	25
7.12 Breaches of permit conditions or relevant limits in legislation and results that vary significantly from predictions contained in any relevant EMP	26
7.13 Staff and contractor environmental training	26
7.14 Community engagement	27
7.15 Commitments to improve future environmental performance	27
State Environmental Management Plan	28
8. General Management	28
8.1 2016 EMP overview	28

8.2	General Management	28
	Reporting of Bird and Bat Collisions	28
8.3	Orange-bellied Parrot Management	28
	Vegetation Management - Site vegetation assessment and control program	28
	Turbine shutdown triggers	33
8.4	Eagle Management	34
	Monitoring eagle collisions with Wind Turbines	34
	Minimising food resources on-site	34
	Rehabilitation of injured eagles	34
	Understanding the factors involved in eagle collision risk	34
	Commonwealth Environmental Management Plans	36
9.	Vegetation Management Plan	36
10.	Tasmanian Wedge-tailed Eagle and White-bellied Sea-eagle Nesting Habitat Management Plan	36
11.	Woolnorth to Smithton Transmission Line	36
12.	Environmental management activities conducted in addition to regulated commitments	37
12.1	Emergency response	37
12.2	Supporting the Tasmanian Threatened Eagles Recovery Plan review	37
12.3	Roadkill mitigation for Save the Devil Program	37
12.4	Technological investigations	37
12.5	Land management activities	37
	Glossary	38
	Species names referred to in text	39
	Appendix 1 - Bluff Point Wind Farm EPN 7421/2 (current version)	
	Appendix 2 - Studland Bay Wind Farm EPN 7423/3 (current version)	

1. General Manager's Statement

This is the 4th Public Environment Report (PER) published for the Bluff Point Wind Farm (BPWF) and the Studland Bay Wind Farm (SBWF) projects. The PER has been prepared following the requirements set out in Section 2.3 and 3.4 of the Annual Fee Remission Guidelines (2010). This PER is also prepared to satisfy Condition G5 of the Environment Protection Notices (BPWF EPN no. 7421/2 and SBWF EPN no. 7423/3) requiring the submission of an Annual Environmental Review (AER), that is publicly available (www.woolnorthwind.com.au/health-safety), to the Director of the Environment Protection Authority (EPA) by the 31st of March of each reporting year. This PER reporting period is January 1, 2019 to December 31, 2021.

The information contained in this PER has been carefully prepared by our environmental team, in collaboration with project staff.

I acknowledge and endorse this report.



Stephen Ross
General Manager
Woolnorth Wind Farm Holding Pty Ltd
25 March 2022

2. This report and reporting period

This is the fourth Public Environmental Report (PER) published for the Bluff Point and Studland Bay Wind Farms in accordance with the Annual Fee Remission Guidelines (sec Ed. 2010) produced under Part 7 of the Environmental Management and Pollution Control (general fees) Regulation 2007.

This PER provides a summary of the environmental management activities and works undertaken at the BPWF and SBWF during the period 2019-2021. The reporting requirements relevant to the Commonwealth EPBC (*Environment Protection and Biodiversity Conservation Act*) approval (2000/12) are also included in this document. It also provides additional information to satisfy the reporting requirements of a PER, a summary of additional work undertaken at these sites to address any environmental issues and/or to improve environmental management of the sites. Table 1 contains details of the sections within this report and the specific purpose of each section.

Table 1 – Sections contained within this report and details of reporting requirements met.

Sections of this report	Compliance details
Statement from General Manager	Requirement of G5 of EPNs. PER requirement.
Reporting period Section 2	PER requirement
Profile – Woolnorth Wind Farm Holding Section 3	PER Requirement
Environmental Policy – Woolnorth Holding Section 4	PER requirement
Activity Profile Sections 3	PER requirement
Legislative requirements Section 6.2	PER requirement
Permit Conditions Section 6.1	Reporting on commitments contained within EPNs. PER requirement.
Environmental Management Plans – State and commonwealth Sections 8-11	Reporting on commitments contained within EPNs, EPBC Approval and the State Environmental Management Plan
Complaints Received from the Public Section 7.5	PER requirement.
Non-trivial Environmental Incidents Section 7.6	PER requirement.
Infringement Notices, Prosecutions or Enforcements Section 7.10, 7.11	PER requirement.
EMPCA actions Section 7.10, 7.11	PER requirement.
Environmental Monitoring Section 7-11	PER requirement.
Environmental Training Section 7.13	PER requirement.
Community Engagement on Environmental Matters Section 7.14	PER requirement.

Sections of this report	Compliance details
Environmental Performance Improvement Section 7.15	PER requirement.
Additional Environmental Actions Section 12	PER requirement.
EPN conditions Appendix 1 and 2	PER requirement.

3. Profile – Woolnorth Wind Farm Holding

Woolnorth Wind Farm Holding Pty Ltd was formed in 2012 and is a joint venture between Hydro Tasmania and Shenhua Clean Energy Holding. In February 2020, Woolnorth Wind Farm Holding registered and commenced trading under the name of Woolnorth Renewables (WNR). WNR owns and operates the BPWF (64.75MW) and SBWF (75MW) Wind Farms, as well as the Musselroe Wind Farm (MRWF, 168MW, not reported on herein). In total, WNR has a total installed capacity of 308 MW, and owns and operates around 100km of 110kV transmission line. WNR owns the BPWF and SBWF sites and has agricultural licence arrangements on both properties. The Company's major administrative base is in Launceston, Tasmania.

4. Environmental Policy - Woolnorth Renewables



Stephen Ross
General Manager
21 January 2022

Document Number:
Version Number:

WNH Q8
5

5. Activity Profile

5.1 Background

BPWF and SBWF are located in far north-west Tasmania. Woolnorth Bluff Point Wind Farm Pty Ltd (BPWF) and Woolnorth Studland Bay Wind Farm Pty Ltd (SBWF) have been previously owned by Roaring 40s Renewable Energy Pty Ltd (up until 30 June 2011), then Hydro Tasmania, and are now owned by WNR. These two subsidiary companies engage WNR to manage their respective wind farms, including compliance with their obligations under EPNs and other approval conditions. The regulatory compliance obligations of BPWF and SBWF are the main focus of this report.

5.2 BPWF and SBWF

The BPWF and SBWF consist of wind turbines placed on towers at a suitable height to generate electricity, underground cables between turbines, an electrical substation, control room and ancillary buildings, roads, fences and other associated infrastructure and a 110kV transmission line (approximately 43 km in length) to the Smithton substation.

BPWF was developed in two stages over a four-year period. The first stage involved construction of six turbines (Vestas V66, 1.75MW), with a total generation capacity of 10.5 MW and an electrical connection to the Smithton substation via a 22 kV power line. Stage 2 included a further development of 54.25 MW, comprising an additional 31, 1.75 MW Vestas V66 wind turbines, and the construction of a 110 kV transmission line from the wind farm (switchyard) to the Smithton substation. BPWF was commissioned in its entirety in August 2004. Refer to Figure 1 for the layout of BPWF.

SBWF was constructed in 2006 with a nominal capacity of 75 MW. The development of SBWF included the construction of a 'spur' transmission line, connecting to the existing 110 kV transmission line between BPWF and the substation at Smithton. SBWF consists of 25, 3MW Vestas V90 wind turbines and was commissioned by 1 June 2007. Refer to Figure 2 for the layout of SBWF and Figure 3 for the alignment of the transmission line.

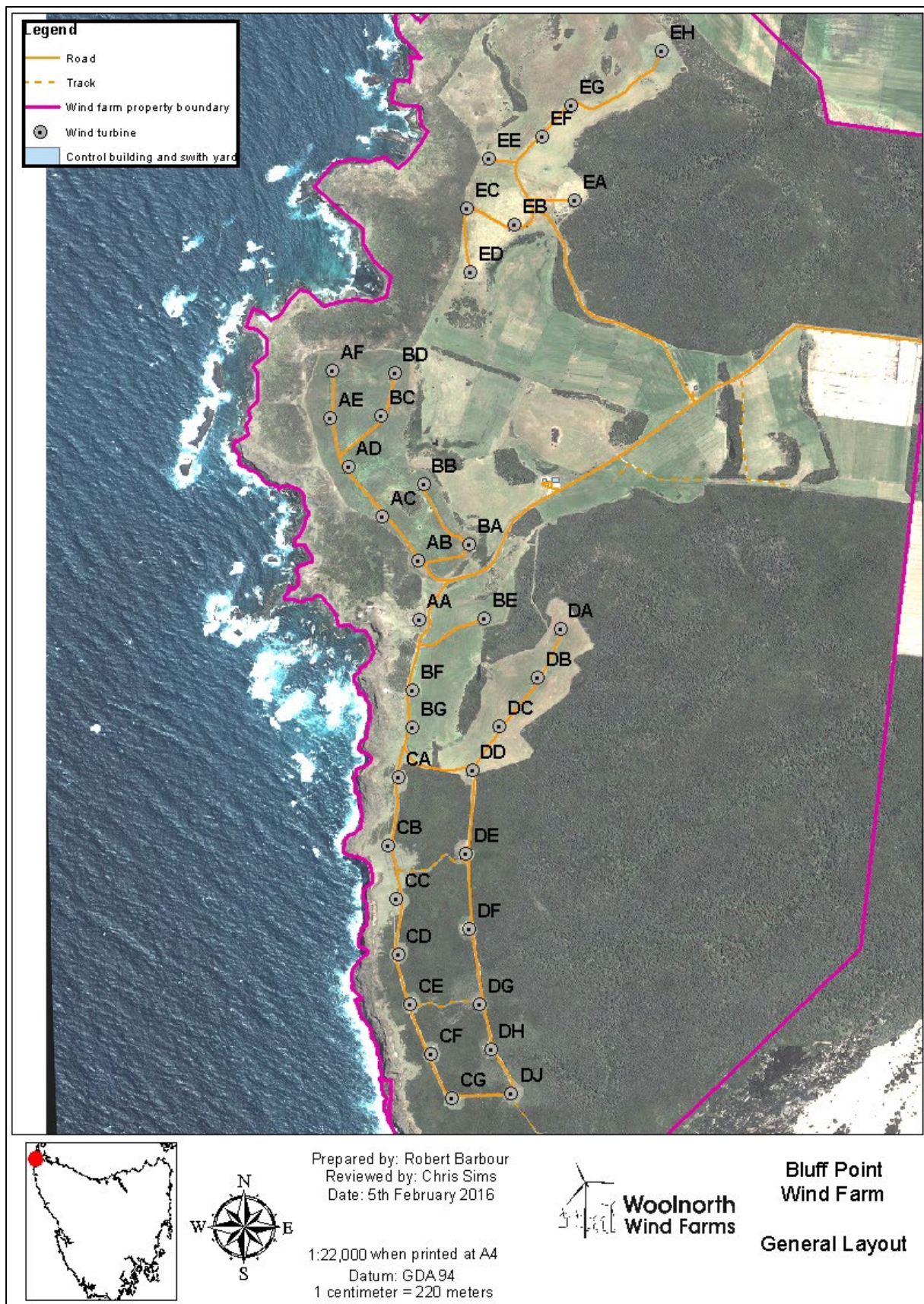


Figure 1. Bluff Point Wind Farm layout

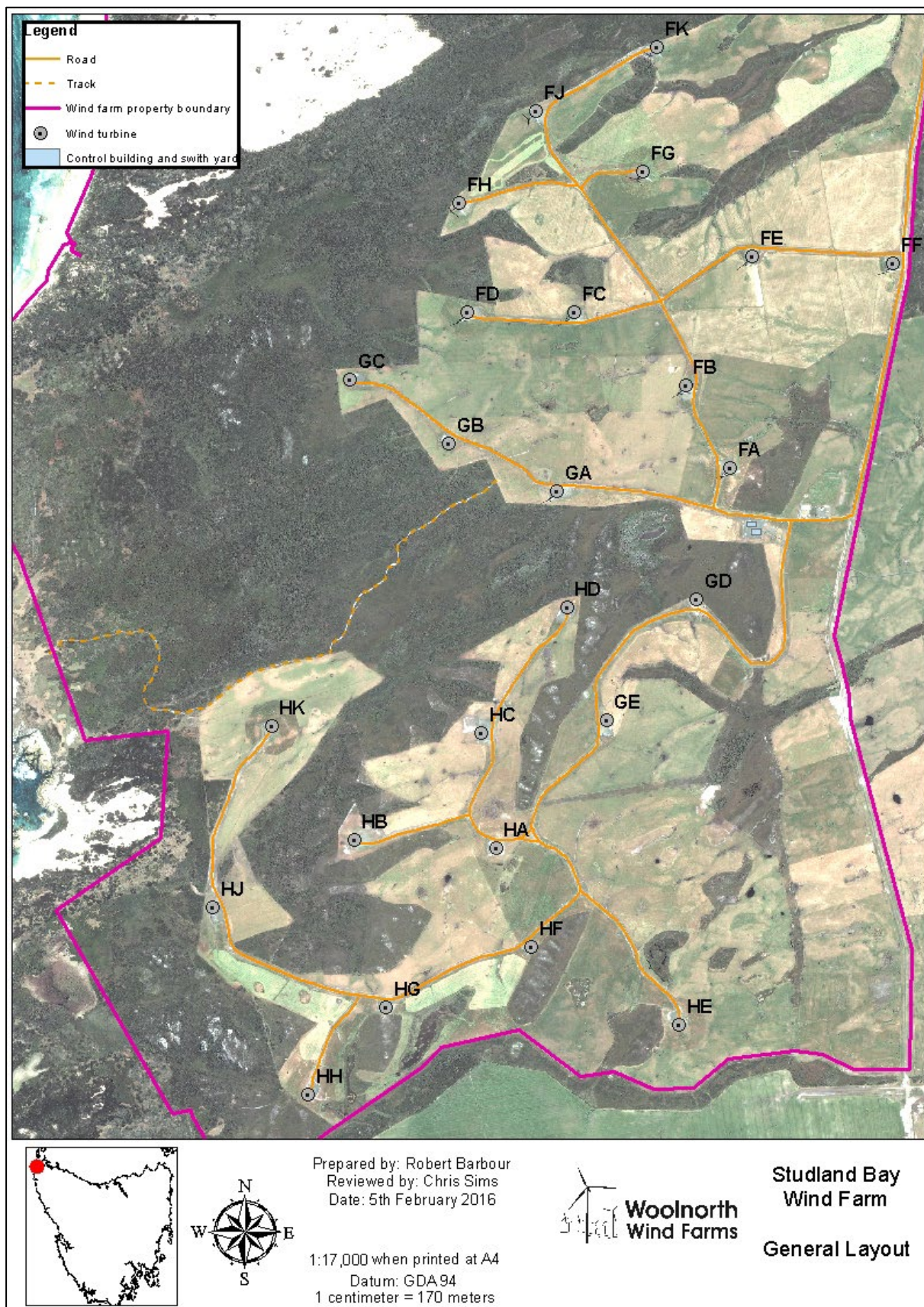


Figure 2. Studland Bay Wind Farm layout

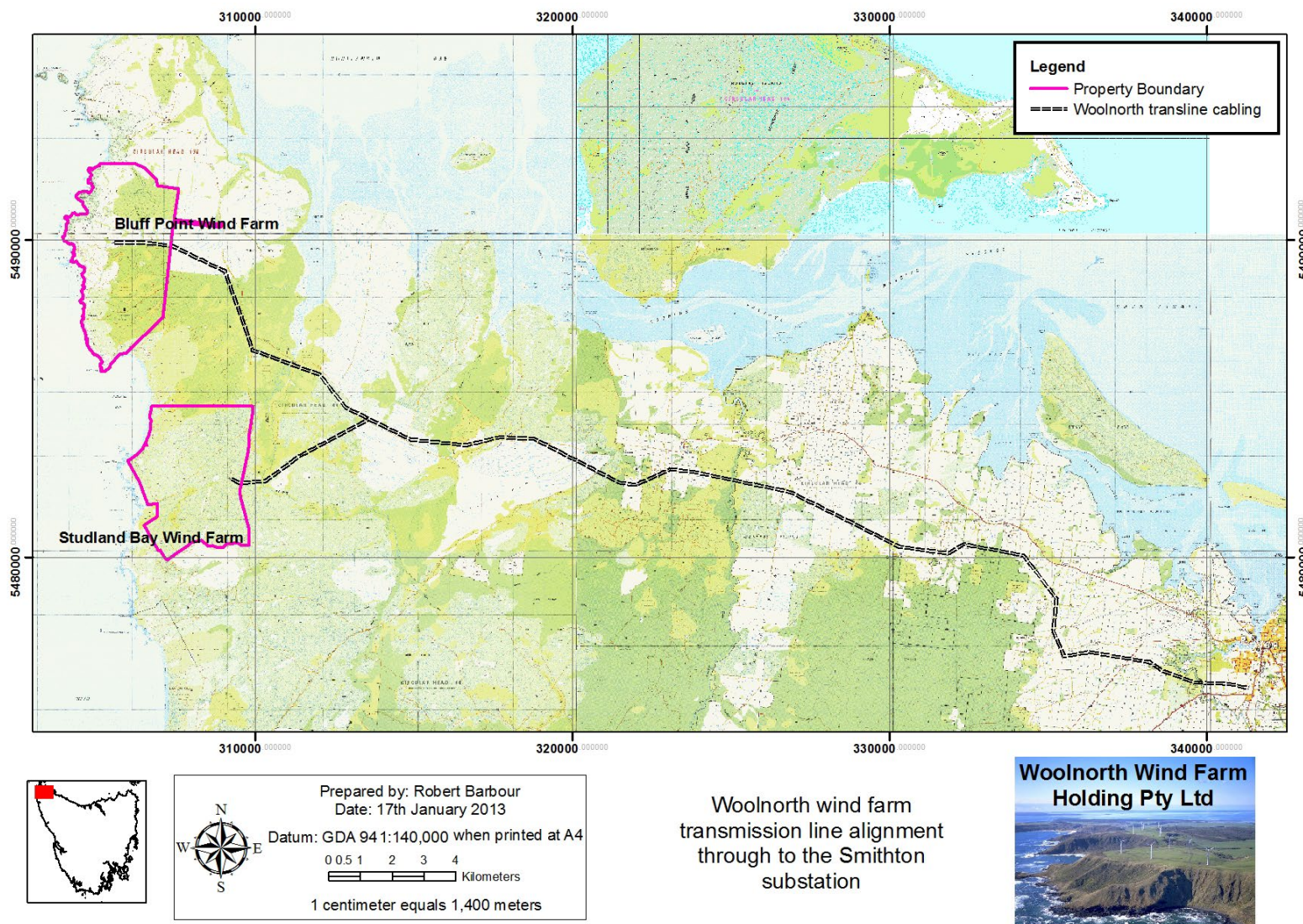


Figure 3. Transmission line alignment

5.3 Plant and operations

Both wind farms are operated continuously and to the maximum possible capacity (unless constrained by the market operator or network managers). Wind turbines generate electricity when the wind speed is between 4 and 25 m/s, with each turbine reaching its nominal rated output at around 14m/s. The three blades of each turbine are connected to the hub. A main shaft connects the hub to a gearbox which in turn drives a generator producing electricity. The electricity is passed through a transformer and is converted to 22kV before being transmitted by an underground power reticulation system to the wind farm switch room and switch yard. The electricity is then passed through another transformer and is transmitted along the 110kV transmission line to the Smithton sub-station. The electricity is distributed from this location into the national electricity grid (also the National Energy Market – NEM).

The operation of both the wind farms and the transmission line includes scheduled and unscheduled maintenance activities performed largely by WNR. Table 2 summarises the infrastructure at the wind farms while Table 3 summarises the transmission line infrastructure.

Table 2. Wind Farm Infrastructure

	Bluff Point	Studland Bay
Installed capacity	65 MW (37 x 1.75 MW turbines)	75 MW (25 x 3 MW turbines)
Number of turbines	37	25
Tower height (m)	60	80
Rotor diameter (m)	66	90
Wind speed range (m/s)	4-25	4-25
Year commissioned	2002 and 2004	2007
Access roads	25 Km	25 Km
Underground power collection system	22kV	22kV
Control building including switch room (high voltage circuit breakers, control equipment), administration offices, and workshop	Yes	Yes
Hazardous material stores	Yes	Yes
High voltage switchyard including transformers, disconnectors, circuit breakers, overhead gantry	Yes	Yes
Reactive support equipment	No	Yes
General storage facility	Yes	No
Visitors Centre	Yes	No

Table 3. Summary of Transmission line infrastructure

	Notes
Configuration	Overhead monopole construction, single circuit comprising 3 conductors and an OPGW (optic fibre ground wire)
Main transmission line length	37 km
No. monopole/towers	148
SBWF connecting spur length	5km
No. monopole/towers	18
Length underground cable from pole 148 to Smithton sub-station	1.5 km

5.4 Production capacity and actual production level

Tables 4 and 5 document the amount (in gigawatt hours) of electricity each wind farm produced during the 2019 – 2021 calendar years.

Table 4. Annual production at the Bluff Point Wind Farm

Calendar year	Electricity production (GWHr)
2019	265
2020	235
2021	123

Table 5. Annual production at the Studland Bay Wind Farm

Calendar year	Electricity production (GWHr)
2019	291
2020	249
2021	269

Output from each of the wind farms has been consistent over the reporting period, with the exception of 2021 at BPWF. The main site transformer (located in the switchyard) for this wind farm failed in April 2021 and was not recommissioned until October that year. With the exception of this, the wind farms have operated close to production capacity by maintaining high wind turbine availability and a high resource utilisation.

5.5 Raw material consumption

The BPWF and SBWF EPNs do not specify or limit the consumption of any raw materials. WNR tracks and report on various waste streams. See section 5.7. The wind turbine operation at BPWF and SBWF does not require consumption of any raw materials.

Electricity and water consumption is minimal. The site consumes a small amount of electricity to provide services during periods of low wind or outages. Electricity is either produced on-site or sourced

from a 110 or 22kV supply. Water consumption is for domestic purposes only and is supplied from onsite rainwater tanks. Both BPWF and SBWF have a static water supply of approximately 50,000L.

Due to the failure of the BPWF main transformer, between April and October 2021, a combination of transportable diesel generators and a 1MVA generator were required to restore power to the turbines. Through this period approximately 334.2KL of diesel was consumed to operate the generators.

The only other notable material used is gravel. Approximately 700 cubic meters is used annually (combined total for both sites) to maintain the gravel road network.

5.6 Product markets and sources of raw material

The electricity produced by the wind farms is supplied into the NEM. The energy is metered (measured) at the Smithton sub-station and distributed into the Tasmania grid and potentially to the mainland via Basslink.

As outline above, the wind turbine operation of BPWF and SBWF does not require consumption of any raw materials. Gravel is used as outlined above and this is source from local, licensed quarries.

5.7 Pollution, greenhouse gas emissions and waste, and their control measures

While the wind farms are industrial facilities, they are not significant sources of air, water or noise pollution. With the exception of exhaust emissions and dust generated from vehicles used to travel around the facilities, no significant losses of gasses used or stored on site were recorded. This includes sulphur hexafluoride (SF6) which is stored within switchgear in most wind turbines and the switchyard main circuit breakers. The volumes held on site are relatively minor. Control measures are in place to minimise emissions to air from equipment containing SF6. Dust emissions are not specifically controlled, but regular road maintenance ensures all site roads have stable running surfaces. Additional exhaust emissions associated with the diesel generator installed at BPWF due to the transformer failure, represent an atypical release of exhaust emissions for the site.

Emissions to water have not been recorded during operations of either wind farm.

Noise emissions are generated through the operation of wind turbines and the switchyards. . Noise compliance assessments of both wind farms were completed following construction, which demonstrated both wind farms were compliant with the noise emission requirements. There have been no complaints regarding noise emissions from the wind farms during their operational life.

Solid wastes are produced at each wind farm and waste streams are monitored and waste volumes recorded. Solid wastes are disposed of at a municipal waste facility by Veolia Environmental Services (under contract). All recyclable materials are recycled where possible.

Waste effluent from the control buildings (domestic wastewater) is disposed of onsite through a mini treatment plant. Stormwater is directed to drinking water tanks or to the sites drainage system.

The breakdown of the types and quantities of solid wastes generated on each site during the reporting period is provided in Table 6.

Table 6. Waste stream volumes

Waste	BPWF Volume (m ³)			SBWF Volume (m ³)		
Year	2019	2020	2021	2019	2020	2021
General waste	99	108	108	37.5	54	54
Recycling	7.8	10	12	1.4	5	0

Hazardous materials used on the wind farm sites generate a relatively small quantity of waste including oils and oily wastes and coolant from turbine servicing. Oil and grease laden rags are disposed of as general waste (accepted by waste facility).

Chemical inventories and safety data sheets (SDS) are held on each site and are regularly updated and audited. Hazardous materials associated with the servicing and maintenance of turbines and other equipment are held in hazardous materials stores and any wastes disposed of by a licenced waste disposal contractor. All hazardous materials such as oils, general materials such as paints, solvents, glues, herbicides etc. are retained on site at the lowest practical stock levels and if possible and practical only brought to site when needed.

The hazardous waste (s) produced at each of the wind farms over the 2019 – 2021 periods is provided in Table 7.

Table 7. Hazardous waste stream volumes

Waste	BPWF Volume (L)			SBWF Volume (L)		
Year	2019	2020	2021	2019	2020	2021
Liquid waste including hydrocarbon and coolant	2000	2000	2000	2000	1000	1000

5.8 The local environment

Both wind farms are located in Tasmania's far north-west. Cape Grim, Tasmania's most north-west tip, is less than 5km from the northern boundary of the BPWF site. The area is dominated by strong and consistent westerly winds, which also bring substantial rain to the region. The yearly rainfall average is 800mm.

Both wind farm sites and the land immediately around them is reasonably representative of the local environment. The local landscape has been progressively cleared to make way for sheep, beef and dairy enterprises resulting in a mosaic landscape comprising relatively large expanses of cleared pasture areas dissected and split by large patches of native vegetation.

BPWF is located on a flat-topped bluff with a steep coastal cliff to the west (Indian Ocean side) and moderately steep slopes to the east, north and south. The BPWF site is 1,524 hectares in size with approximately 40% of the land cleared for cattle grazing (with some fodder cropping). The remainder (60%) being high quality remnant vegetation (including closed melaleuca forest and wet coastal shrubby eucalypt forest). All vegetation is fenced to exclude cattle. The wind farm occupies a very small component of the total property.

SBWF is on less elevated terrain and consists of flat undulating land with isolated rocky outcrops and large consolidated dunes with some small ephemeral freshwater lagoons close to the coast (and to the

north of the site). The SBWF site is 1,410 hectares in size with approximately 60% of the land cleared for cattle grazing (with some fodder cropping). The remaining land (comprising coastal swamp forest, coastal heath and pockets of wet coastal shrubby eucalypt forest) is fenced to exclude stock. The wind farm occupies a very small component of the total property.

The local environment provides a range of habitats for fauna species including the Tasmanian wedge-tailed eagle (WTE), white-bellied sea-eagle (WBSE), woodland birds and seabirds, the Tasmanian devil, quolls, bandicoots and large populations of wallabies (bennetts and rufous).

The majority of surrounding land is owned and operated by Moon Lake Investments (trading as Van Dairy). Van Dairy have also operated on the wind farm sites under grazing licences, however, since mid-2021, the licenses under which they operate have been under review.

There are no significant local sources of pollution within the vicinity of the wind farms. The Cape Grim Baseline Air Pollution Monitoring Station is located a few kilometres north of BPWF.

There are numerous records of Aboriginal heritage on both wind farm sites. There are no records of heritage from European or other ethnicities on the wind farm sites.

5.9 The regional environment

The regional environment can be described in the same manner as the local environment. Land use across the region is focussed on agricultural enterprises and in particular dairy and beef production. Large parts of the region are therefore cleared for grazing. Within the region however, commercial forestry activities also occur within native forest and plantation estates. There are significant stands of native forest and plantation to the southeast of the wind farm sites. The land in the region is mostly private freehold, with few reserves and other state-owned land. The region is generally flat with the only point of significant relief being Mt Cameron West which is south of the SBWF. Given the varied landscape, the region offers a diverse range of flora and fauna species and habitats. The region is considered by DPIPW to be particularly important for Tasmanian devil conservation.

A larger portion of the wind farms are situated in the Welcome River catchment which is a small flat catchment. A portion of BPWF is situated in a small unnamed catchment. Both catchments include both cleared land and extensive patches of native vegetation.

The closest population centre is Smithton (population approximately 3,881 – 2016 Census data) which comprises urban, commercial and industrial areas. Major industries include sawmills, a vegetable processing facility, a milk processing plant and an abattoir. Smithton is approximately 40km east of the wind farm sites.

5.10 Changes to wind farm operations over the reporting period

There have been no major changes to the plant, operation, production, pollution, waste or impacts on the local and regional environment at either of the wind farms over the 2019 – 2021 period, although see comments above on the temporary use of the diesel generators at BPWF.

6. Legislative requirements

6.1 Permit conditions

BPWF and SBWF operate under separate EPNs issued under the *Environmental Management and Pollution Control Act (Tas.) 1994* by the Director of the EPA. As outlined these EPNs are:

- Bluff Point Wind Farm - EPN 7421/2 (see Appendix 1)
- Studland Bay Wind Farm - EPN 7423/3 (see Appendix 2).

BPWF and SBWF also operate under an environmental approval issued by the Australian Government Department of the Environment and Heritage (now the Department of Agriculture, Water and the Environment - DAWE) under the *Environment Protection and Biodiversity Conservation Act 1999*.

Attached to these legal instruments are environmental conditions with which the wind farms must comply. The preparation of this AER is a requirement of each wind farms' EPN. Environmental Management Plans (EMPs) approved in accordance with the EPNs and Commonwealth approval conditions outline reporting commitments and requirements. This report therefore contains the relevant reporting requirements for the BPWF, SBWF and the associated 110kV Transmission Line (including the SBWF 'spur line').

6.2 Relevant Environmental legislation

The following legislation and policy documentation is applicable to the operation and maintenance of BPWF and SBWF.

TASMANIAN LEGISLATION AND REGULATIONS

- Aboriginal Relics Act 1975
- Agricultural and Veterinary Chemicals (Control of Use) Act 1995
- Agricultural and Veterinary Chemicals (Control of Use) Order 2001
- Animal Welfare Act 1993
- Animal Welfare Regulations 1993
- Building Act 2016
- Building Regulations 2016
- Plumbing Regulations 2014
- Crown Lands Act 1976
- Crown Lands Regulations 2001
- Dangerous Goods (Road and Rail Transport) Act 2010
- Dangerous Goods (Road and Rail Transport) Regulations 2010
- Electricity Supply Industry Act 1995
- Electricity Supply Industry Regulations 2008
- Electricity Wayleaves and Easements Act 2000
- Environmental Management and Pollution Control Act 1994
- Environmental Management and Pollution Control (Noise) Regulations 2016
- Environmental Management and Pollution Control (Waste Management) Regulations 2020
- Fire Service Act 1979
- Forest Practices Act 1985
- Forest Practices Regulations 2007
- Forest Practices Code 2020
- Historic Cultural Heritage Act 1995

- Historic Cultural Heritage Regulations 2016
- Land Use Planning and Approvals Act 1993
- Land Use Planning and Approvals Regulations 2014
- Local Government Act 1993
- Natural Resource Management Act 2002
- Nature Conservation Act 2002
- Resource Management and Planning Appeal Tribunal Act 1993
- State Coastal Policy 1996
- State Policy on the Protection of Agricultural Land 2009
- State Policy on Water Quality Management 1997
- Threatened Species Protection Act 1995
- Water and Sewerage Industry Act 2008
- Water and Sewerage Industry (General) Regulations 2009
- Weed Management Act 1999
- Weed Management Regulations 2017

COMMONWEALTH LEGISLATION AND REGULATIONS NAME

- Environment Protection and Biodiversity Conservation Act 1999
- Environment Protection and Biodiversity Conservation Regulations 2000
- National Environment Protection Council Act 1994
- National Greenhouse and Energy Reporting Act 2007
- National Greenhouse and Energy Reporting Regulations 2008
- Native Title Act 1993
- Renewable Energy (Electricity) Act 2000
- Renewable Energy (Electricity) Regulations 2001

OTHER CODES AND STANDARDS

- Australian Dangerous Goods Code
- OBP Recovery Plan (current ed.)
- Eagle Recovery Plan (current ed.)

7. Environmental Management and Monitoring

7.1 Environmental Management Plans

Environmental monitoring at the wind farms is conducted in accordance with the approved Environmental Management Plans (EMPs). The results of the monitoring are detailed in the following sections “State Environmental Management Plans” and the “Commonwealth Environmental Management Plans”.

All necessary EMPs for BPWF and SBWF were prepared and approved prior to commissioning as required by the approval conditions, permit and/or EPNs. In 2010, 2013 and 2016 reviews of the State EMPs were conducted. The revised documents from the 2016 review were approved early in that year (2016). This PER reporting period therefore focusses on this revised version of the plans, for which there is one for each wind farm. The review in 2016 resulted in limited change to the content of the plans (sections) but the included content was consolidated into logical subject topics. Further details on this review are provided in the 2016-2018 PER. The plan was again reviewed through 2021, but was not approved until early 2022 and therefore had no influence on the reporting under this publication.

The following tables (Tables 8 and 9) summarise the relevant management plans and details (the current Departmental names are used) for both the wind farms and the transmission line.

Table 8. Status of EMPs for BPWF and SBWF

Environmental Management Plan	Approved by	Last approved Version	Status
State Environmental Management Plan	EPA	2016	Active
Vegetation Management Plan	EPA	2013	Superseded
	DAWE	2005	Active but commitments completed
Bird and Bat Monitoring Plan	EPA	2013	Superseded
	DAWE	2005	Active but commitments completed
Turbine Shutdown Contingency Plan	EPA	2013	Superseded
Orange-bellied Parrot Management Plan	EPA	2013	Superseded
Wedge-tailed Eagle and White-bellied Sea Eagle Management Plan	EPA	2013	Superseded
Tasmanian Wedge-tailed Eagle and White-bellied Sea-Eagle Nesting Habitat Management Plan	DAWE	2007	Completed
Studland Bay Wind Farm Operational Commencement Plan for Eagle Monitoring	EPA	2007	Completed

Table 9. Status of EMPs for the 110kV Transmission Line

Environmental Management Plan	Approved by	Last approved	Status
Transmission Line Bird Strike Mitigation Plan	EPA	2003	Completed
	DAWE	2003	Active
Transmission Line Vegetation Management Plan	EPA	2003	Completed
Transmission Line Vegetation Management to Deter the Orange-bellied Parrot	EPA	2003	Completed
	DAWE	2003	Active
Transmission Line Bird Strike Monitoring Plan	DAWE	2003	Active
	EPA	2003	Completed

7.2 Environmental Management System

WNR (including operations at BPWF and SBWF) operates its business under a Health, Safety and Environmental management system. WNR was certified to ISO 14001 in 2013 and has maintained its certification since.

The HSE system includes Policies, Procedures, Forms and other documents that assist to establish and set high-level directives to all areas of the business. This includes defining document accountabilities and responsibilities, effectively outlining business and operational risks, developing procedures and protocols to effectively control and manage these risks. In addition, the system includes methods to check and review system performance and implementation and ensure a systematic continuous improvement cycle is established and implemented.

7.3 Annual audit reports

Internal and external audits of the two wind farm sites are conducted in accordance with an audit schedule. The audit schedule is drawn up at the commencement of each calendar year and reviewed on a regular basis to ensure the schedule is being followed. Internal audits are conducted in accordance with system procedures. All audit findings are entered into a dedicated database and audit actions tracked. Table 10 includes a summary of the audits conducted during the PER period.

Table 10. Summary of significant audits and their findings 2019-2021

Year	Audit focus	Summary of audit actions
2019	Environmental audit at BPWF & SBWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 3, Chemical management related <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 7, variety
2019	Operational audit at BPWF & SBWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 2, Safety related <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 0
2019	Bushfire Preparedness audit BPWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 0
2019	Bushfire Preparedness audit SBWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 0
2019	External audit against ISO 14001	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 1, Internal audit process <u>Opportunities for improvement/ observations</u> <ul style="list-style-type: none"> • 0
2020	Operational audit at BPWF & SBWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 3, safety related <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 0
2020	Site Environmental audit at BPWF & SBWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 4, chemical management <u>Opportunities for improvement, Observation</u> <ul style="list-style-type: none"> • 16, various
2020	Bushfire Preparedness BPWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 3
2020	Bushfire Preparedness SBWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement</u>

		<ul style="list-style-type: none"> • 4
2020	EMS System audit	Notes collated for redrafting of the procedure
2020	External audit against ISO 14001	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement/ observations</u> <ul style="list-style-type: none"> • 1, Management review and internal audit improvement opportunities
2021	Operational & General Site Audit at SBWF	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 14
2021	Bushfire preparedness audit	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 0
2021	Environmental & compliance audit	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 2
2021	System Audit - EMS Procedure	<u>Major Non-Conformance</u> <ul style="list-style-type: none"> • 0 <u>Minor Non-Conformances</u> <ul style="list-style-type: none"> • 0 <u>Opportunities for improvement</u> <ul style="list-style-type: none"> • 1
2021	ISO 14001 External Audit	Delayed due to covid restrictions on travel.

7.4 Report on any changes made or intended to the activity or EMS in response to the annual audits

Audits conducted over the PER period continue to check environmental performance and drive continuous improvement in environmental management at both sites. All audit actions including opportunities for improvement have been evaluated and where possible actions developed to address them. Implementation of actions is tracked at various levels.

There have been no material changes made or intended to be made to the activity. All audit issues have been addressed promptly.

7.5 Public Complaints

There were no public complaints regarding environmental matters received by WNR during the 2019-2021 reporting period. WNR provides a free-call 1800 number and email address to ensure a range of options for contacting the business.

7.6 Environmental Incidents (non-trivial) and non-compliances

Environmental Occurrences

It is a requirement that all reportable incidents are reported to the EPA and sections of Tasmanian Department of Primary Industry, Parks, Water and Environment (DPIPWE) as per the EPNs and the reporting procedure prescribed in the BPWF and SBWF EMPs. Bird and bat related incidents are reported in Section 5 of this report.

There were three reportable environmental incidents identified at BPWF and SBWF during the 2019-2021 reporting period, being for three listed bird species that were apparent wind turbine collisions (see section 8.2). Other non-reportable/trivial incidents were documented and managed by WNR through internal procedures.

Occurrence follow-up, mitigation and preventative measures

As the only reportable reportable/non-trivial incidents were for listed bird species, the follow up and preventative measures completed on site or in response to reportable incidents was minimal and in accordance with prescribed requirements outlined in the BPWF and SBWF EMPs.

Non-compliance

WNR continued to comply with the latest approved State EMPs and where relevant any Commonwealth approved EMPs with relevant requirements.

There were no non-compliances with the EPNs or other approval conditions identified. Internal audits conducted as a part of WNR internal audit schedule found no EPN or other approval condition related non-compliances. External audits against ISO 14001 found the sites to be maintaining the standard required to continue their certification, and audits by both the Commonwealth and State regulators also found no non-compliances.

Infringement and environment protection notices

No legal proceedings such as infringement notices or EPNs were served on the wind farms during the reporting period.

7.7 Environmental procedure or process changes

There were no substantial changes to WNRs Environmental Management System or regulatory documents through the 2019-2021 reporting. The five yearly review of the State Environmental Management Plan was submitted to the EPA in early 2021 but was still to be approved at the end of 2021. The company's environmental policy was reviewed and changed in late 2021 to better reflect the WNR business, its risks and management approaches.

7.8 Environmental Management activities and meetings

A summary of environmental management activities and meetings for the period 2019-2021 is provided in Table 11.

Table 11. Summary of environmental management activities and meetings during the reporting period (2019-2021)

Date	Activity or meeting	Comment
Activities undertaken and outlined in the approved EMPs are outlined in the relevant sections of this report. Other management activities and meetings held in conjunction or addition to the approved EMPs are listed in this table.		
Regularly throughout all 3 years	Visitor tours of BPWF and SBWF by Woolnorth Tours	Woolnorth Tours (www.woolnorthtours.com.au) conducts tours of the BPWF/SBWF.
As required throughout all 3 years	EPA discussions	General catch-up
Regularly throughout all 3 years	Audits and emergency preparedness sessions	Various audits and training sessions conducted throughout the year in accordance with WNR's internal schedules.
Throughout the 3 years	Funding of various community events/groups	Twilight on the Duck, Pony club championship (Smithton), UTAS Springboard (Smithton), Graze the Region, Raptor Refuge, Circular Head Show, RFDS Mobile Dental Van
Regularly throughout the 3 years	Discussions with Van Dairy	Discussions Van Dairy occur regularly throughout the year to discuss and action a range of topics.
2019		
January	TFS visit	Hosted local brigades on site for a site familiarisation and preparedness discussion
January	Devil trapping	DPIWE devil team
February	EPA meeting	General meeting including eagle management.
March	Robin Radar investigation	Discussion and technology assessment with Robin Radar in the Netherlands
July	Routine devil trapping	Site devil conservation activity by DPIPWE
October	Clean Energy Open Day	Studland Bay Wind Farm was opened to the public as a part of Clean Energy Open Day.
October	External Audit	External audit by BSI for ISO 14001 certification
December	Woolnorth Wind Farm Springboard to Higher Education Bursary presentation	Present University of Tasmania Woolnorth Wind Farm Springboard to Higher Education Bursary at Smithton High School and Circular Head Christian School
2020		

Date	Activity or meeting	Comment
February	EPA meeting	General meeting including eagle management.
March	Geology conference site tour	Held by the University of Tasmania's Earth Sciences and CODES department
July	UTAS eagle tagging	In kind support for UTAS project
December	External Audit	External audit by BSI for ISO 14001 certification
December	Devil trapping	DPIPWE devil team
December	Woolnorth Wind Farm Springboard to Higher Education Bursary presentation.	Present University of Tasmania Woolnorth Wind Farm Springboard to Higher Education Bursary at Smithton High School and Circular Head Christian School
December	Wind & Wildlife conference	Attend online events and access to proceedings
2021		
April	EPA meeting	General catchup
April	Stakeholder meeting Devil mortalities on Woolnorth Rd	Attendance to stakeholder meeting re devil mortalities on the Woolnorth Rd
June	Devil trapping	Property access and support for the DPIPWE devil team
October	EPA meeting	General catchup
December	Devil trapping	Property access and support for the DPIPWE devil team
June to December	Van Dairy	Discussions and negotiations around renewal of 20 year grazing licence

7.9 Specific actions under EMPCA

There were no specific actions under EMPCA in relation to the activity

7.10 Any proceedings under Tasmanian or Commonwealth environmental legislation

There were no proceedings under Tasmanian or Commonwealth environmental legislation during the reporting period.

7.11 Any other enforcement actions

There were no enforcement actions in place during the reporting period.

7.12 Breaches of permit conditions or relevant limits in legislation and results that vary significantly from predictions contained in any relevant EMP

There were no breaches of the permit conditions or other relevant limits during the reporting period.

7.13 Staff and contractor environmental training

WNR maintains a training plan for the employees and contractors working at BPWF and SBWF. The training plan is an output of the Health, Safety and Environmental system that governs the BPWF and SBWF operations. The training plan documents all employees and lists the mandatory and recommended training requirements for each person. Training packages have been developed in line with the training plan and are delivered both internally and externally by suitably qualified personnel. In addition to training sessions, emergency preparedness exercises have been undertaken to prepare and train site personnel for site emergency events. Table 12 documents the training sessions and emergency preparedness exercises undertaken during 2019-2021.

Table 12. Training sessions and emergency preparedness exercises

Year	Training or exercise	Activity type
2019	Vehicle rollover on site	Desktop
2019	Elevated Work Platform rescue	Field, practical
2019	TFS site tour and preparedness briefing	Field, practical
2019	Nacelle evac rigging	Practical
2020	Major incident response - Management	Group work, theory
2020	Immobilised worker in nacelle	Group work, theory
2020	Transmission line incident	Group work, theory
2020	HSE management of transmission line works with multiple disparate work parties	Group work, theory
2020	HSE management of a major component change - gearbox replacement	Group work, theory
2021	Vehicle rollover on site	Group work, theory
2021	Contact with transmission line conductors with excavator	Group work, theory
2021	Crane emergency – based on incident	Group work, theory
2021	Switchyard transformer oil spill	Group work, theory
2021	Nacelle evacuation rigging	Practical
2021	Trapped technicians following pallet racking collapse	Group work, theory

7.14 Community engagement

Various community engagement activities and meetings are detailed in Table 11 above. In addition to these, during the PER period WNR has provided support and funding to various local and regional events/programs and community groups. These include:

- University of Tasmania Springboard to Higher Education Bursary for Smithton High School and Circular Head Christian School
- Royal Flying Doctor Service Mobile Dental Van
- Duck River Festival
- 10 Days on the Island
- Smithton Basketball Club
- Pony Club State Event Championships
- Circular Head Show
- National Reconciliation Week

WNR's procurement strategy aims to support as many local businesses as possible through purchasing goods locally and employing local contractors.

WNR provides site access to Woolnorth Tours to conduct site tours of BPWF and SBWF. This allows local and international visitors to view and receive information about the two wind farms at a purpose-built visitors centre and viewing platform. Over the PER period approximately 8005 people visited BPWF/SBWF.

7.15 Commitments to improve future environmental performance

Adaptive Management

The commitment to continual improvement is demonstrated by the use of an embedded adaptive management process. This approach provides a structured evaluation of complex environmental issues at the wind farms. It was initially formally applied to evaluate the effectiveness of management actions (including surveys) relating to WTE collisions at BPWF and SBWF and was fundamental in the EMP review in 2010 and 2013. However, the process is now being applied to any environmental management strategy where appropriate, some of which are not complex in their nature. The approach is predicated on evidence-based management, which leads to robust and defensible decision making in environmental management. The approach has been described in previous Annual and Public Environmental Reports.

Other methods of ensuring continuous improvement

WNR is committed to the continuous improvement principles that underpin both the ISO 14001 standard and the HSE system applied to the operations and maintenance of BPWF and SBWF. Opportunities to improve environmental performance are identified and evaluated through systematic processes such as management reviews, corporate level planning, internal and external auditing, site inspections, monthly site HSE meetings and weekly toolbox meetings. The commitment to continuous improvement is outlined in the WNR Environmental Policy included on page 8.

Other evidence of WNR's commitment to continual improvement is the attendance at relevant national and international conferences (to keep abreast of the latest research and management strategies), the continual tracking of scientific literature on various topics, and the publication and presentation of data from these sites.

State Environmental Management Plan

8. General Management

8.1 2016 EMP overview

The 2016 version of the State EMP has three sections: General Management, Orange-Bellied Parrot Management and Eagle Management.

8.2 General Management

Reporting of Bird and Bat Collisions

Over the PER reporting period, only four observations of dead/injured birds (both sites combined) were reported and managed as incidents in the WNR HSE (Health Safety and Environment) Management System. In the case of non-threatened species, Bird/bat strike forms were provided (within a few days of the observation) to the EPA as general advice of the observation, while threatened species were reported in accordance with the EMP. Three threatened species events were documents, these being two injured wedge-tailed eagles and one dead white-bellied sea eagle.

8.3 Orange-bellied Parrot Management

This section of the plan focusses on ensuring that the attractiveness of the site to orange-bellied parrots (OBPs) is minimised. This is conducted through vegetation management and surveys, preparedness for rehabilitation of any injured birds, and turbine shutdown prescriptions in the event of OBP sightings on the wind farm. Vegetation Management

Vegetation Management - Site vegetation assessment and control program

Both wind farms sites were inspected for the presence of OBP foraging weeds in late January of each reporting period. The inspection focussed on the following species:

- Wireweed
- Fat hen
- Nettle-leafed goosefoot
- Water buttons
- Chickweed

The inspections focus on identifying the presence of the above weed species with spraying (or other actions) undertaken where necessary. Other weed species, if relevant, are identified and noted during the surveys. The specific methods used are detailed below.

Methods

In late January each year, prior to the OBP northward migration, a verification survey was conducted at BPWF and SBWF to assess if there are any areas that may attract OBPs. The survey assessed:

- Turbine areas

- Roads and hardstands areas
- General pastures.

The objective of the survey was to confirm that the average ground cover of known OBP foraging species (listed above) either flowering or producing seed, did not exceed an average of 10% across the total site, and that no localised area (close to a wind turbine) exceeded 30%. A staged design was used. This involved:

Turbine selection

Six turbines were chosen at random across the site.

Turbine surveys – PASS/FAIL triggers

- At each turbine (out to 50m from the turbine base), seven 1m x 1m quadrats were randomly selected, and the species contained in each quadrat estimated.
- If the combined average of OBP foraging species (listed above) of these quadrats was less than 20%, the turbine zone was deemed a PASS.
- If the combined average of OBP foraging species (listed above) of these quadrats is greater than 20%, another seven quadrats were randomly selected, and the average of all 14 taken.
- If the new average is above 22%, the turbine zone was a FAIL and required treatment/management actions and another turbine was selected at random to be tested.

Site wide calculations – PASS/FAIL triggers

- If the combined average of all PASS quadrats was less than 7.0%, then the site was a PASS.
- If the combined average of all PASS quadrats was greater than 7.0%, then another two turbines were selected (and the turbine survey methodology described above applied).
- Following the additional two turbine surveys, the combined average of all PASS quadrats had to be less than 7.5%. Greater than this indicated a FAIL for the site and a thorough inspection of all cleared areas within close proximity of turbines was undertaken to identify areas that required treatment/management actions.

A PASS indicated a less than 5% likelihood of the site having a genuine average greater than the trigger level. A FAIL indicates that there was greater than 5% likelihood that the plant coverage may be greater than the trigger level.

Roads and Hardstands

Roads and hardstands have previously been identified as areas where OBP species can commonly exist. The random quadrat surveys at each turbine (described above) may sample road and hardstand areas. Outside of this, all roads within 200m of any turbine and all hardstands were inspected for the presence of known OBP food species (see list above) and treatment/management actions undertaken where necessary.

General pastures

Over the past sixteen years no OBPs have been recorded foraging at the BPWF or SBWF site. Grazing management, fertiliser regimes and pasture species composition are managed by the grazing licensee (Van Dairy) and assessed by BPWF and SBWF on an as needs basis. The random quadrat surveys at turbines (described above) sampled general pastures across the site (according to the turbines selected) and management intervention is undertaken when triggers are exceeded (described above).

Results

The findings from the turbine surveys conducted in January 2019, 2020 and 2021 at BPWF and SBWF are displayed in Figures 4 and 5 respectively. These Figures outline the turbines and quadrat locations that the surveys were conducted across. No OBO weeds were detected in any of the quadrats in any of the years. Based on this result, all wind turbines areas were deemed a 'PASS'.

During the surveys there were no significant areas of OBP weed species found in open pastures indicating the surveys and any control undertaken by Van Dairy was effective. Roads and hardstands were assessed by WNR personnel and during this PER period some herbicide and mechanical control was undertaken to reduce or prevent the presence and proliferation of any OBP weeds.

The verification surveys undertaken each January have therefore demonstrated the sites to be effectively free of the key OBP attracting weed species.

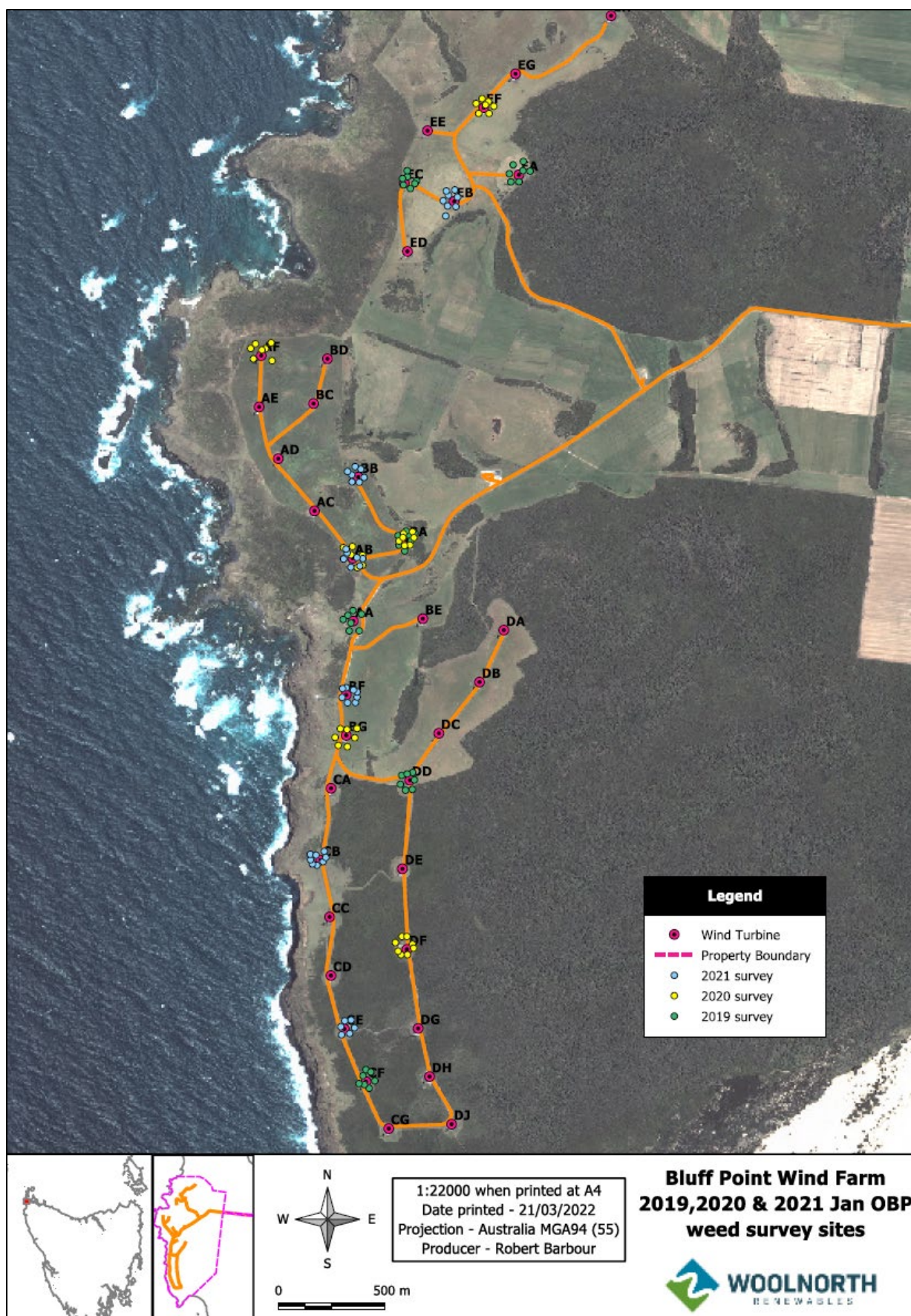


Figure 4. Quadrat sites from the OBP weed surveys conducted at BPWF in January of 2019, 2020 and 2021. No OBP weeds were identified at any quadrat.

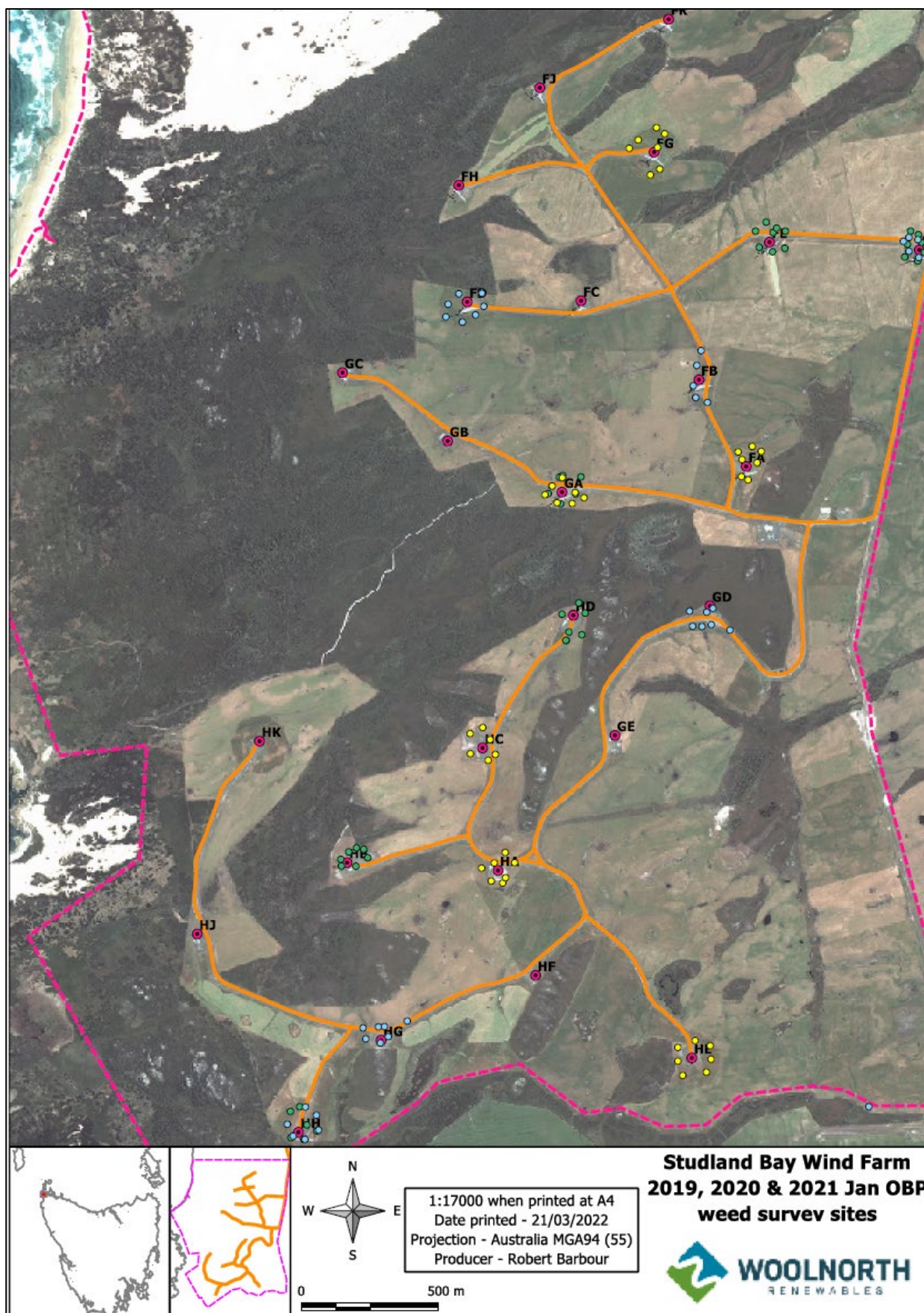


Figure 5. Quadrat sites from the OBP weed surveys conducted at SBWF in January of 2019, 2020 and 2021. No OBP weeds were identified at any quadrat.

OBP Habitat Manipulation - off-site works

The OBP habitat plot, established in 2008/09, is visited at least twice yearly and photographs taken to document its progress (Figure 6). No works have been completed at the site throughout the reporting period, due to the health and success of the plantings.



Figure 6. The OBP habitat plot photographed in 2020.

Orange-bellied Parrot Rehabilitation and Offsets

No OBPs were found injured after colliding with a turbine on either site during the period 2019-2021 (or in fact since operations commenced at either site). Therefore, no rehabilitation was required. No OBPs were killed or incapacitated at either BPWF or SBWF during the 2019 to 2021 period (or in fact since operations commenced at either site). Therefore, no offsets were required.

Turbine shutdown triggers

No OBPs were observed on either site within 50m of any turbine, nor flocks of more than 20 blue-winged parrots (BWPs) during 2019-2021. Therefore, no management actions (as specified in the plan) were triggered. The triggers that are in place are designed to prevent collisions.

8.4 Eagle Management

Monitoring eagle collisions with Wind Turbines

The surveillance strategy approved and implemented during the previous plan continues. The strategy is based on site evidence and is underpinned by a series of benchmarks developed on the calculated long-term collision rate (for each site). All the benchmarks have triggered responses aimed at investigating any detected eagle mortalities (to understand or determine the root cause/s) and to determine if there has been a change (increase) in the average annual collision rate.

Methods

Monitoring is conducted by all personnel that are working on the sites, which includes both WNR staff, external contractors, and other farm staff. The requirement to report any dead or injured eagles (or other birds and bats) to WNR, or their representative, is managed and reinforced through the general and site induction processes.

Results

There was one dead white-bellied sea eagle and one injured wedge-tailed eagle identified at BPWF through the reporting period, while at SBWF there was one injured wedge-tailed eagle found. As these were single events for each species within each respective year, no management responses were triggered.

Minimising food resources on-site

WNR continued to minimise potential eagle food resources on site by preventing any calving on the land and by removing any dead cattle from turbine areas. This has been achieved by daily monitoring of stocked areas by farm staff. No sheep have been grazed on the wind farm sites for ten-years (approximately). In addition, a prey control program is implemented when there is a significant or unusual density of WTE or WBSE prey species (wallabies and pademelon) observed/identified on site. A prey control program was not deemed necessary during the reporting period, and therefore not implemented.

Rehabilitation of injured eagles

The two injured eagles that were identified were not taken into a rehabilitation program as the extent of their injuries were too great. The vet in attendance made the decision to euthanase them following their inspection.

Understanding the factors involved in eagle collision risk

The assessment of new technologies for understanding eagle collision risk, collision factors and potential mitigation options continued throughout the 2019-2021 reporting period. This included the review of technical reports and papers, summaries of conference proceedings and workshops, review of technology provider's websites and discussions or meetings with technology suppliers.

In 2019 the Robin Radar Max system was identified by WNR as an appropriate technology to reduce the risk of avian collisions with wind turbines at the Musselroe Wind Farm site. The system comprises of a phased array radar which is designed specifically to detect birds. The radar is able to detect a bird flight and through a custom software program provide signals to the wind farm control system to curtail/shut down the appropriate turbines.

The Robin Radar system was installed in mid-2020 and continues to be in a testing and commissioning phase. Once operational the results will be carefully analysed to determine if this technology may be applicable to the SBWF and BPWF sites.

Other wind farm recently developed in Tasmania are employing different avian detection systems, such as IdentiFlight, which are showing promising results. Where possible, WNR will collaborate with these developments, where practicable, to share any lessons which may be generated.

Throughout the reporting period, the literature published focused on assessing efficiencies being developed in pre-existing technologies. Much of this research was conducted in a northern hemisphere setting or at offshore wind farms. Although not all of the findings are relevant to the Tasmanian experience, the key outcome themes are applicable.

Probably the most significant publications and presentation of findings through 2020 came from the international Wind and Wildlife Research Meeting held in December (<https://wwrm2020.brand.live/WindWildlifeResearchMeeting>). All aspects of wildlife management and wind farm impacts were addressed. The sections on Eagles & Raptors and Risk Reduction were most relevant to BPWF and SBWF. New technology and strategies for monitoring bird and bat collisions and flight paths were presented, but nothing that presented material improvements beyond that offered by the Robin or Identiflight systems.

WNR will continue to monitor the progression of technologies, research projects and relevant literature.

Commonwealth Environmental Management Plans

Actions that have been developed in response to the Commonwealth permit conditions are contained within the following EMPs:

- Bird and Bat Monitoring Plan (specifically bird utilisation surveys and monitoring of bird mortalities);
- Vegetation Management Plan (specifically habitat management for OBPs);
- OBP Management Plan;
- Wedge-tailed Eagle and White-bellied Sea-eagle Nesting Habitat Management Plan (actions relating to wedge-tailed eagles); and the
- Transmission line EMPs.

As indicated in discussions in relation to the State EMPs above, actions in the OBP Management Plan are completed (with the exception of ongoing management requirements). The remaining EMPs are discussed below.

9. Vegetation Management Plan

The actions in this plan that are relevant to the Commonwealth are those relating to habitat management of OBPs. The results of these actions are reported Section 8.3, Orange-Bellied Parrot Management.

10. Tasmanian Wedge-tailed Eagle and White-bellied Sea-eagle Nesting Habitat Management Plan

The commitments outlined in this planned have all been completed and have been reported in the previous PERs. No further reporting against this plan is considered necessary.

11. Woolnorth to Smithton Transmission Line

Various management plans apply to the Woolnorth to Smithton 110kV transmission line. These are:

- Transmission Line Bird Strike Mitigation Plan;
- Transmission Line Vegetation Management Plan;
- Transmission Line Vegetation Management to Deter the Orange-bellied Parrot; and
- Transmission Line Bird Strike Monitoring Plan.

The majority of actions contained in these plans were completed during the construction of the transmission line. The remaining actions including vegetation surveys to deter OBPs from the transmission line corridor and surveys of the easements for evidence of collisions were undertaken as required by the relevant plans.

12. Environmental management activities conducted in addition to regulated commitments

12.1 Emergency response

Throughout the PER period, a number of emergency response exercises were conducted according to annual plans. These exercises have involved operational staff in all cases but have been run as either desktop/toolbox type training, integrated sessions with external services such as the Tasmanian Police, Tas Fire, State Emergency Service, and practical response exercises. These sessions have found that the site emergency response, preparedness, on-site equipment and staff training was adequate to deal with the majority of emergency scenarios.

12.2 Supporting the Tasmanian Threatened Eagles Recovery Plan review

WNR are supporting the review of the Tasmanian Threatened Eagles Recovery Plan (2006-2010) through involvement in a DPIPWLE led reference group. WNR are providing input in collaboration with, and on behalf of, other companies operation or developing wind farms in Tasmania. The review of the existing/current Plan is a required step in the decision to establish a new plan. As outlined in previous AERs, WNR has suggested an updated Plan would be useful in guiding management actions for both species. WNR will continue to support the Plan review.

12.3 Roadkill mitigation for Save the Devil Program

WNR has continued its support and collaboration with the Save the Tasmanian Devil Program. This has included with the field trapping and research work, and with monitoring and support with their roadkill prevention efforts.

WNR also participated in a stakeholder forum, led by the Circular Head Council, assessing options to mitigate/reduce the mortality on Woolnorth Road.

12.4 Technological investigations

Monitoring of technological advances and strategies being used around the world to monitor the effects of wind farms on avian fauna and bats, and mitigation strategies to reduce impacts was undertaken throughout the PER period. This is beyond that explored for eagle impacts discussed above. There continues to be an increase in the amount of data published on quantifying and mitigating wind farm effects in the scientific literature, but little new, novel or commercially viable options or techniques that have been demonstrated as effective.

12.5 Land management activities

Various land management activities have been undertaken across the wind farm sites during the PER period. The principal activity has focussed on strategic gorse control at both BPWF and SBWF. This has been an ongoing program for a number of years but has now reached the point where existing populations are being managed under annual maintenance regimes.

Glossary

WNR	Woolnorth Renewables (a trading name for Wind Farm Holding Pty Ltd), the controlling entity and owner/operator of BPWF and SBWF, person responsible for the activity
BPWF	Bluff Point Wind Farm
SBWF	Studland Bay Wind Farm
DPIPWE	Tasmanian Department of Primary Industry Parks Water and Environment
DAWE	Department of Agriculture, Water and the Environment
EMP	Environmental Management Plan
EPA	Tasmanian Environment Protection Authority
TSPA	Tasmanian <i>Threatened Species Protection Act 1995</i>
EPBCA	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPN	Environmental Protection Notice
BWP	Blue-winged Parrot (<i>Neophema chrysostoma</i>);
OBP	Orange-bellied Parrot (<i>Neophema chrysogaster</i>)
WBSE	White-bellied Sea-Eagle (<i>Haliaeetus leucogaster</i>)
WTE	Wedge-tailed Eagle (<i>Aquila audax fleayi</i>)

Species names referred to in text

Plants

Common Name	Species
Chickweed	<i>Stellaria media</i>
Fat hen	<i>Chenopodium album</i>
Gorse	<i>Ulex europeaus</i>
Nettle-leaved goosefoot	<i>Chenopodium murale</i>
Water buttons	<i>Cotula coronopifolia</i>
Wire weed	<i>Polygonum aviculare</i>

Birds

Common Name	Species
Wedge-tailed eagle	<i>Aquila audax fleayi</i>
White-bellied sea-eagle	<i>Haliaeetus leucogaster</i>

Mammals

Common Name	Scientific name
Tasmanian Devil	<i>Sarcophilus harrisii</i>
Wallabies	<i>Notamacropus rufogriseus</i> or <i>Thylogale billardierii</i>
Bandicoots	<i>Perameles gunnii</i>
Quolls	<i>Dasyurus spp.</i>

Appendix 1 - Bluff Point Wind Farm EPN 7421/2

(current version)



ENVIRONMENT PROTECTION NOTICE No. 7421/2

Issued under the *Environmental Management and Pollution Control Act 1994*

Issued to: **WOOLNORTH BLUFF POINT WIND FARM PTY LTD**
ACN 095 369 396
4 - 12 ELIZABETH ST
HOBART TAS 7000

Environmentally Relevant Activity: **The operation of a wind farm and transmission line (ACTIVITY TYPE: Wind Energy Facilities)**
WOOLNORTH BLUFF POINT WIND FARM , 1681 WOOLNORTH RD
WOOLNORTH TAS 7001

GROUND

I, Alex Schaap, Director, Environment Protection Authority, being satisfied in accordance with section 44(1)(d) of the *Environmental Management and Pollution Control Act 1994* (the EMPCA) and in relation to the above-mentioned environmentally relevant activity that it is desirable to vary the conditions of a permit (see table below) hereby issue this environment protection notice to the above-mentioned person as the person responsible for the activity.

Permit No.	Date Granted	Granted By
PA10/00	25 June 2001	Circular Head Council

PARTICULARS

The particulars of the grounds upon which this notice is issued are:

- 1 The permit conditions need to be varied to reflect changes to the reporting requirements of bird and bat strikes.
- 2 The permit conditions need to be varied to reflect removal of conditions relating to the transport of Controlled Waste, dealing with samples and management of dust on roads as experience over several years demonstrates that controlled waste, sampling and dust issues have not been of concern.
- 3 The permit conditions need to be varied to reflect the current or updated terminology and/or to clarify the meaning of conditions and to reflect current regulatory practice and continuous improvement consistent with the objectives of EMPCA.
- 4 The permit conditions need to be varied to reflect the changes to the environmental management plan structure.

DEFINITIONS

Unless the contrary appears, words and expressions used in this Notice have the meaning given to them in Schedule 1 of this Notice and in the EMPCA. If there is any inconsistency between a definition in the EMPCA and a definition in this Notice, the EMPCA prevails to the extent of the inconsistency.

REQUIREMENTS

In accordance with s.44(3) of the EMPCA, the person responsible for the activity is required to comply with the conditions contained in Schedule 2 of this Notice. These conditions prevail over the terms of the permit to the extent of any inconsistency.

INFORMATION

Attention is drawn to **Schedule 3**, which contains important additional information.

PENALTIES

If a person bound by an environment protection notice contravenes a requirement of the notice, that person is guilty of an offence and is liable on summary conviction to a penalty not exceeding 1000 penalty units in the case of a body corporate or 500 penalty units in any other case (at the time of issuance of this Notice one penalty unit is equal to \$130.00).

NOTICE TAKES EFFECT

This notice takes effect on the date on which it is served upon you.

APPEAL RIGHTS

You may appeal to the Appeal Tribunal against this notice, or against any requirement contained in the notice, within 14 days from the date on which the notice is served, by writing to:

The Chairperson
Resource Management and Planning Appeal Tribunal
GPO Box 2036
Hobart TAS 7001

Signed: _____

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

29 OCT 2014

Date: _____

Table Of Contents

Schedule 1: Definitions.....	4
Schedule 2: Conditions.....	6
Maximum Quantities.....	6
Q1 Regulatory limits.....	6
General.....	6
G1 Access to and awareness of conditions and associated documents.....	6
G2 Incident response.....	6
G3 No changes without approval.....	6
G4 Change of ownership.....	6
G5 Annual Environmental Review.....	6
G6 Environmental Management Plan and review thereof.....	7
Decommissioning And Rehabilitation.....	8
DC1 Notification of cessation.....	8
DC2 Rehabilitation following cessation.....	8
DC3 DRP requirements.....	8
Flora And Fauna.....	8
FF1 Infrastructure location.....	8
FF2 Nest Disturbance.....	8
FF3 Notification of Bird and Bat Strikes	8
Hazardous Substances.....	9
H1 Storage and handling of hazardous materials.....	9
H2 Spill kits.....	9
Monitoring.....	9
Noise Control.....	9
N1 Noise emission limits.....	9
Schedule 3: Information.....	10
Legal Obligations.....	10
LO1 EMPCA.....	10
LO2 Storage and handling of Dangerous Goods, Explosives and dangerous substances.....	10
LO3 Change of responsibility.....	10
Other Information.....	10
OI1 Waste management hierarchy.....	10
OI2 Notification of incidents under section 32 of EMPCA	10



Schedule 1: Definitions

Activity means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity.

Director means the Director, Environment Protection Authority holding office under Section 18 of EMPCA and includes a person authorised in writing by the Director to exercise a power or function on the Director's behalf.

DRP means Decommissioning and Rehabilitation Plan

EMPCA means the *Environmental Management and Pollution Control Act 1994*.

Environmental Harm and **Material Environmental Harm** and **Serious Environmental Harm** each have the meanings ascribed to them in Section 5 of EMPCA.

Environmental Management Plan means Bluff Point Wind Farm State Environmental Management Plan November 2013 approved in writing by the Director on 23 December 2013, and any amendment to or revision of the plan approved in writing by the Director.

Environmental Nuisance and **Pollutant** each have the meanings ascribed to them in Section 3 of EMPCA.

Environmentally Hazardous Material means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

Grey Goshawk means *Accipiter novaehollandiae*

Heavy Disturbance Activities means any activity associated with the maintenance of the wind farm, transmission line and ancillary activities that generates local noise above background levels but excludes activities associated with the initial response to an emergency event.

Noise Sensitive Premises means residences and residential zones (whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

Person Responsible is any person who is or was responsible for the environmentally relevant activity to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

Reporting Period means the 12 months ending on 31 December of each year.

Tasmanian Noise Measurement Procedures Manual means the Noise Measurement Procedures Manual referred to in regulation 4 of the *Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2014*.

The Land means the land on which the activity to which this document relates may be carried out, and includes: buildings and other structures permanently fixed to the land, any part of the land covered with water, and any water covering the land. The Land falls within the area defined by:

- 1 Certificates of Title 135793/1, 135793/3, 135793/4, Property ID: 2112639.

Wedge-Tailed Eagle means *Aquila audax fleayi*.

White-Bellied Sea-Eagle means *Haliaeetus leucogaster*.

A handwritten signature in black ink, consisting of stylized, overlapping loops and strokes.

Schedule 2: Conditions

Maximum Quantities

Q1 Regulatory limits

- 1 The activity must not exceed the following limits (annual fees are derived from these figures):

- 1.1 65 megawatts of generating capacity

General

G1 Access to and awareness of conditions and associated documents

A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the activity. The person responsible for the activity must ensure that all persons who are responsible for undertaking work on The Land, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G2 Incident response

If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

G3 No changes without approval

- 1 The following changes, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the activity if such changes have been approved in writing by the EPA Board following its assessment of an application for a permit under the *Land Use Planning and Approvals Act 1993*, or approved in writing by the Director:

- 1.1 a change to a process used in the course of carrying out the activity; or
- 1.2 the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity; or
- 1.3 a change in the quantity or characteristics of materials used in the course of carrying out the activity.

G4 Change of ownership

If the owner of The Land upon which the activity is carried out changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change or intended change in the ownership of The Land, the person responsible must notify the Director in writing of the change or intended change of ownership.

G5 Annual Environmental Review

- 1 Unless otherwise specified in writing by the Director, a publicly available Annual Environmental Review for the activity must be submitted to the Director each year within three months of the end of the reporting period. Without limitation, each Annual Environmental Review must include the following information:
 - 1.1 a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the Annual Environmental Review;

- 1.2 subject to the *Personal Information Protection Act 2004*, a list of all complaints received from the public during the reporting period concerning actual or potential environmental harm or environmental nuisance caused by the activity and a description of any actions taken as a result of those complaints;
- 1.3 details of environment-related procedural or process changes that have been implemented during the reporting period;
- 1.4 a summary of the amounts (tonnes or litres) of both solid and liquid wastes produced and treatment methods implemented during the reporting period. Initiatives or programs planned to avoid, minimise, re-use, or recycle such wastes over the next reporting period should be detailed;
- 1.5 details of all non-trivial environmental incidents and/or incidents of non compliance with permit or environment protection notice conditions that occurred during the reporting period, and any mitigative or preventative actions that have resulted from such incidents;
- 1.6 a summary of the monitoring data and record keeping required by these conditions. This information should be presented in graphical form where possible, including comparison with the results of at least the preceding reporting period. Special causes and system changes that have impacted on the parameters monitored must be noted. Explanation of significant deviations between actual results and any predictions made in previous reports must be provided;
- 1.7 identification of breaches of limits specified in these conditions and significant variations from predicted results contained in any relevant DPEMP or EMP, an explanation of why each identified breach of specified limits or variation from predictions occurred and details of the actions taken in response to each identified breach of limits or variance from predictions;
- 1.8 a list of any issues, not discussed elsewhere in the report, that must be addressed to improve compliance with these conditions, and the actions that are proposed to address any such issues;
- 1.9 a summary of fulfilment of environmental commitments made for the reporting period. This summary must include indication of results of the actions implemented and explanation of any failures to achieve such commitments; and
- 1.10 a summary of any community consultation and communication undertaken during the reporting period.

G6 Environmental Management Plan and review thereof

- 1 Unless otherwise specified in writing by the Director, the activity on The Land must be carried out and monitored in accordance with the environmental management measures set down in the Environmental Management Plan (EMP) and in accordance with best practice environmental management.
- 2 A revised Environmental Management Plan (EMP) for the activity must be submitted to the Director by 15 February 2016 and at five yearly intervals thereafter.
- 3 The EMP must include a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the EMP.
- 4 The EMP must detail the potential environmental impacts arising from the ongoing operation of the activity over the next 5 years, including a strategic consideration of potential changes to the activity during that period and consideration of opportunities to implement continuous improvement.
- 5 The EMP must separately identify specific commitments, with actions and timeframes, to mitigate or prevent the identified potential environmental impacts. In preparing the EMP the person responsible must take into account the contents of any previous annual environmental reviews including complaints, incidents and monitoring data.

- 6 If the Director issues guidelines for preparation of the EMP review, the revised EMP must address the matters listed in those guidelines.

Decommissioning And Rehabilitation

DC1 Notification of cessation

Within 30 days of becoming aware of any event or decision which is likely to give rise to the permanent cessation of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to cease or has ceased.

DC2 Rehabilitation following cessation

- 1 Following permanent cessation of the activity, and unless otherwise approved in writing by the Director, The Land must be rehabilitated including:
 - 1.1 stabilisation of any land surfaces that may be subject to erosion;
 - 1.2 removal or mitigation of all environmental hazards or land contamination, that might pose an on-going risk of causing environmental harm; and
 - 1.3 decommissioning of any equipment that has not been removed.
- 2 Where a Decommissioning and Rehabilitation Plan (DRP) has been approved by the Director, decommissioning and rehabilitation must be carried out in accordance with that plan, as may be amended from time to time with written approval of the Director.

DC3 DRP requirements

Unless otherwise approved in writing by the Director, a draft Decommissioning and Rehabilitation Plan (DRP) for the activity must be submitted for approval to the Director within 30 days of the Director being notified of the planned cessation of the activity or by a date specified in writing by the Director. The DRP must be prepared in accordance with any guidelines provided by the Director.

Flora And Fauna

FF1 Infrastructure location

New infrastructure must not be located within 180 metres of a Wedge-tailed Eagle nest site or a White-Bellied Sea-Eagle nest site or within 100 metres of an active Grey Goshawk nest site.

FF2 Nest Disturbance

- 1 Unless it has been demonstrated to the satisfaction of the Director that a nest site is inactive, or as otherwise approved in writing by the Director, heavy disturbance activities which last for a continuous period of greater than 30 minutes, or non-continuous heavy disturbance activities which last in aggregate for more than 60 minutes within a 24 hour period, must not occur during the period 1 August to 1 February within:
 - 1.1 1,000 metres of a Wedge-tailed Eagle nest or White-Bellied Sea-Eagle nest if the maintenance activities are in line-of-site of the nest; or
 - 1.2 500 metres of a Wedge-tailed Eagle nest or White-Bellied Sea-Eagle nest if the maintenance activities are not in line-of-site of the nest; or
 - 1.3 100 metres of a Grey Goshawk nest site.

FF3 Notification of Bird and Bat Strikes

- 1 The Director must be notified of any evidence of dead or injured native birds and bats listed under the *Threatened Species Protection Act 1995* found on The Land within 24 hours of their discovery.

- 2 Within three days of notification, an incident report must be submitted to the Director. The report must include, but is not necessarily limited to, the following:
 - 2.1 unique identification number;
 - 2.2 general description of evidence;
 - 2.3 species identification;
 - 2.4 sex and estimated age (if known);
 - 2.5 discovery date and time;
 - 2.6 estimated date of collision;
 - 2.7 estimate of general weather conditions at the time of incident;
 - 2.8 position of evidence relative to infrastructure;
 - 2.9 photographic evidence; and
 - 2.10 any other relevant information.

Hazardous Substances

H1 Storage and handling of hazardous materials

Unless otherwise approved in writing by the Director, environmentally hazardous material held on The Land, including chemicals, fuels and oils, must be located within impervious bunded areas or spill trays which are designed to contain at least 110% of the total volume of material.

H2 Spill kits

Spill kits appropriate for the types and volumes of materials handled on The Land must be kept in appropriate locations to assist with the containment of spilt environmentally hazardous materials.

Monitoring

Noise Control

N1 Noise emission limits

- 1 Noise emissions from the activity when measured at any noise sensitive premises in other ownership and expressed as the equivalent continuous A-weighted sound pressure level must not exceed 40dB(A).
- 2 Where the combined level of noise from the activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the ambient noise levels by at least 5 dB(A).
- 3 The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified in writing by the Director.
- 4 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian Noise Measurement Procedures Manual.
- 5 All methods of measurement must be in accordance with the Tasmanian Noise Measurement Procedures Manual.



Schedule 3: Information

Legal Obligations

LO1 EMPCA

The activity must be conducted in accordance with the requirements of the *Environmental Management and Pollution Control Act 1994* and Regulations thereunder. The conditions of this document must not be construed as an exemption from any of those requirements.

LO2 Storage and handling of Dangerous Goods, Explosives and dangerous substances

- 1 The storage, handling and transport of dangerous goods, explosives and dangerous substances must comply with the requirements of relevant State Acts and any regulations thereunder, including:
 - 1.1 *Work Health and Safety Act 2012* and subordinate regulations;
 - 1.2 *Explosives Act 2012* and subordinate regulations; and
 - 1.3 *Dangerous Goods (Road and Rail Transport) Act 2010* and subordinate regulations.

LO3 Change of responsibility

If the person responsible for the activity ceases to be responsible for the activity, they must notify the Director in accordance with Section 45 of the EMPCA.

Other Information

OI1 Waste management hierarchy

- 1 Wastes should be managed in accordance with the following hierarchy of waste management:
 - 1.1 waste should be minimised, that is, the generation of waste must be reduced to the maximum extent that is reasonable and practicable, having regard to best practice environmental management;
 - 1.2 waste should be re-used or recycled to the maximum extent that is practicable; and
 - 1.3 waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the relevant planning authority or the Director to receive such waste, or otherwise in a manner approved in writing by the Director.

OI2 Notification of incidents under section 32 of EMPCA

Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning 1800 005 171 (a 24-hour emergency telephone number).

Appendix 2 - Studland Bay Wind Farm EPN 7423/3 (current version)



ENVIRONMENT PROTECTION NOTICE No. 7423/3

Issued under the *Environmental Management and Pollution Control Act 1994*

Issued to: **WOOLNORTH STUDLAND BAY WIND FARM PTY LTD**
ACN 111 996 377
4 - 12 ELIZABETH ST
HOBART TAS 7000

Environmentally **The operation of a windfarm and transmission line (ACTIVITY TYPE:**
Relevant **Wind Energy Facilities)**
Activity: **WOOLNORTH STUDLAND BAY WIND, WOOLNORTH RD**
WOOLNORTH TAS 7330

GROUND

I, Alex Schaap, Director, Environment Protection Authority, being satisfied in accordance with section 44(1)(d) of the *Environmental Management and Pollution Control Act 1994* (the EMPCA) and in relation to the above-mentioned environmentally relevant activity that it is desirable to vary the conditions of a permit (see table below) hereby issue this environment protection notice to the above-mentioned person as the person responsible for the activity.

Permit No.	Date Granted	Granted By
PA10/00	25 June 2001	Circular Head Council

PARTICULARS

The particulars of the grounds upon which this notice is issued are:

- 1 The permit conditions need to be varied to reflect changes to the reporting requirements of bird and bat strikes.
- 2 The permit conditions need to be varied to reflect removal of conditions relating to noise surveys, dealing with samples and the management of dust on roads as experience over several years demonstrates that noise, sampling and dust issues have not been of concern.
- 3 The permit conditions need to be varied to reflect the current or updated terminology and/or to clarify the meaning of conditions and to reflect current regulatory practice and continuous improvement consistent with the objectives of EMPCA.
- 4 The permit conditions need to be varied to reflect the changes to the environmental management plan structure.

DEFINITIONS

Unless the contrary appears, words and expressions used in this Notice have the meaning given to them in Schedule 1 of this Notice and in the EMPCA. If there is any inconsistency between a definition in the EMPCA and a definition in this Notice, the EMPCA prevails to the extent of the inconsistency.

REQUIREMENTS

In accordance with s.44(3) of the EMPCA, the person responsible for the activity is required to comply with the conditions contained in Schedule 2 of this Notice. These conditions prevail over the terms of the permit to the extent of any inconsistency.

INFORMATION

Attention is drawn to **Schedule 3**, which contains important additional information.

PENALTIES

If a person bound by an environment protection notice contravenes a requirement of the notice, that person is guilty of an offence and is liable on summary conviction to a penalty not exceeding 1000 penalty units in the case of a body corporate or 500 penalty units in any other case (at the time of issuance of this Notice one penalty unit is equal to \$130.00).

NOTICE TAKES EFFECT

This notice takes effect on the date on which it is served upon you.

APPEAL RIGHTS

You may appeal to the Appeal Tribunal against this notice, or against any requirement contained in the notice, within 14 days from the date on which the notice is served, by writing to:

The Chairperson
Resource Management and Planning Appeal Tribunal
GPO Box 2036
Hobart TAS 7001

Signed:



DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date:

29 OCT 2014

Table Of Contents

Schedule 1: Definitions.....	4
Schedule 2: Conditions.....	6
Maximum Quantities.....	6
Q1 Regulatory limits.....	6
General.....	6
G1 Access to and awareness of conditions and associated documents.....	6
G2 Incident response.....	6
G3 No changes without approval.....	6
G4 Change of ownership.....	6
G5 Annual Environmental Review.....	6
G6 Environmental Management Plan and review thereof.....	7
Decommissioning And Rehabilitation.....	8
DC1 Notification of cessation.....	8
DC2 Rehabilitation following cessation.....	8
DC3 DRP requirements.....	8
Flora And Fauna.....	8
FF1 Infrastructure location.....	8
FF2 Nest Disturbance.....	8
FF3 Notification of Bird and Bat Strikes	8
Hazardous Substances.....	9
H1 Storage and handling of hazardous materials.....	9
H2 Spill kits.....	9
Noise Control.....	9
N1 Noise emission limits.....	9
Schedule 3: Information.....	10
Legal Obligations.....	10
LO1 EMPCA.....	10
LO2 Storage and handling of Dangerous Goods, Explosives and dangerous substances.....	10
LO3 Change of responsibility.....	10
Other Information.....	10
OI1 Waste management hierarchy.....	10
OI2 Notification of incidents under section 32 of EMPCA	10



Schedule 1: Definitions

Activity means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity.

Director means the Director, Environment Protection Authority holding office under Section 18 of EMPCA and includes a person authorised in writing by the Director to exercise a power or function on the Director's behalf.

DRP means Decommissioning and Rehabilitation Plan

EMPCA means the *Environmental Management and Pollution Control Act 1994*.

Environmental Harm and Material Environmental Harm and Serious Environmental Harm each have the meanings ascribed to them in Section 5 of EMPCA.

Environmental Management Plan means Studland Bay Wind Farm State Environmental Management Plan November 2013 approved in writing by the Director on 23 December 2013, and any amendment to or revision of the plan approved in writing by the Director.

Environmental Nuisance and Pollutant each have the meanings ascribed to them in Section 3 of EMPCA.

Environmentally Hazardous Material means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

Grey Goshawk means *Accipiter novaehollandiae*

Heavy Disturbance Activities means any activity associated with the maintenance of the wind farm, transmission line and ancillary activities that generates local noise above the background level but excludes activities associated with the initial response to an emergency event.

Noise Sensitive Premises means residences and residential zones (whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

Person Responsible is any person who is or was responsible for the environmentally relevant activity to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

Reporting Period means the 12 months ending on 31 December of each year.

Tasmanian Noise Measurement Procedures Manual means the Noise Measurement Procedures Manual referred to in regulation 4 of the *Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2014*.

The Land means the land on which the activity to which this document relates may be carried out, and includes: buildings and other structures permanently fixed to the land, any part of the land covered with water, and any water covering the land. The Land falls within the area defined by:

- 1 Certificate of Title: 135793/5, 135793/2, Property ID: 2112647.

Wedge-Tailed Eagle means *Aquila audax fleayi*.

White-Bellied Sea-Eagle means *Haliaeetus leucogaster*.

A handwritten signature in black ink, appearing to be a stylized 'B' or similar character.

Schedule 2: Conditions

Maximum Quantities

Q1 Regulatory limits

- 1 The activity must not exceed the following limits (annual fees are derived from these figures):
 - 1.1 75 megawatts of generating capacity

General

G1 Access to and awareness of conditions and associated documents

A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the activity. The person responsible for the activity must ensure that all persons who are responsible for undertaking work on The Land, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G2 Incident response

If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

G3 No changes without approval

- 1 The following changes, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the activity if such changes have been approved in writing by the EPA Board following its assessment of an application for a permit under the *Land Use Planning and Approvals Act 1993*, or approved in writing by the Director:
 - 1.1 a change to a process used in the course of carrying out the activity; or
 - 1.2 the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity; or
 - 1.3 a change in the quantity or characteristics of materials used in the course of carrying out the activity.

G4 Change of ownership

If the owner of The Land upon which the activity is carried out changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change or intended change in the ownership of The Land, the person responsible must notify the Director in writing of the change or intended change of ownership.

G5 Annual Environmental Review

- 1 Unless otherwise specified in writing by the Director, a publicly available Annual Environmental Review for the activity must be submitted to the Director each year within three months of the end of the reporting period. Without limitation, each Annual Environmental Review must include the following information:
 - 1.1 a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the Annual Environmental Review;

- 1.2 subject to the *Personal Information Protection Act 2004*, a list of all complaints received from the public during the reporting period concerning actual or potential environmental harm or environmental nuisance caused by the activity and a description of any actions taken as a result of those complaints;
- 1.3 details of environment-related procedural or process changes that have been implemented during the reporting period;
- 1.4 a summary of the amounts (tonnes or litres) of both solid and liquid wastes produced and treatment methods implemented during the reporting period. Initiatives or programs planned to avoid, minimise, re-use, or recycle such wastes over the next reporting period should be detailed;
- 1.5 details of all non-trivial environmental incidents and/or incidents of non compliance with permit or environment protection notice conditions that occurred during the reporting period, and any mitigative or preventative actions that have resulted from such incidents;
- 1.6 a summary of the monitoring data and record keeping required by these conditions. This information should be presented in graphical form where possible, including comparison with the results of at least the preceding reporting period. Special causes and system changes that have impacted on the parameters monitored must be noted. Explanation of significant deviations between actual results and any predictions made in previous reports must be provided;
- 1.7 identification of breaches of limits specified in these conditions and significant variations from predicted results contained in any relevant DPEMP or EMP, an explanation of why each identified breach of specified limits or variation from predictions occurred and details of the actions taken in response to each identified breach of limits or variance from predictions;
- 1.8 a list of any issues, not discussed elsewhere in the report, that must be addressed to improve compliance with these conditions, and the actions that are proposed to address any such issues;
- 1.9 a summary of fulfilment of environmental commitments made for the reporting period. This summary must include indication of results of the actions implemented and explanation of any failures to achieve such commitments; and
- 1.10 a summary of any community consultation and communication undertaken during the reporting period.

G6 Environmental Management Plan and review thereof

- 1 Unless otherwise specified in writing by the Director, the activity on The Land must be carried out and monitored in accordance with the environmental management measures set down in the Environmental Management Plan (EMP) and in accordance with best practice environmental management.
- 2 A revised Environmental Management Plan (EMP) for the activity must be submitted to the Director by 15 February 2016 and at five yearly intervals thereafter.
- 3 The EMP must include a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the EMP.
- 4 The EMP must detail the potential environmental impacts arising from the ongoing operation of the activity over the next 5 years, including a strategic consideration of potential changes to the activity during that period and consideration of opportunities to implement continuous improvement.
- 5 The EMP must separately identify specific commitments, with actions and timeframes, to mitigate or prevent the identified potential environmental impacts. In preparing the EMP the person responsible must take into account the contents of any previous annual environmental reviews including complaints, incidents and monitoring data.



- 6 If the Director issues guidelines for preparation of the EMP review, the revised EMP must address the matters listed in those guidelines.

Decommissioning And Rehabilitation

DC1 Notification of cessation

Within 30 days of becoming aware of any event or decision which is likely to give rise to the permanent cessation of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to cease or has ceased.

DC2 Rehabilitation following cessation

- 1 Following permanent cessation of the activity, and unless otherwise approved in writing by the Director, The Land must be rehabilitated including:
 - 1.1 stabilisation of any land surfaces that may be subject to erosion;
 - 1.2 removal or mitigation of all environmental hazards or land contamination, that might pose an on-going risk of causing environmental harm; and
 - 1.3 decommissioning of any equipment that has not been removed.
- 2 Where a Decommissioning and Rehabilitation Plan (DRP) has been approved by the Director, decommissioning and rehabilitation must be carried out in accordance with that plan, as may be amended from time to time with written approval of the Director.

DC3 DRP requirements

Unless otherwise approved in writing by the Director, a draft Decommissioning and Rehabilitation Plan (DRP) for the activity must be submitted for approval to the Director within 30 days of the Director being notified of the planned cessation of the activity or by a date specified in writing by the Director. The DRP must be prepared in accordance with any guidelines provided by the Director.

Flora And Fauna

FF1 Infrastructure location

New infrastructure must not be located within 180 metres of a Wedge-tailed Eagle nest site or a White-Bellied Sea-Eagle nest site or within 100 metres of an active Grey Goshawk nest site.

FF2 Nest Disturbance

- 1 Unless it has been demonstrated to the satisfaction of the Director that a nest site is inactive, or as otherwise approved in writing by the Director, heavy disturbance activities which last for a continuous period of greater than 30 minutes, or non-continuous heavy disturbance activities which last for more than an aggregate period of 60 minutes within a 24 hour period, must not occur during the period 1 August to 1 February within:
 - 1.1 1,000 metres of a Wedge-tailed Eagle nest or White-Bellied Sea-Eagle nest if the maintenance activities are in line-of-site of the nest; or
 - 1.2 500 metres of a Wedge-tailed Eagle nest or White-Bellied Sea-Eagle nest if the maintenance activities are not in line-of-site of the nest; or
 - 1.3 100 metres of a Grey Goshawk nest site.

FF3 Notification of Bird and Bat Strikes

- 1 The Director must be notified of any evidence of dead or injured native birds and bats listed under the *Threatened Species Protection Act 1995* found on The Land within 24 hours of their discovery.

- 2 Within three days of notification, an incident report must be submitted to the Director. The report must include, but is not necessarily limited to, the following:
 - 2.1 unique identification number;
 - 2.2 general description of evidence;
 - 2.3 species identification;
 - 2.4 sex and estimated age (if known);
 - 2.5 discovery date and time;
 - 2.6 estimated date of collision;
 - 2.7 estimate of general weather conditions at the time of incident;
 - 2.8 position of evidence relative to infrastructure;
 - 2.9 photographic evidence; and
 - 2.10 any other relevant information.

Hazardous Substances

H1 Storage and handling of hazardous materials

Unless otherwise approved in writing by the Director, environmentally hazardous material held on The Land, including chemicals, fuels and oils, must be located within impervious bunded areas or spill trays which are designed to contain at least 110% of the total volume of material.

H2 Spill kits

Spill kits appropriate for the types and volumes of materials handled on The Land must be kept in appropriate locations to assist with the containment of spilt environmentally hazardous materials.

Noise Control

N1 Noise emission limits

- 1 Noise emissions from the activity when measured at any noise sensitive premises in other ownership and expressed as the equivalent continuous A-weighted sound pressure level must not exceed 40dB(A).
- 2 Where the combined level of noise from the activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the ambient noise levels by at least 5 dB(A).
- 3 The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified in writing by the Director.
- 4 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian Noise Measurement Procedures Manual.
- 5 All methods of measurement must be in accordance with the Tasmanian Noise Measurement Procedures Manual.

Schedule 3: Information

Legal Obligations

LO1 EMPCA

The activity must be conducted in accordance with the requirements of the *Environmental Management and Pollution Control Act 1994* and Regulations thereunder. The conditions of this document must not be construed as an exemption from any of those requirements.

LO2 Storage and handling of Dangerous Goods, Explosives and dangerous substances

- 1 The storage, handling and transport of dangerous goods, explosives and dangerous substances must comply with the requirements of relevant State Acts and any regulations thereunder, including:
 - 1.1 *Work Health and Safety Act 2012* and subordinate regulations;
 - 1.2 *Explosives Act 2012* and subordinate regulations; and
 - 1.3 *Dangerous Goods (Road and Rail Transport) Act 2010* and subordinate regulations.

LO3 Change of responsibility

If the person responsible for the activity ceases to be responsible for the activity, they must notify the Director in accordance with Section 45 of the EMPCA.

Other Information

OI1 Waste management hierarchy

- 1 Wastes should be managed in accordance with the following hierarchy of waste management:
 - 1.1 waste should be minimised, that is, the generation of waste must be reduced to the maximum extent that is reasonable and practicable, having regard to best practice environmental management;
 - 1.2 waste should be re-used or recycled to the maximum extent that is practicable; and
 - 1.3 waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the relevant planning authority or the Director to receive such waste, or otherwise in a manner approved in writing by the Director.

OI2 Notification of incidents under section 32 of EMPCA

Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning 1800 005 171 (a 24-hour emergency telephone number).

