Flyers Creek Wind Farm

Pollution Incident Response Management Plan

Document Authorisation

Document Details

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16/05/2025	1	Josh Fitzgerald Nelson Mckie	Shane Kelly Katherine Olney Reshma Surendran	Matt Dickie	Initial issue. Based on construction PIRMP : Document number IAU-EPL-FLCGE65-004_0A

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1. Purpose

FLYERS CREEK WIND FARM PTY LTD holds an Environment Protection Licence with the NSW Environment Protection Authority (EPA) for Flyers Creek Wind Farm. As per the Protection of the Environment Operations Act 1997 (the POEO Act), the holder of an Environment Protection Licence must prepare, keep, test, and implement a pollution incident response management plan (PIRMP) that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates.

If a pollution incident occurs during an activity so that material harm to the environment (within the meaning of section 147 of the POEO Act) is caused or threatened, the person carrying out the activity must immediately implement this plan in relation to the activity required by Part 5.7A of the POEO Act.

A copy of this plan will be kept at the licensed premises, will be made available on request by an authorised EPA officer and to any person who is responsible for implementing this plan.

Parts of the plan will also be available on a publicly accessible website, or with a copy of the plan provided to any person who makes a written request. The sections of the plan that are required to be publicly available are set out in clause 98D of the Protection of the Environment Operations (General) Regulation 2009.

This plan has been developed in accordance with the Protection of the Environment Operations Act 1997, Protection of the Environment Operations (General) Regulation 2009 and EPA's Guideline: Pollution incident response management plans.

ENVIRONMENT PROTECTION LICENCE (EPL) DETAILS		
Name of licensee: (Including ABN)	FLYERS CREEK WIND FARM PTY LTD	
	ABN: 69 130 749 012	
EPL number:	21404	
Premises name and address:	FLYERS CREEK WIND FARM PTY LTD, FLYERS CREEK WIND FARM, ERROWANBANG NSW 2791	
Company or business contact details	Name	Josh Fitzgerald
	Position or title	FCWF Site Manager
	Business hours contact number/s	(02) 8031 9951
	After hours contact number/s	(02) 8031 9950
	Email	Joshua.Fitzgerald@iberdrola.com.au
Website address	https://www.iberdrola.com.au/our-assets/asset-map/operating-renewable-energy-assets/flyers-creek-wind-farm	
Scheduled activity/activities on EPL	Electricity Generation	

Fee-based activity/activities on EPL	Electricity Works (Wind Farm) 0-450 GWh annual generating capacity	
Pollution incident – person/s responsible		
PIRMP Activation	Primary Contact	Josh Fitzgerald
	Name of person responsible	Josh Fitzgerald
	Position or title	FCWF Site Manager
	Business hours contact number/s	(02) 8031 9951
	After hours contact number/s	(02) 8031 9950
	Email	Joshua.Fitzgerald@iberdrola.com.au
	Secondary Contact	
	Name of person responsible	Shane Kelly
	Position or Title	Regional Operations Manager
	Business hours contact number/s	0457 706 051.
	After hours contact number/s	0457 706 051
	Email	Shane.Kelly@Iberdrola.com.au
Notifying Relevant Authorities		
Notification should be made by a person with an appropriate level of authority within the company. Managing response to pollution incident	Name of person responsible	Katherine Olney
	Position or title	QHSE Manager
	Business hours contact number/s	+61429023976
	After hours contact number/s	+61429023976
	Email	katherine.olney@iberdrola.com.au

2. Notification of relevant authorities

Identify any persons or authorities required to be notified as per Part 5.7A of the POEO Act in the case of a pollution incident that causes or threatens to cause material harm to the environment.

Relevant authorities include:

- Fire & Rescue NSW and/or Rural Fire Service as applicable – 000 (first notification)
- EPA – 131 555
- NSW Health (nearest public health unit)
    - See www.health.nsw.gov.au/Infectious/Pages/phus.aspx for local contact details.

- SafeWork NSW – 131 050
- Local authority (usually the local council) in which the pollution has occurred.

Note: The local council and public health unit will vary depending on the location of the pollution incident. For mobile plant licences the PIRMP will need to include the person or people who are responsible for identifying the local authority and nearest public health unit.

DEPARTMENT	CONTACT NUMBER/S:
Fire & Rescue NSW / Rural Fire Service, NSW Police and NSW Ambulance Service	000
EPA	131 555
NSW Health	Bathurst Public Health Unit (02) 6330 5880 0428 400 526 (after hours)
SafeWork NSW	131 050
Blayney Shire Council	(02) 6368 2104
Cabonne Shire Council	(02) 6392 3200
Department of Planning and Environment	1300 420 596

*Any other identified organisation or agency requiring notification (if applicable) e.g. Water NSW, Department of Planning Industry and Environment, Roads and Maritime Services.

3. Notification of neighbours and the local community

- Neighbours and the local community in the vicinity1 of Flyers Creek Wind Farm include:
    - Private landholders
    - Carcoar Public School, Lyndhurst Public School and Blayney Public School
    - Millthorpe Little Learning Centre, Circle Early Learning and Blayney Early Learners
    - Orange Health Service
    - Gosling Aged Care and Moyne Aged Care Centre

- Communication of an incident, early warning, and regular updates to the community, will consider the:
    - nature of the incident.
    - phase of response (e.g., initial community notifications, update communications, clean-up/recovery)
    - types of neighbours who need to receive information.

- The community will be notified in the following ways:
    - incident notifications on the Iberdrola website within 5 business days of the incident occurring.
    - social media
    - telephone calls, SMS, or other messaging systems.
    - emails to community representatives (as agreed through community consultation)
    - letterbox drops.
    - doorknocking of affected community members.

4. Description and Likelihood of Hazards

The Flyers Creek Wind Farm Environmental Management Plan (EMP), details hazards to human health or the environment associated with the activities outlined in the EPL, which are:

- Incorrect disposal of waste material leading to contamination of local environment
- Incorrect storage and containment of waste material
- Release of fuel into local environment from plant in the event of a fuel line failure
- Incorrect storage of dangerous and hazardous materials such as gases and fuels leading to fire, explosion or escape of substances into the environment.
- Incorrect identification of environmentally sensitive areas leading to subsequent impacts during windfarm operation and maintenance
- Uncontained release of oils or lubricants to the local environment during routine service activities or operation
- Unexpected find of contamination during windfarm operation.
- Inadequate training of site personnel in the event of a spill.
- Personnel entering restricted areas to undertake operations / maintenance activities.
- Contamination of land by the introduction of new noxious weeds/pests from new plant equipment

The FCWF Risk Register details the likelihood of any such hazards occurring, ranging from common (once per month) to Highly Unlikely (once in >20 years). The likelihood of these hazards may be exacerbated by:

- power failure.

- natural disasters such as bushfires, floods, or major storm events
- materials and equipment brought onto the premises by contractors.
- vegetation and other combustible material on or bordering the premises.

The detailed risk assessment, including the risk matrix used to assess hazards for Flyers Creek Wind Farm is attached in Appendix A – Aspects and Impacts Risk Register.

5. Pre-emptive actions to be taken

Pre-emptive actions to be taken to minimise or prevent any risk of harm to human health or the environment arising from the activities undertaken at the premises are listed in the Flyers Creek Wind Farm - Emergency Response Management Plan (ERMP), the FCWF Site Induction and Safe Work Method Statement (SWMS) development and implementation.

- Vehicle pre-inspections, wash-downs, hygiene requirements and response procedures
- Plant inspections.
- Staff training through daily pre-start meetings, toolbox talks and one on one conversations.
- Compliance with all environmental management plans
- Incident reporting
- Site environmental inspections and audits
- Pre-clearance checks and establishment and maintenance of No-Go Zones
- Project Layout development to avoid known sensitivities and constraints.
- Servicing only on hardstand Temporary catch trays used during vehicle service activities.
- Provision of spill kits on site
- Accompaniment of service workers/visitors to site by fully inducted staff
- Provision of water carts on site
- Access area permit system
- Storage of dangerous, hazardous, or combustible materials that meets statutory requirements.
- Provision of bunding and other stormwater mitigation measures
- Waste Management including containment, segregation, disposal, and record keeping.
- Transport of all waste by appropriately licenced operators to licenced facilities.
- Warning systems on ablution storage tanks

6. Inventory of Pollutants

Provide an inventory of potential pollutants on the premises or used in carrying out the activity to which the licence relates:

LOCATION/TANK	MAX. QUANTITY OF FUEL STORAGE	CONTENTS	COMMENTS
Sub-Station Compound Class 3 Flammable Goods Bulk Storage Container	10,000L	Mixed Class 3	Mixed Class 3 storage including paint products
Sub-Station Compound Class 3 Flammable Goods Bulk Storage Container	4,000L	Mixed Class 3	Mixed Class 3 storage including paint products
Sub-Station Compound Class 3 Flammable Goods Bulk Storage Container	250L	Mixed Class 3	Mixed Class 3 storage including paint products
Sub Station – IBDR Workshop Class 3 Dangerous Goods Storage Cabinet.	250L	Mixed Class 3	Mixed Class 3 storage including paint products
Sub Station GE Workshop Class 3 Dangerous Goods Storage Cabinet.	250L	Mixed Class 3	Mixed Class 3 storage including paint products

7. Safety Equipment

Safety equipment or other devices used to minimise the risks to human health or the environment and to contain or control a pollution incident include:

- Spill Response Kits
- Personal Protective Equipment (PPE)
- Temporary Catch Trays

- Water Carts
- Bunding
- Waste Containment and Segregation Bins
- Warning Systems on Ablution Storage Tanks
- Safety Data Sheets (SDS)
- Fire Extinguishers / Fire Hoses
- Back-up Power Generators
- Eye-Wash Stations

8. Communicating with Neighbours and the Local Community Members

As detailed in the FCWF Community and Stakeholder Communication Protocol, regular consultation with the community and landholders is expected to be undertaken during operation. The Wind Farm Site Manager is responsible for providing accurate information to representatives of Flyers Creek Wind Farm, including forewarning of matters that may have negative impact in / on the community.

The FCWF Site Manager is responsible for community and Stakeholder notifications, agreements, contacts, records and correspondence.

The **Community Notification Protocol in Appendix D** outlines the process of how notification of minor, serious and major pollution incidents will be communicated to stakeholders and the local community.

Iberdrola has developed a Community and Stakeholder Engagement Management Plan, which details specific information given to neighbours and the local community.

9. Minimising harm to persons on the premises

To minimise risk to human health and the environment the site has an Environmental Aspects and Impacts Risk Register **(Appendix B)** which includes identified hazards, the sources for those hazards, and the appropriate risk assessments and control measures required to manage them.

The **Pollution Incident Management Protocol in Appendix D** further serves to minimise impacts to those on site when such an incident occurs.

10. Maps

Refer to **Appendix C** for an overview of where hazardous materials are stored and spill control equipment is located across the site.

11. Actions to be taken during or immediately after a pollution incident

As detailed in the Flyers Creek Wind Farm Emergency Response Management Plan ERMP (IIAU-GPL-FLCGE22-0203) Section 9, the following response shall be undertaken in the event of a major hazardous substance spill.

Danger	Is spillage life threatening? - If so, evacuate the immediate or affected area contact FCWF Site Manager. For hazardous chemicals which have been classified as low risk obtain the SDS from the SDS database. For all medium to high-risk chemicals the SDS must/will be available at the immediate location of the work activity where the chemical is being used. Undertake all spills management and associated clean up requirements in accordance with the ERMP.

If Not Life Threatening:

Advise	The Wind Farm Site Manager and Wind Farm HSE Representative
Assess and determine	Consider the nature, size, type of spill and the control measures that may be required to effectively contain/absorb the spill
Stop	Stop the source of the spill or leak wherever possible.
Contain	Contain the leak/spillage from spreading if possible & restrict access to essential personnel
Absorb/Clean	Absorb and clean up the spill in accordance with the SDS procedure
Collect/Dispose	Place all captured spill and contaminated clean up materials in an appropriate approved and bunded area awaiting collection and disposal by a licensed regulated waste transporter to an approved facility
Report	The incident and all associated details to the relevant HSE Personnel
Assist	In the Incident/Injury Investigation
Replace and restock.	Replace and restock used spill kits /clean-up materials and lost equipment

Monitoring	Where required, undertake appropriate soils and/or water quality monitoring (by a competent and trained person) at the impact site following the spill

As detailed in the Flyers Creek Wind Farm Fire and Emergency Response Plan the following response shall be undertaken in the event of a hazardous substance spill or exposure to a hazardous material. This is to be employed to reduce the risks of harm to human health both during and immediately after the pollution incident.

STEP 1	Immediately raise the alarm. Ensure FCWF Site Manager and HSE Manager is informed.
STEP 2	Arrange for immediate onsite first aid treatment using SDS as a basis for any treatment.
STEP 3	FCWF Site Manager to arrange for the casualty to be transported to medical facilities. If transport is not medically advised, keep casualty comfortable and await onsite medical attention – In such instances the Site Supervisor should arrange to escort medical personnel to the casualty.
STEP 4	In the event of a minor spill, prevent other persons entering the contaminated area
STEP 5	If safe to do so, attempt to isolate the spill. Ensure SDS is referenced prior to any action and that PPE is suitable. Ensure all ignition sources, including smoking, are isolated where safe to do so.
STEP 6	Ensure SDS is available for Emergency Service Response.
STEP 7	FCWF Site Manager to initiate steps to notify the injured person's next of kin and all key stakeholders. The Incident must be reported.

Clean-up from a pollution incident may include the engagement of contractors and use of clean-up equipment such as waste disposal tankers and waste disposal facilities. Flyers Creek Wind Farm has taken out appropriate insurances and/or has contingency funds available.

12. Co-ordinating with Persons

The procedures to be followed for coordinating with the authorities or persons to be notified is outlined in Appendix E – Incident Notification Protocol.

As outlined in Section 8 of the ERMP, The FCWF Site Manager is responsible for Incident management and response ensuring appropriate environmental responses and controls are implemented. This will entail on site liaison with the relevant crew(s) and provision of verbal advice to both respond to the incident and advise on any amended work practices required to avoid repeat occurrences.

13. Staff Training

All staff shall complete a site-specific environmental induction prior to undertaking any work on the site, which includes spill management and response as outlined in Section 7 of the ERMP. Continual training will be provided to staff on this PIRMP and will include a mix of the following:

- toolbox talks.
- formal staff training on incident management
- desktop scenario exercises
- field exercises.
- incident exercises (including exercises in conjunction with emergency services).

14. Testing and Updating of the PIRMP

It is a legal requirement to test this plan every 12 months and within one month of any pollution incident. Testing of this plan is to be carried out to ensure that the information included in the plan is accurate and up to date and the plan is capable of being implemented in a workable and effective manner. Testing will cover all components of the PIRMP, including the effectiveness of training.

Desktop assessments will require site personnel, responsible for testing the plan, to select a scenario from the Aspects and Impacts Risk Register (Appendix B) and ensure that all the required controls for the scenario are in place. During the desktop assessment environmental control and PPE equipment supplies will be inspected to ensure that they are functional and that there are enough materials to ensure that emissions relating to the scenario can be controlled effectively and safely. A debrief will follow testing and this will be recorded in the relevant section of the PIRMP.

In addition to scheduled testing, the PIRMP will be tested within one month of any pollution incident that occurs. This includes near misses and incidents that have the potential to cause material harm. A debrief will follow testing and this will be recorded in the PIRMP.

If significant changes are made to plant and equipment or operation at Flyers Creek Wind Farm, the PIRMP will be reviewed to ensure it remains relevant.

A new risk assessment will be done to determine if the risks have changed, whether new preventative measures are needed to minimise the risks and potential impact of an incident, and to ensure the PIRMP is effective if it needs to be activated.

Detail the dates on which the plan was updated:

14.1. PIRMP Testing Details

DATE	TESTED BY	TYPE	AREAS FOR IMPROVEMENT
02/12/2022	Lee Beecheno (GLC Environment Advisor)	Desktop simulation – Fuel Spill	PIRMP required updating of contact names due to staff changes in FCWF. Spill risk and response to be considered with greater detail in GLC Hazcon
27/10/2023	Mick Wooley / Mandy McLeod (GLC Environment Advisors)	Field based drill	Drill went very well. No specific actions for improvement.
2/11/2023	Mick Wooley (GLC Environment Advisors)	Field based drill	Drill went well. No specific actions for improvement.
06/12/2023	Mick Wooley (GLC Environment Advisors)	Field based drill	T34 Emergency Nacelle Evacuation and Grass Fire Emergency Response. Drill went well. No specific actions identified for improvement.

Next scheduled testing date 2025 – This will focus on operational response as the windfarm is expected to be in Operations at this date.

14.2. PIRMP Update Details

DATE UPDATE OCCURRED	REASON FOR UPDATE	DETAILS OF UPDATES	DATE THE UPDATED VERSION UPLOADED TO WEBSITE (IF APPLICABLE)
07/07/2022	PIRMP required under EPL	Construction PIRMP developed	01/08/2022
02/12/2022	PIRMP testing required	Staff changes meant name and contact details needed to be updated. Areas of improvement identified after testing of PIRMP.	03/12/2022
27/10/2023	PIRMP testing required	Staff changes meant name and contact details needed to be updated. Updates to chemical register Improved site compound layout map	17/11/2023

DATE UPDATE OCCURRED	REASON FOR UPDATE	DETAILS OF UPDATES	DATE THE UPDATED VERSION UPLOADED TO WEBSITE (IF APPLICABLE)
18/10/2024 (commenced)	PIRMP Update for Handover to FCWF Operations	Complete document update for application in Operations. Update of name and contact details for Operations. Updates to Chemical Register Updated site compound / layout map	23/5/25

NSW Environment Protection Authority

Email: info@epa.nsw.gov.au

Website: www.epa.nsw.gov.au

EPA 2022P3986

September 2022

Appendix A: FCWF Hazardous Chemicals Register

A Chemical Register is maintained in the FCWF Hazardous Chemicals electronic SDS Database

Employer	Product Name	Quantity (L)	Manufacturer	MSDS Expiry Date	Last Updated	Submitted By	Status
GE Vernova	Brake Oil – VG46	2000	Exxon - Mobil	30/09/2026	30/09/2021	Steve Bennett	Accepted 14/10/2024
GE Vernova	EP Gear Lube Oil – ISO - 320	4000	AMSOIL	20/02/2022	20/02/2017	Steve Bennett	Accepted 14/10/2024
GE Vernova	Kluberplex BEM 41-132	3500	Kluber Lubrication	06/08/2020	06/08/2015	Steve Bennett	Accepted 14/10/2024
GE Vernova	Mobil SHC Grease – 681 WT	3000	Exxon - Mobil	28/09/2028	28/09/2023	Steve Bennett	Accepted 14/10/2024
McArdles	Eclipse Surface Cleaner	20	Hammersley Aust	01/07/2024	01/07/2019	Nelson Mckie	Accepted 14/10/2024
McArdles	HD Degreaser	20	Hammersley Aust	01/04/2028	01/04/2023	Nelson Mckie	Accepted 14/10/2024
McArdles	Hi Gene Bathroom Cleaner	20	Hammersley Aust	01/04/2025	01/04/2020	Nelson Mckie	Accepted 14/10/2024
McArdles	Hydrosolve Hard Surface Cleaner	20	Hammersley Aust	01/11/2027	01/11/2022	Nelson Mckie	Accepted 14/10/2024
McArdles	Mastertouch Hard Surface Polish	20	Hammersley Aust	01/09/2026	01/09/2021	Nelson Mckie	Accepted 14/10/2024
McArdles	Spraysan Hard Surface Sanitiser	20	Hammersley Aust	01/10/2025	01/10/2020	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Dulux Low Sheen Interior Paint (52L - Line)	20	Dulux Aust	19/05/2025	19/05/2020	Nelson McKie	Accepted 14/10/2024
Iberdrola	Dulux Metalshield Premium Enl (384 - Line)	20	Dulux Aust	24/05/2026	24/05/2021	Nelson McKie	Accepted 14/10/2024
Iberdrola	Dulux Metalshield M/P Spraypak - (889 – Line)	20	Dulux Aust	14/06/2025	14/06/2020	Nelson McKie	Accepted 14/10/2024
Iberdrola	Diggers Graffiti Remover (81500)	1	RecoChem	13/03/2029	13/03/2024	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Paving Paint – Slip Resistant & Smooth	20	Norglass	10/08/2023	10/12/2018	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Concrete Cleaner (4098)	20	Norglass	10/12/2028	10/12/2023	Nelson Mckie	Accepted 14/10/2024
Iberdrola	BMF Cleaner (5L)	10	Wurth Pty Ltd	05/04/2029	05/04/2024	Nelson Mckie	Accepted 14/10/2024

Iberdrola	Degreaser Concentrate	30`	BRS Australia	01/04/2021	01/04/2016	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Uni Thinner Medium – (1-151)	20	DeBeer Refinish	01/09/2029	01/09/2024	Nelson Mckie	Accepted 14/10/2024
Iberdrola	White Knight Ultra Pave Floor Paint (42185-4L)	5	PPG	09/01/2029	09/01/2024	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Glitz - Bleach	5	Pascoes Pty Ltd	01/05/2018	01/05/2013	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Glitz - Dishwashing Liquid	5	Pascoes Pty Ltd	01/08/2023	01/04/2018	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Glitz – Goo and Stain Remover	1	Pascoes Pty Ltd	22/06/2025	22/06/2020	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Isopropyl Alcohol (16235)	5	Recochem	05/08/2026	05/08/2021	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Line Marking Paint – All Colours	30 cans	Dymark Pty Ltd	07/09/2026	07/09/2021	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Multi-Purpose Surface Cleaner – Vanilla (15009)	1	Recochem	31/01/2027	31/01/2022	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Plumma's Type N Blue	1	RLA Polymers	29/05/2028	29/05/2023	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Plumma's Type N Clear	1	RLA Polymers	29/05/2028	29/05/2023	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Plumma's Type N Green	1	RLA Polymers	08/06/2028	08/06/2023	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Priming Fluid - Red	1	RLA Polymers	30/08/2026	30/08/2021	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Septone Degrease -All	20	ITW AAM Tech Aust	21/04/2021	21/04/2016	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Trade Pro Undercoat – (236500FV)	20	PPG	06/01/2028	06/01/2023	Nelson Mckie	Accepted 14/10/2024
Iberdrola	Trade Pro – Interior Low Sheen White – (292100)	20	PPG	06/01/2028	06/01/2023	Nelson Mckie	Accepted 14/10/2024
Iberdrola	PU Topcoat Enamel Activator – (AU 540)	20	Valspar Industrial	16/12/2027	16/12/2022	Nelson Mckie	Accepted 14/10/2024
Iberdrola	PU Topcoat Enamel (Hi Gloss) (TB 540)	20				Nelson Mckie	Accepted 14/10/2024

Appendix B: Aspects and Impacts Register

Flyers Creek Risk Register							
Identifying the Risks							
Define the risk			Risk Owner	Inherent Risk Classification	Existing Controls	Residual Risk Classification	Further Controls
What is the Situation?	What is the Event?	What is the type of Consequence?					Details
Spread of weeds	From the clearing of roads, road maintenance etc	Degradation of environmental and economic value of the land	Site Manager	High	**Elimination, Substitution, Engineering:** No deviation from roads. Included in site induction. **Administration, PPE:** Weed spraying program in consultation with landowners Hardstand Clearing for bushfire mitigation kept to 20m from WTGs to minimise environmental disruption	Medium	
Biodiversity and environmental values	Land Clearing - for turbines, hardstands - over clearing for road maintenance, bushfire management	Impact on native species, loss of habitat values and erosion	Site Manager	High	**Elimination, Substitution, Engineering:** Clearing permits and boundaries **Administration, PPE:** Permit to work Clearing for bushfire mitigation kept to 20m from WTGs to minimise environmental disruption. Pre-clearing ecology surveys completed for WTG cleared areas.	Medium	1. Develop process for routine inspection of cleared areas including turbine areas and overhead power lines.

Biodiversity and environmental values	Wind Turbine Operations	Impact of listed Bird and Bat Species	Site Manager	**Low**	**Elimination, Substitution, Engineering:** **Administration, PPE:** Bird and Bat Management Plans Parrot Survey as per BBAMP	**Low**	Implementation of the Bird and Bat Adaptive Management Plan (BBAMP) with appropriate follow up action in the event of collision triggers. Confirm that Turbines have been installed to have no perching places Removing dead tree habitats from within 100 m of turbines. Removing carcasses from areas near turbine in accordance with BBAMP monitoring program. Preventing Lambing near turbines Education to farmers (shooting fauna) to not leave dead carcasses within the range of turbines No lighting installed on turbines Trigger events and reporting requirements

Visual impact of windfarm	Construction of windfarm, BOP, offices and associated infrastructure	Visual impact, Community complaints	Site Manager	**Low**	**Elimination, Substitution, Engineering:** EPA approvals / Planning approvals process seeks consultation and places conditions on visual amenity Clearing Zones **Administration, PPE**: OEMP's Community and stakeholder engagement Implementation of the Design and Landscape Plan (DLP) including specific screen planting at the Substation and Switching Station Work underway with landowner of land around substation to plant screening trees	**Low**	Note : • On request tree screening is to be provided at non associated receivers within 4km to reduce impacts where practical. • Tree planting on associated lease properties (as requested)
Oil Leaks and Visual	Oil Leaks on blades and the nacelle	Visual Impact, Environmental Impact	Site Manager	**Medium**	**Elimination, Substitution, Engineering:** **Administration, PPE:** Ad-hoc Visual inspections - feedback provided to GE GE 6 and 12 monthly inspection program. Online monitoring of leaks - alarms "pitch oil low"	**Low**	
Ground erosion around assets (hardstands, around transformers)	Caused by weather, animals.	Damage to assets and infrastructure. Injuries to people (manual handling).	Site Manager	**Medium**	**Elimination, Substitution, Engineering:** **Administration, PPE:** Inspections around turbine towers (6 and 12 monthly).	**Low**	1. Conduct periodic inspections of underground cable routes. Consider use of drone technology.

Shadow flicker	Shadow flicker caused by operation of Wind Turbines	• Shadow flicker exceeding the NSW Government guidelines of 30 hours per year			-EA conditions - Analysis of shadow flicker part of application for approval - OEMP		• Validation of shadow flicker modelling undertaken during EA to confirm compliance. • Turbines are set back at least 1 km from all neighbouring residences reduces shadow flicker effect (EA 9.12, 9.13 and 16.8 & CoA D23)
Visual characteristics	Visual impact of turbines and ancillary infrastructure on local community	-Dissatisfied Landowner due to the impact on visual characteristics		**High**	-Existing OEMP and Landscape plan - Consultation with land owners - Installation compliance as per the designed layout	**Medium**	Implementation of the Design and Landscape Plan (DLP) including specific screen planting at the Substation and Switching Station On request tree screening is to be provided at non associated receivers within 4km to reduce impacts where practical. Tree planting on associated lease properties (as requested)
Blade Glint	Sun reflecting off the blade causing annoyance to local community or distraction to drivers on local roads	-Dissatisfied Landowner due to the impact on visual characteristics		**Medium**	-Product compliance to the spec - Compliance to DA conditions - Consultation with Stakeholders	**Low**	Confirm that Low reflectivity finish utilised on turbine blades which minimises potential for glint. Confirm that Turbines set back at least 1 km from all neighbouring residences.

Other infrastructre not complying to Env conditions	Associated infrastructure eg. access tracks, cabling, transmission line, are not rehabilitated as per plan - substation highly visible	-Dissatisfied Landowner due to the impact on visual characteristics		**Medium**	-Product compliance to the spec - Compliance to DA conditions - Consultation with Stakeholders	**Low**	Confirm that the Temporary tracks are removed and reseeded after construction works. Routine monitoring and maintenance as required by the OEMP during operation
Vegetation clearance	Excessive clearing of native vegetation for operational aspects (i.e access tracks)	-Non compliance to Env conditions		**Medium**	- Approval conditions - Mapping of the cleared and rehab areas - OEMP - External audit confirming compliance	**Low**	Any vegetation removal will be undertaken in the presence of an ecologist Operational Clearance Permit to be developed Areas to avoid clearance are clearly marked and communicated Operation permit to work off the access tracks
Operational noise	Exceedance of operational noise limits detailed in the EPL - Exceedance of noise limits during maintenance activities	- Non compliance ot Env conditions		**Medium**	Project designed to ensure that operational noise is compliant with noise guidelines. Community complaints procedure established as part of OEMP Noise Management sub plan.	**Low**	- Compliance testing at nearest relevant receivers carried out within three months of commissioning to verify noise standards are not exceeded. -

Off-site traffic Impacts	Movement of oversize and overmass vehicles in the area impacting traffic flows during maintenance activities Heavy loads causing degradation to locals roads	Stakeholder complaints - Non compliance to consent conditions		**High**	Traffic and Access Management Plan (TAMP) to be implemented during operations. - Ongoing Community information and awareness program (CCC) during operations - Warning and general signposting on access routes - Provision Traffic controls where needed - Restrictions on timing of delivery of large equipment by oversize trucks. Community complaints procedure - Induction to staff and communication to neighbours	**Low**	
On-site impacts	Operation of plants in the access tracks	Operational vehicles driving off road causing disturbance to natural habitats and causing erosion and sedimentation. Degradation of access tracks due traffic		**Medium**	Internal access tracks near environmentally sensitive areas have been avoided or guided by relevant specialist - At conclusion of construction, any tracks no longer needed will be restored and revegetated. - Induction of staff to ensure awareness of traffic management requirements specifically to stay on existing formed tracks.	**Low**	
Opeartion of wind turbines	Possible interference with Radio broadcasts and reception in the area.	Non compliance to consent condition		**Medium**	Siting of wind turbines considered communications impacts and potential issues addressed. Overseas and local experience demonstrates that radio broadcasts are unlikely to be impacted by wind farm operation.	**Low**	TV Reception issues became evident for the surraounding area. Sat dishes installed on properties as a temp measure. Team working on permanent solution.

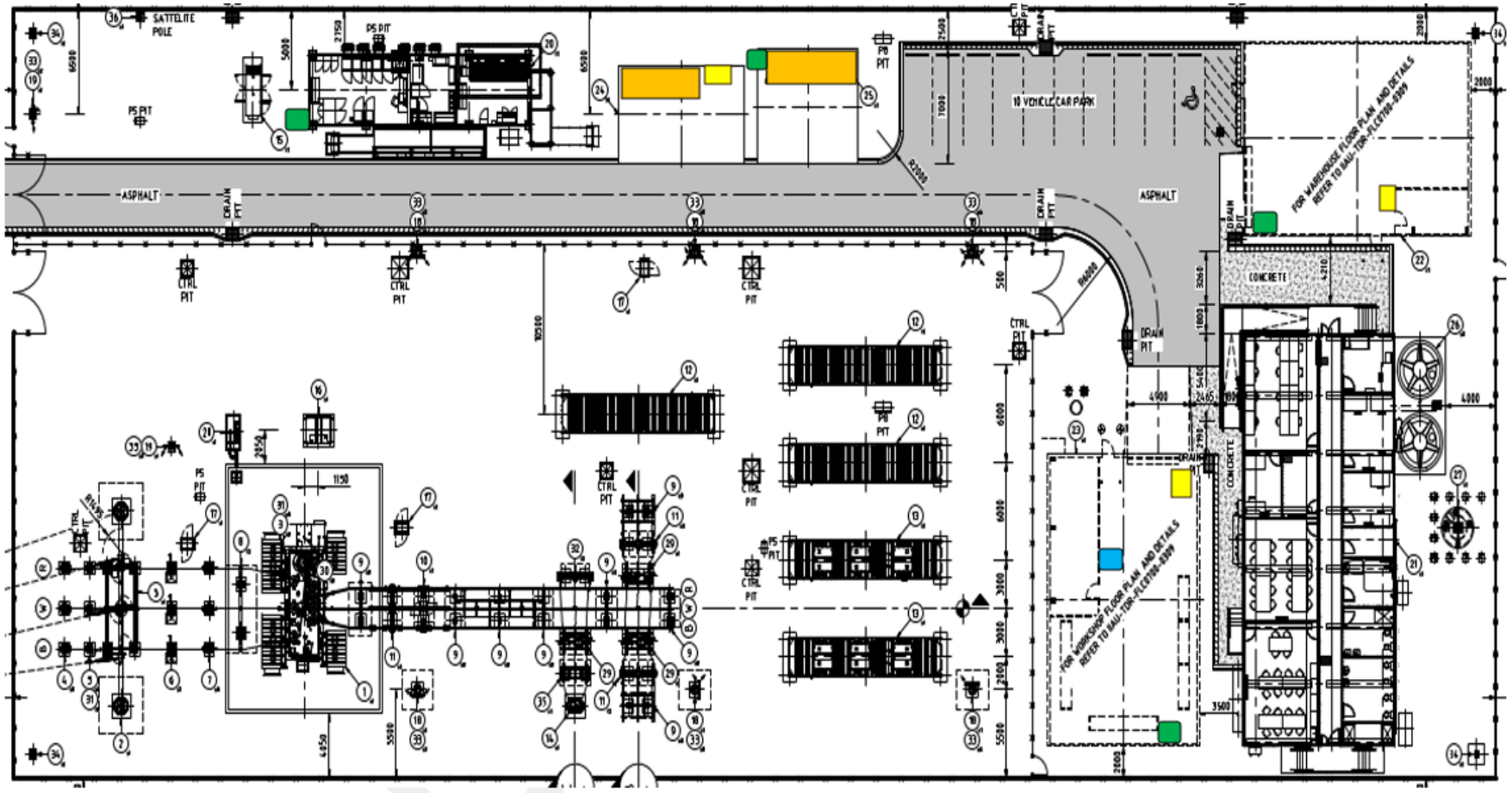
Opeartion of wind turbines	Possible interference with mobile phone reception in area	Non compliance to consent condition		**Medium**	Follow up compliance monitoring during operations to confirm compliance with criteria In the unlikely event of deterioration, investigations and steps to rectify the situation would be carried out.	**Low**	No evidence of interferance.
Opeartion of wind turbines	Potential to interfere with point-to- point microwave communication links in the area	Non compliance to consent condition		**Medium**	Follow up compliance monitoring during operations to confirm compliance with criteria. Turbine locations have taken into account communication links and adjustments have been made. Micrositing will take into account, and confirm, no impact upon point-to-point links.	**Low**	No issues
Opeartion of wind turbines	Rotating blades of wind turbine causing interference with digital television signals	Non compliance to consent condition		**Medium**	· Follow up compliance monitoring during operations to confirm compliance with criteria.	**Low**	TV Reception issues became evident for the surraounding area. Sat dishes installed on properties as a temp measure. Team working on permanent solution.
Greenhouse gas emission	Opeation task and energy consumption	- Exceedance of GHG emission than the assessed limit in GHG emission plan		**Medium**		**Low**	To develop asset specific Climate Change plan for operations

Aircraft safety	Presence of turbines may impact upon the safe operation of aircraft in the area	Injury to public - Non compliance to conditions		**High**	· Final as built locations of turbines will be provided to the relevant stakeholders for inclusion on aviation charts including CASA, Orange Aerodrome, Orange City Council, Air Services Australia, AAAA and the Department of Defence have all been advised of the details of the proposed wind farm.	**Low**	No issue evident
EMF	The possibility that Electric and Magnetic Fields created around high voltage power lines may have potential health impacts has not been entirely ruled out.	-asset damage - Stakeholder complaints		**Low**	· Potential impacts considered and assessed for medium voltage (132 kV) electricity generation and transmission occurring as part of the project Location of turbines and substation are in areas not frequented by public; operations will be in accordance with relevant electrical safety codes AS2067 substation design requirements have been met in the design of the FCWF Substation	**Low**	
Soil management	Operational activities may initiate erosion of soils - Controls are inadequate to minimise erosion and sedimentation	Non compliance to Pollution reduction and Improvement management plan		**High**	Operational Soil and Water Management Sub Plan will be prepared and implemented as part of the OEMP Ongoing monitoring and maintenance of activities will be undertaken to ensure erosion is minimised.	**Medium**	

Water management	Waterways impacted by sediment runoff resulting from works for tracks, cables and transmission lines crossing watercourses. Sewage effluent incorrectly managed at O&M Spills from fuel, oil, chemicals and battery leakage	Non compliance to Water management requirements and Compliance conditions		**High**	Operational Soil and Water Management Plan will be prepared and implemented as part of the OEMP. Fuel, oil, chemicals and batteries safely stored in areas with back up containment in case of leaks O&M Facility has a self-contained hazardous storage facility Maintenance of Transformer Oil check bunds Ongoing monitoring and maintenance Procedure for handling chemicals	**Medium**	
Air quality	Dust and minor air emissions generated during construction phase may impact upon air quality in local area Emission resulting from vehicle use	Non compliance to Air Quality standards		**Medium**	Weather station reviewing conditions on daily basis Examination of potential issues and appropriate controls based on current best practise has been undertaken and included in the Environmental Assessment. An air quality management plan will be prepared as part of the OEMP to control dust and particulates. Stabilisation of exposed soils Rehabilitation plan Idling of vehicles minimised	**Low**	
Waste management	Improper management of excavated material, garbage, construction waste.	Non compliance to Environmental conditions		**Medium**	-Recycling facilities - NGER reporting - Waste Management Sub Plan - Register of wastes generated and disposed	**Low**	

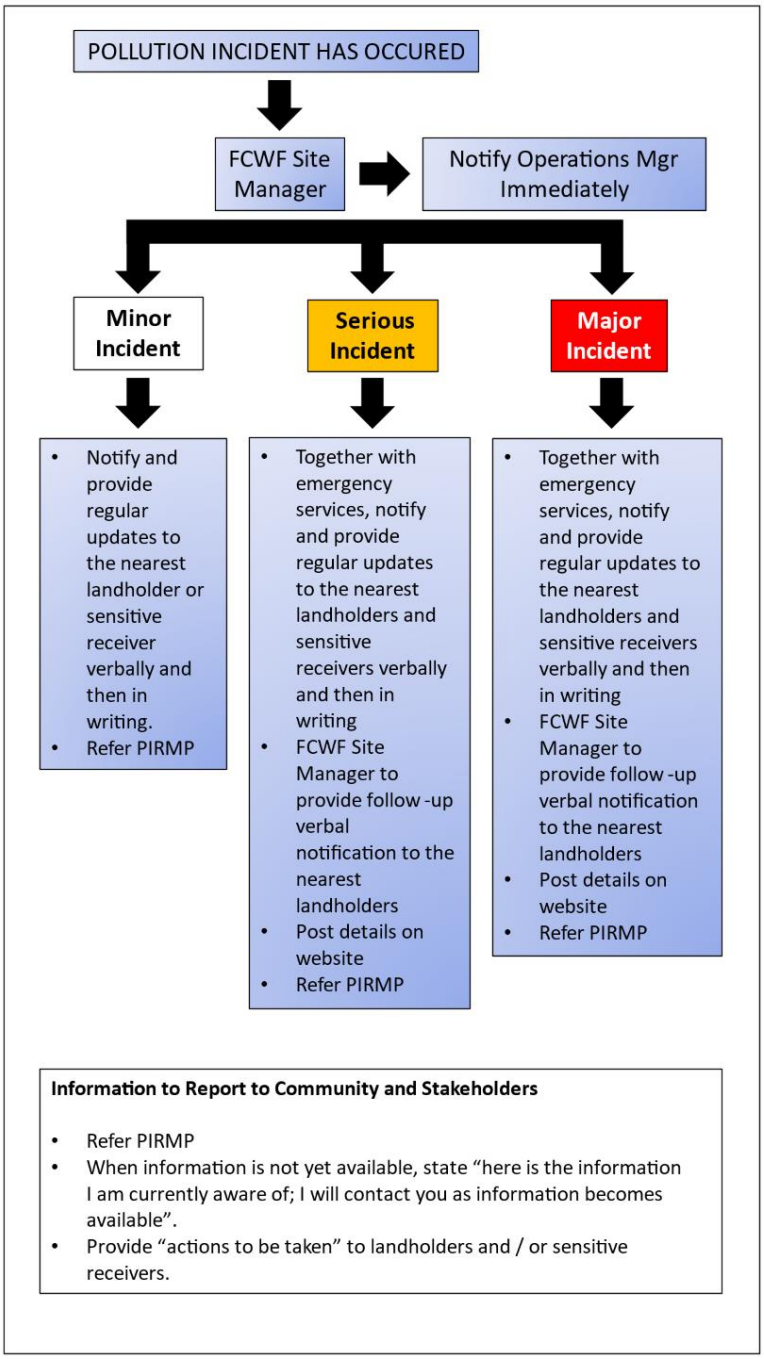
Trig Stations	Wind turbines may impact usability of trigonometric station in area by interrupting sight lines.	Non compliance to Environmental conditions		**Medium**	Potential impacts on the trig stations were examined as part of the project formulation and design onsultation with Surveying Infrastructure and Geodesy section of Land and Property Management Authority has been undertaken Turbines locations selected & Micrositing of turbines done so as not to impact upon trig station operation	**Low**	

Appendix C: - Flyers Creek Wind Farm - PIRMP Site Map



	EMERGENCY SPILL RESPONSE KIT		BULK dangerous goods STORAGE CABINET – (Class 3)
	DANGEROUS GOODS CABINET - (CLASS 3)		EMERGENCY EYEWASH STATION

Appendix D – FCWF Community Notification Protocol



Appendix E – FCWF Incident Notification Protocol