NSW EPA

Our reference: FIL07/8-06: DOC14/38665-02
Contact: Andrew Helms, (02) 6332 7604

Mr Neville Osborne
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Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

30 May 2014

Dear Mr Osborne

PALINGS YARD WIND FARM – MP 10_0053

I refer to your letter, received by the Environment Protection Authority (EPA) on 26 March 2014, requesting the EPA's comments and any recommended conditions of consent for the above proposal.

The EPA has assessed the proponent's application, summarised in the document *"Paling Yards Wind Farm, Environmental Assessment, January 2014"* (prepared by Tract Consultants Pty Limited), and has determined that it is able to support the proposal in its current form subject to the Department of Planning and Environment considering the comments and recommended conditions of project approval identified in the attachments.

Please note that should this project be approved, the applicant will be required to make a separate application to the EPA for an Environment Protection Licence in accordance with section 48 (and Schedule 1) of the *Protection of the Environment Operations Act, 1997.*

Should you have any enquiries regarding this matter please contact Mr Andrew Helms at the Bathurst Regional Office of the EPA by telephoning (02) 6332 7604.

Yours sincerely

DARRYL CLIFT
Head Central West Unit
Environment Protection Authority

Enclosures Attachment 1 – EPA Comments on the Proposal
Attachment 2 – EPA recommended conditions of Project Approval

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Attachment 1:

EPA Comments on Noise Component of Proposal:

The EPA has reviewed the *Paling Yards Wind Farm Environmental Assessment* (the "EIS", Tract Consultants 2014) and the *Paling Yards Wind Farm Noise Impact Assessment* (the "NIA", SLR 2012) and has developed project noise limits and recommended conditions of consent based on this review. The limits contained within the EPA's proposed conditions (Attachment 2) are conservative and based on the prediction in the NIA that operational noise will not exceed $L_{eq(10min)}$ 35 dBA at any non-project involved sensitive receiver. This is necessary as:

- Wind speed at microphone height was not measured to exclude wind-affected data;
- Red dots used by the consultant on photographs of monitoring equipment may have concealed whether or not the wind screens were installed properly;
- Noise loggers were installed in vegetation at a number of locations, which may have led to elevated background noise curves;
- The NIA did not specify the height at which wind speed measurements were undertaken, but states that it was adjusted to 100m height wind speed;
- The number of valid data points reported for three of the monitoring locations, between 1064 and 1585, was significantly less than the 2000 required by the South Australian EPA guidelines;
- Plotted background noise levels indicate that, at all monitoring locations, regression curves may have been affected by the noise floor of the noise logging instrument used, between 22 dBA and 30 dBA (higher than recommended in the draft NSW guidelines); and
- Plotted data for location 128 showed some stratification, and correlation of background noise measurements with wind speed at location 10 was very low (a maximum of 0.2683). This may indicate excessive extraneous noise levels at these locations.

The information presented in the EIS and NIA indicates that the wind farm can comply with the EPA's proposed limits.

Attachment 2

EPA recommended Conditions of Project Consent

1. Air:

All operations and activities occurring on the premises must be carried out in a manner that will minimise the emission of dust from the premises.

All trafficable areas, soil stockpile areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.

2. Noise:

Noise Limits

Noise generated at the premises must not exceed the noise limits in the table below.

		$L_{eq(10min)}$ Noise Limits (dBA)
Locality	Location	All wind speeds
Any receiver	*Any residential receiver not subject to a negotiated agreement*	35

To determine compliance with the $L_{eq(10\ minute)}$ noise limits, the noise measurement equipment must be located:

1. approximately on the property boundary, where any dwelling is situated 20 metres or less from the property boundary closest to the premises; or
2. within 20 metres of a dwelling façade, but not closer than 5m, where any dwelling on the property is situated more than 20 metres from the property boundary closest to the wind farm premises.
3. at the most affected point at a location where there is no dwelling at the location; or
4. at the most affected point within an area at a location prescribed by 1 and 2 above.

A non-compliance of the noise limit will still occur where noise generated from the premises in excess of the appropriate limit is measured:

- at a location other than an area prescribed above and/or
- at a point other than the most affected point at a location.

For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the *Environmental Noise Guidelines: Wind Farms* (SA EPA 2003) must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

Additions to Definition of Terms of the licence

- NSW Industrial Noise Policy - the document entitled "New South Wales Industrial Noise Policy published by the Environment Protection Authority in January 2000."
- Noise - sound pressure levels' for the purposes of noise conditions.
- "Noise sensitive locations" includes buildings used as a residence, hospital, school, child care centre, places of public worship and nursing homes. A noise sensitive location includes the land within 30 metres of the building.

Recommended Consent Condition – Revised Noise Impact Assessment

The Proponent shall prepare a revised Noise Impact Assessment (NIA) for the final turbine model and turbine layout selected prior to commissioning of the wind turbines. The revised NIA must demonstrate, through appropriate modelling and in accordance with the *Environmental Noise Guidelines: Wind Farms* (SA EPA 2003), that the final turbine model and layout can meet the noise limit(s) derived in accordance with those guidelines.

Recommended Consent Condition – Noise Management Plan

Prior to commissioning of the turbines, the Proponent must prepare and implement a Noise Management Plan that includes the following measures to manage noise emissions from the operation of the project. The Plan must be undertaken generally in accordance with the *Environmental Noise Guidelines: Wind Farms* (SA EPA 2003) and include, but not necessarily be limited to:

a) compliance monitoring, within one year of commissioning, against the noise limits,

b) identification and implementation of best practice management techniques for minimisation of noise emissions where reasonable and feasible,

c) measures to be undertaken to rectify annoying characteristics resulting from the operation of the project such as infrasound, tonality or adverse mechanical noise from component failure, and

d) procedures and corrective actions to be undertaken if non-compliance is detected.

3. Blasting Conditions

Airblast overpressure level

The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

Ground vibration level

Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

Blasting hours

Blasting at the premises may only take place between 9:00am-5:00pm Monday to Friday. Blasting is not permitted on public holidays.

Blasting outside of the hours specified above can only take place with the written approval of the EPA.

Blast monitoring

To determine compliance with airblast overpressure and ground vibration levels:

a) Airblast overpressure and ground vibration levels experienced at the following noise sensitive locations must be measured and recorded for all blasts carried out on the premises;

- <enter exact location – to be negotiated with proponent, based on locations of proposed blasts >.

b) Instrumentation used to measure and record the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.

NOTE: A breach of the licence will still occur where airblast overpressure or ground vibration levels from the blasting operations at the premises exceeds the blast condition levels at any "noise sensitive locations" other than the locations identified in the above condition.

The airblast overpressure and ground vibration levels do not apply at noise sensitive locations that are owned by the licensee or subject to a private agreement, relating to airblast overpressure and ground vibration levels, between the licensee and land owner.

4. Water:

Stormwater/Sediment Control – Construction Phase

A Construction Environmental Management Plan (CEMP) must be prepared and implemented prior to any construction associated with the project. The CEMP must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The CEMP should be prepared in accordance with the requirements for such plans as outlined in "*Managing Urban Stormwater: Soils and Construction*" (Landcom 2004).