

Decision W 59/2007

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of appeals under section 120 of the Act

BETWEEN

AJ HODGSON-BOOTH-  
WINDSOR

(ENV W 0019/06)

MAKARA GUARDIANS INCORPORATED

(ENV W 0013/06)

R PAUL & C MOORE

(ENV W 0021/06)

QUARTZ HILL RESERVE  
CHARITABLE TRUST

(ENV W 0022/06)

MERIDIAN ENERGY LIMITED

(ENV W 0028/06)

WEST WELLINGTON  
ENVIRONMENTAL PROTECTION  
SOC INC

(ENV W 0029/06)

ACTION FOR ENVIRONMENT INC

(ENV W 0030/06)

SOUTHERN ENVIRONMENTAL ASSOC  
(WELLINGTON) INC

(ENV W 0031/06)

Appellants

AND

THE WELLINGTON CITY COUNCIL

First Respondent

THE WELLINGTON  
REGIONAL COUNCIL

Second Respondent



AND

**MERIDIAN ENERGY LIMITED**

(ENV W 0028/06)

Applicant

**BEFORE THE ENVIRONMENT COURT**

Environment Judge S E Kenderdine

Environment Judge C J Thompson

Environment Commissioner W R Howie

Environment Commissioner H A McConachy

**DECISION APPROVING CONDITIONS***Introduction*

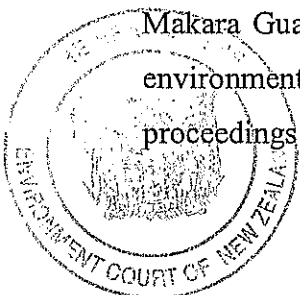
[1] The decision of this Court dated 14 May 2007 provided at para [587]:

*We invite the Councils, consulting with other parties as required, to draft revised sets of consent conditions to reflect what was agreed upon in the course of proceedings, and the matters we have raised in this decision. We would be grateful if those conditions could be presented for approval by Friday 8 June 2007.*

[2] The decision issued on 21 December 2005 by the Hearing Commissioners jointly appointed on behalf of the respondent Councils (WCC and WRC) granted consents subject to an extensive set of conditions. Using these conditions as a starting point we are advised by way of a memorandum from the counsel for the Councils dated 8 June 2007, that the Councils prepared a revised set of conditions incorporating:

- condition amendments as agreed and addressed at the hearing;
- the revised noise conditions as agreed by all noise expert witnesses and presented to the Court on 6 July 2006;
- those to address those matters identified by the Court in its decision.

[3] We are advised by counsel for the Councils that Meridian and the appellants/parties (the Makara Guardians and Mr Moore and Ms Paul, the Quartz Hill Charitable Trust, the three environmental Societies and Paul Hughes) took an active part in the subsequent drafting proceedings and provided input into the final draft conditions.



[4] We are further advised that a number of the proposed changes sought by the appellants/parties were seen as non-contentious and were agreed to by the Councils. Other proposed changes were, however, more substantive and seen ultimately as being for the determination of the Court. Details of the outstanding matters were addressed in the appendices to counsel's memorandum, and we refer to these below.

***Summary of Condition Amendments Sought***

[5] Counsel for the Councils set out a brief summary of the condition amendments sought by each party, with the text of amendments sought attached to and highlighted in his memorandum. The following is a brief summary of the parties' positions:-

- ***Meridian Energy***

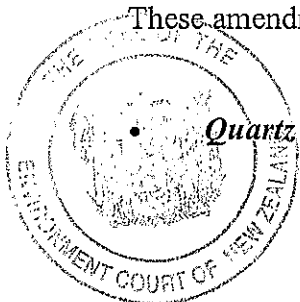
[6] Meridian agreed with the amended consent conditions as circulated by the Councils. Some minor amendments were also proposed for clarification purposes such as substituting the words 'low reflective paint' for 'non reflective paint' in Condition 4, fourth bullet point. This change has been incorporated into the proposed conditions.

- ***Makara Guardians and Ruth Paul***

[7] A letter was received from Makara Guardians seeking changes to the land use consent conditions. The letter requested that if any conditions were not agreed, then the letter was to be submitted to the Court together with the suggested conditions.

[8] The majority of condition amendments proposed by Makara Guardians are agreed by the WCC. There were only four suggestions that were not included in the attached conditions, one of which was subsequently agreed to by Meridian in a memorandum to the Court dated 18 June 2007 (the description of the turbines as "pitch regulated") in Condition 4, first bullet point.

[9] A separate communication was received from Ms Ruth Paul. She noted two minor amendments to the conditions in order to ensure that they reflect the most recent proposal. These amendments were agreed to and are incorporated into the WRC's conditions.



***Quartz Hill Charitable Trust***

[10] Three suggested amendments were received on from the Trust. We are advised amendments have now been incorporated into the proposed conditions.

- ***The Societies***

[11] A communication to the Councils from counsel for the Societies on 7 June 2007 outlines a number of proposed condition amendments and new conditions. Three amendments to Condition 75 have now been incorporated. The proposed amendments to Condition 53(c), three additional conditions to the WCC's consent, and one change to the WRC's consent have not been included. It was submitted by the Councils that those changes are not necessary, although it was acknowledged that they were a matter for determination by the Court.

- ***Paul Hughes***

[12] A communication was received from Mr Hughes, who is a s274 party. His email traverses the Court's decision and highlights paragraphs where he considers that condition amendments are appropriate. Counsel for the Councils submitted that the requests are generally unhelpful as:

- many of the matters are already addressed in the proposed conditions.
- many of the decision references record the evidence or the Court findings but do not require condition amendments.

Counsel advised that the general conditions require the project to be undertaken in accordance with the plans submitted while (as a matter of law) the scope of the consent is limited to the application and evidence.

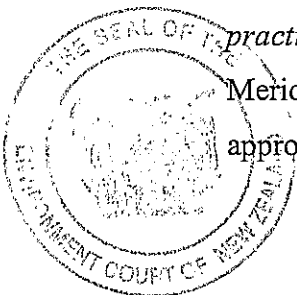
### ***The Court's Evaluation of Further Proposed Conditions***

- ***Makara Guardians***

[13] The Guardians seek that:-

#### ***Landscape Visual***

- words be added to Condition 7 that "the substation will not be not visible outside the site". We consider the words in the condition presently "...so as to minimise its visibility in land and sea views from beyond the site to the greatest extent practicable" reflect the reality of the situation. Photo 3 Tab 2 of Volume 1 of the Meridian Application "Construction Effects and Management Report" identifies the approximate substation area at the northern end of a substantial fill area looking to



H05 with White Rock hill in the distance. The location of the facility appears to be set down in the fill area and this also appears to be roughly in the location identified on Drawing No 15 Appendix A "Plans" in Volume 1 of the Application documents. No amendment is required.

- the words "concrete batching plant to be located to the centre of the site" be added to Condition 8. Para [20] of the Court's decision records that *at least one temporary concrete batching plant will be required* and that its location will be to the centre of the site. The plant is only to be temporary in any event. No amendment is required.

#### *Traffic Management*

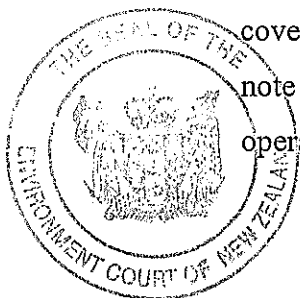
- words be added to Condition 76 bullet point 19 (Guardian's bullet point 18) to make specific "school pupil travel times 7-9am and 3-5pm inclusive". We consider the arrangements for this timing should be left to the Traffic Management Plan as operational requirements may vary. No amendment is required.
- to add the following words to Condition 76, second sub bullet point 21 (Guardian's bullet point 19) "to suppress dust and mitigate noise effects in the area". We consider this is unnecessary as in our experience sealing has the effect of mitigating both. No amendment is required.
- to add to Condition 76, bullet point 21 the word "safe pedestrian *route* for children" instead of *access*. We agree, and the amendment has been made.
- that the Court issue further traffic conditions because we had earlier referred to assessing the matter under Part 2 RMA (Para [152]). Part 2 RMA refers to health and safety and general matters of sustainable management. We consider the traffic conditions, now finalised, achieve this. No further reference is required.

#### ***Hughes: Section 274 Party***

[14] Of the many suggestions as to conditions offered by Mr Hughes, most have been incorporated to those set out in the Appendix to this final decision. Of those that are not, we find as follows:-

#### *Johnny's Bush*

- the request is to "covenant Johnny's Bush". While the Court raised the issue of a covenant for Johnny's Bush and that the issue needs addressing by Meridian, we note covenants may take a number of forms such as a QEII Trust Covenant. On an operational site like this it may be appropriate to protect it in another way.



Otherwise, covenants have to be offered by the landowner as a matter of law and cannot be imposed by the Court. No amendment is required.

#### *Construction Cuts for Roothing*

- the request is “to ensure cuts not to exceed 25m and cuts along roads not to exceed 6m for more than 15% of the total road length”. The SEMPS and Condition 53 adequately control the activity. No amendment is required.

#### *Traffic Management*

- at Condition 76 the request is that “Vehicle movements are restricted to the hours 6 am–7 pm seven days a week”. Again we consider this should be left to the Traffic Management Plan. In addition positive changes have been made, for example Condition 76, bullet point 17 stipulates procedures shall be used to ensure priority is given to traffic not associated with the wind farm; Condition 76, bullet point 20 applies in order to avoid funeral processions and other such road users as far as practicable. Finally a review condition is available to the WCC at any time during construction of the wind farm to deal with adverse effects. We consider the amended conditions are positively helpful and require no further amendment.

#### *Restriction on Clearances*

- the request is that “no land that is presently revegetated shall be cleared on Terawhiti Station”. Terawhiti Station is a privately owned land. The Court’s jurisdiction does not extend to controlling matters on Terawhiti Station that are outside the scope of the application. No amendment is required.

#### *Cycle Access*

- the request is that “Pedestrian cycle access to Opau Bay shall be provided after a parameter assessment”. The statement in the Court’s decision para [282], notes that “there is to be an addition of a bullet point at condition 89 which relates to the West Wind’s recreational functions and will read: *Assess The Parameters of Pedestrian Cycle Access to Opau Bay*. Note: “This leaves open the route to be used but confirms that some access for pedestrians and cyclists is intended”. There are many issues about this access yet to be explored so we consider the condition is the best that can be achieved at this point. The ‘note’ makes the intention clear.



### *Quartz Hill*

- the request is that the promised extent of a geopreservation area be incorporated as a condition. This has been included as a new paragraph in existing Condition 75. Otherwise most of the concerns about Quartz Hill are addressed in conditions. The omission is the availability of parts of the site for teaching purposes and therefore the presence of students. The condition currently includes the words *the Reserve areas shall be made available by the consent holder for reasonable use by suitably qualified scientists to determine the sites scientific origins and shall be kept free of ...* We have altered this to reflect the wider use and have inserted “...*reasonable use by suitably qualified scientists and their supervised students, for teaching purposes and scientific investigation* and shall be kept free of ... (our emphasis).

### *Environmental Societies*

[15] The Societies have requested:

#### *Ecological Area*

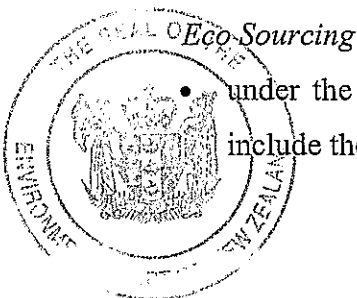
- a separate condition for the provision of a 35ha ecological area. Condition 53(c) appears to satisfy this. No amendment is required.

#### *Turbines H10 – H14 – Road Widening*

- under Additional Conditions 3, issue (b), reference is made to road widening between turbines H10 – H14. If the works are not needed (an apparent benefit of the redesign) there is no need for any amendment.

#### *Modification to Access Tracks*

- as to disturbance to the western adit of the Makara Pioneer mine – additional Conditions issue (c), Condition 83, third bullet point under *Archaeology* provides only that the archaeologist shall “*monitor track construction work*” to “*record*” construction detail. Cutting the road inevitably affects the adit so we have concluded the best that can be achieved is recording and monitoring what occurs.



- under the WRC Conditions 1 *Eco-Sourcing Issue*, we conclude it is important to include the Societies' suggested new condition that the re-vegetation take place from

plants eco-sourced on the site. Most landscape architects require this for big projects. Condition 68 is the appropriate place to specify this by adding:

*“The consent holder shall ensure that the plants and seeds for any indigenous revegetation work carried out in regard to the proposed development shall be eco sourced, and where practicable, this shall be from within the wind farm site.”*

### ***Court’s Amendment to Noise Conditions***

[16] The noise conditions are acceptable except in respect of Condition 19(b). That refers to a representative location being within 200m of a dwelling and within the notional boundary of the dwelling. A notional boundary is defined as 20m from the dwelling or the site boundary if nearer. We have amended Condition 19(b) to read as follows:-

*Representative measurement locations shall be selected for all dwellings within the predicted 35dBA  $L_{eq}$  noise contour. As a guide representative background sound monitoring should take place within 200 metres of a dwelling of interest and within the notional boundary of the representative dwelling. (our emphasis)*

### ***Conditions numbering***

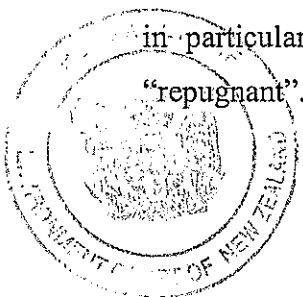
[17] After the amendments are made to the WCC’s land use conditions, there will no longer be conditions numbered 36, 42 and 93. We do not consider it is necessary to renumber all the conditions to avoid gaps in the numbering. However, WCC might wish to consider placing a note in the schedule of conditions to indicate where conditions have been deleted to avoid confusion.

### ***Erratum***

[18] We have noted that para [434] of the decision of the Court reads:

*However planned modification to the site is extensive. Roads, turbine sites and fill sites will traverse much of the plateau to a level described by to a level we find repugnant.*

We apologise for this scrambled statement which somehow evaded the editing process. We cannot unravel exactly how this apparent conflating of two sentences came about. As will be apparent from the approval of the project generally however, and our findings on Quartz Hill in particular, it is not a finding of the Court that the development on Quartz Hill is “repugnant”.





***Conclusion***


[19] Attached to this decision as Appendices 'A' and 'B' are the final conditions for all consents. The majority of condition amendments are to the WCC's land use consent, with only minimal changes required or proposed to WRC's consent conditions.

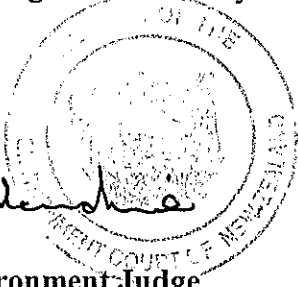
***Costs***

[20] It is our initial opinion that costs should lie where they fall. However, if any party wishes to apply for costs, applications should be lodged within 15 working days of the date of this decision, with any replies to be lodged within 10 working days.

**DATED** at Wellington this 20<sup>th</sup> day of July 2007

For the Court:

  
S E Kenderdine  
Presiding Environment Judge



## APPENDIX A

### WELLINGTON CITY COUNCIL LAND USE CONSENT CONDITIONS

#### General

1. With the exception of amendments required to comply with other conditions of this consent and any conditions of related resource consents granted by the Wellington Regional Council, the proposed development shall proceed in general accordance with the information provided with Application Service Request number 131428 as amended by the Revised West Wind Site Layouts dated 12 March 2007.

This includes but is not limited to the following Opus Consultant plans<sup>1</sup>:

- Drawing No 1 – “Overall Site Development – Site Layout” – code 6504 – sheet 1 (Note a separate plan has been included to show the reduced transmission corridor, referred to under condition 94).
- Drawing No 6 – “Overall Site Development – Laydown and disposal areas, and hydrological catchments” – code 6504 – sheet 4
- Drawing No 8 – “Overall Site Development – Typical Turbine Platform and foundation details” – code 6504 – sheet 10
- Drawing No 9 – “Overall Site Development – Site Access from Oteranga Bay – Part 1 of 2” – code 6504 – sheet 21
- Drawing No 9a – “Overall Site Development – Site Access from Oteranga Bay – Part 2 of 2” – code 6504 – sheet 21
- Drawing No 10 – “Overall Site Development – Oteranga Bay Access – Stream Diversion Works” – code 6504 – sheet 23

*Note: All references to drawings throughout the conditions, including this condition, are subject to the Revised West Wind layouts dated 12 March 2007, unless otherwise specified.*

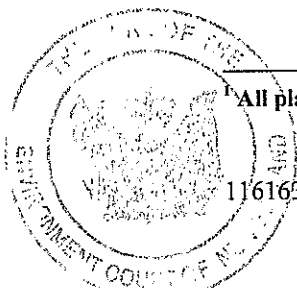
#### Lapse date

2. In accordance with section 125(1) of the Resource Management Act 1991, this consent shall lapse if not given effect to within seven years of being granted.

#### Landscape/Visual

3. No more than sixty six (66) wind turbine generators (“turbines”) shall be permitted to be installed by way of this consent. The revised site layouts shall be taken to exclude turbines B03, D10, D11 and H01.
4. Each turbine:
  - Shall be a pitch regulated upwind three bladed rotor type, with a tubular steel tower, as indicatively shown on Page 82 of Appendix C to the AEE submitted with the application.
  - Shall be no more than 100 metres from the location shown for it on the Revised West Wind Layout Plans dated 12 March 2007, except where the turbine location is unchanged from that shown in the plans (reference 5/1681/1 rev R0 sheets 70, 71 and 72 and accompanying A4 turbine movement envelope plans numbered sheets 1 – 38) (‘the plans’), then the turbines must be within those

<sup>1</sup>All plans referenced in these conditions appear in Appendix 3 of the decision

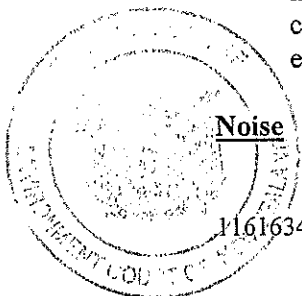


- specific envelopes. Specifically, H20 shall not move outside the 100m envelope, and turbine E08 shall remain in its location as specified in the plans.
- Shall not exceed a height of 111.2 metres measured from the base of the tower to the vertically extended blade tip.
  - Shall in all external parts, including turbine towers, nacelles and turbine blades, have a low reflective paint approved by the Compliance and Monitoring Officer, Strategy and Planning, so as to minimise blade glint.
  - Shall be a light grey (RAL 7035) colour.
  - Shall be maintained to the satisfaction of the Compliance and Monitoring Officer, Strategy and Planning, so as to ensure that it does not materially alter its visual or noise characteristics existing at the time of installation.
  - Shall not be upgraded in a manner that materially alters its visual characteristics or worsens noise characteristics existing at the time of installation.
5. Berthing structures, works and activities related to access from the sea that fall within the District Plan area are restricted to Oteranga Bay. The options associated with the location and type of berthing structure at Oteranga Bay are not limited by this decision in that either a pile structure or a sheet pile structure can be located at either Oteranga West or Oteranga East but only a single location and a single structure type shall be implemented.
  6. The berthing structure and associated works shall be removed within three years of its construction.
  7. The substation and operations and maintenance facility shall be located, designed and painted so as to minimise its visibility in land and sea views from beyond the site to the greatest extent practicable, and in a manner approved by the Compliance and Monitoring Officer, Strategy and Planning. The actual location of the substation is identified in the application in Section B Drawing No.1 and is shown in more detail in the drawing labelled *Project West Wind – Plan Showing Proposed Concrete Batching Plant Location*.
  8. The concrete batching plant shall be a temporary installation for the construction period only and shall be located in the position in the drawing labelled *Project West Wind – Plan Showing Proposed Concrete Batching Plant Location*. The batching plant shall be removed within six months of completion of construction of the wind farm and no later than 3 years after installation of the concrete batching plant.

#### **Communications Interference**

9. All wind turbines shall be located in positions that ensure clearance from the first Fresnel zone, for each of the fixed radio paths that traverse the site as at the date of lodgement of this application.
10. Turbine H18 shall be located a minimum of 20m south of its indicative location on Drawing No.1, or otherwise located (within the specified movement envelope) to avoid the first Fresnel zone around the MetService microwave link from Makara High to Outlook Hill.
11. The consent holder shall remedy any television interference that is a direct result of the installation and operation of the wind turbines as soon as practicable after interference occurs. The remedy will be restoration of reception for free to air channels at the consent holder's cost to the level of reception quality in existence at each point of interference prior to wind farm construction.

**Noise**



## Construction Noise

12. Noise from all construction and decommissioning work including (but not limited to):

- Site works;
- Wind turbine generator assembly and placement;
- Concrete placement;
- Wind turbine removal;
- Foundation demolition and removal; and
- Land reinstatement.

Shall be measured, assessed and controlled using New Zealand Standard NZS6803:1999 *Acoustics - Construction Noise*. The noise limits shall be those set out in Table 2 of NZS6803 for works of 'long term' duration.

13. All aspects of concrete manufacture shall not exceed the following noise limits:

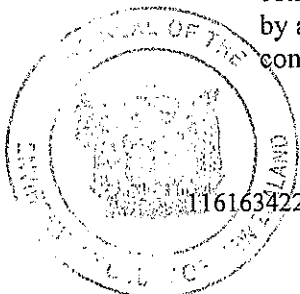
6.00am to 10.00pm    55dBA  $L_{10}$  at or within the boundary of any site other than the site from which the noise is generated, and

At or within the notional boundary of a residential building, other than on the site from which the noise is generated:

6.00am to 7.00am	35dBA $L_{10}$
6.00am to 7.00am	60dBA $L_{max}$
7.00am to 8.00pm	45dBA $L_{10}$
8.00pm to 10.00pm	35dBA $L_{10}$
8.00pm to 10.00pm	60dBA $L_{max}$

*Note: For these Conditions the notional boundary is defined as a line 20 metres from any side of a dwelling, or the legal boundary where this is closer to the dwelling.*

14. Concrete shall not be manufactured outside of the hours of 6.00am to 10.00pm on any day.
15. A **Construction Noise Management Plan** shall be prepared and implemented prior to commencement of construction. This shall be generally in accordance with Section 8 and the relevant annexes of New Zealand Standard NZS6803:1999 *Acoustics - Construction Noise* which detail the types of construction and procedures that will be carried out to ensure compliance with the Standard. The noise management plan shall be prepared by appropriately qualified and experienced persons, prior to relevant construction stages commencing, and shall be approved by the Compliance



and Monitoring Officer, Strategy and Planning, Wellington City Council,  
prior to construction commencing.

Operational Noise (Non-turbine Related)

16. Noise from all other activities on the site (other than wind turbine generator operation and construction activities) shall not exceed the following limits at or within the notional boundary of any dwelling (excluding any dwelling on the Wind Farm site):

7.00am to 8.00pm	45dBA L <sub>10</sub>
8.00pm to 7.00am	35dBA L <sub>10</sub>
8.00pm to 7.00am	60dBA L <sub>max</sub>

The noise shall be measured in accordance with NZS6801:1991:  
Measurement of Sound and assessed in accordance with NZS6802:1991:  
Assessment of Environmental Sound.

Operational Noise (Turbines)

17. Wind turbine sound levels, when measured at the notional boundary of dwellings existing or holding all resource consents necessary for construction at the date of this consent, or able to be constructed as a permitted activity shall not exceed the appropriate regression curve of the A-weighted background sound level (L<sub>95</sub>) by more than 5dBA, or a level of 40dBA L<sub>95</sub>, whichever is the greater, and

When the background sound conditions are at or below 25dBA L<sub>95</sub> determined from the appropriate regression curve, without the interference of the wind farm, and when the mean wind speed at a representative location for the dwelling is less than 1.5m/s measured at a height of 10m AGL, then noise from the wind farm shall not exceed 35dBA L<sub>95</sub> at the dwelling.

18. Prior to installation of any wind turbine generator the consent holder shall furnish:
- (a) An acoustic emissions report to the Council for each of the selected wind turbine generators. The report shall be in accordance with IEC61400-11, Wind Turbine Generator Systems Part 11, Acoustic noise measurement techniques and shall include the A-weighted sound power levels, spectra, and tonality at integer wind speeds from 6 to 10 m/s and up to 95% of rated power for each type and mode of individual wind turbine to be installed.
  - (b) A noise prediction report from a suitably qualified and experienced acoustical consultant that demonstrates to the satisfaction of the Compliance and Monitoring Officer, Strategy and Planning, that the sound levels from the wind farm will not exceed those levels set out in Condition 17 above. Modes of operation and the type of turbine must be specified.



## Pre Instalment Measurements

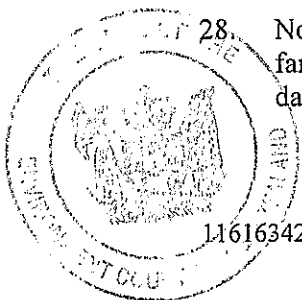
19. The wind farm sound levels shall be measured, assessed and controlled using NZS6808:1998 *Acoustics - The Assessment and Measurement of Sound from Wind Turbine Generators* within the notional boundary of any dwelling, except for lots where written approval has been obtained, but with the following requirements to be met. Where these following requirements differ from NZS6808:1998 then these requirements shall prevail:
- (a) The 10 minute background sound levels ( $L_{95,10min}$ ) shall be measured within the notional boundary of a dwelling. Such measurements shall be carried out before the commencement of any construction work related to the wind farm that could produce noise sufficient to affect  $L_{95}$  background sound measurements.
  - (b) Representative measurement locations shall be selected for all dwellings within the predicted 35dBA  $L_{eq}$  noise contour. As a guide representative background sound monitoring should take place within 200 metres of a dwelling of interest and within the notional boundary of the representative dwelling. Upon inspection the background sound level at a place of interest should be reasonably similar to the monitoring location. Depending on topography and the location of ambient sound generators such as streams and vegetation in the area this distance of 200 metres may need to be less. The representative locations shall be selected on the principle that if turbine noise was excessive, then the largest difference between the predicted post-installation noise level and the background sound level would be obtained.
  - (c) The requirements for background sound level measurements under this condition shall not apply to any property where access for measurement purposes has been refused by the property owner or tenant and monitoring cannot take place at a nearby representative location for whatever reason).
  - (d) The 10 minute average wind speed and wind direction at the wind farm shall be based on the hub height of the wind turbines and wind speed measurements shall be made at the same time as the 10 minute background  $L_{95,10min}$  measurements at dwellings (and called data pairs). Local wind speed and direction measurements shall also be made in the vicinity of the sound level monitoring (without interfering with that monitoring) at the time of these measurements and this data shall be recorded.
  - (e) Background sound level  $L_{95,10min}$  at a dwelling shall be correlated with wind speed at the wind farm for conditions under 19(f).
  - (f) Sufficient data must be collected to assess the following:
    - Operation wind speeds of the wind turbines from the cut-in wind speed (nominally  $3 \text{ m.s}^{-1}$ ) up to the rated power wind speed (nominally  $15 \text{ m.s}^{-1}$ ) at the wind farm;
    - The prevailing wind directions at the wind farm – N ( $300^\circ - 030^\circ$ ) and S ( $120 - 210^\circ$ );



- Time of day - Nighttime (10pm to 5am) and Daytime (5am to 6pm) and Evening (6pm to 10pm).
  - Background sound levels when the receptor wind speed is less than 1.5m/s at 10m AGL.
  - Sufficient data is when the addition of further data makes no difference to the location of the regression curve.
- (g) Sufficient data shall be gathered such that accurate best fit regression curves can be obtained.
- (h) Care will be taken to eliminate periods of contamination of the noise data by other noise sources, i.e. seasonal cicadas, crickets, frogs rainfall periods, etc.

### **Post Installation Testing**

20. Post installation compliance testing shall commence as soon as practical, as agreed by the Compliance and Monitoring Officer, Strategy and Planning, of the wind farm once turbines are installed and commissioned. If possible the testing shall be carried out at the same locations as the background sound monitoring or, if that position is not available, then at a nearby location where the background sound monitoring is still representative.
21. The same parameters as in Condition 19(f) required for the background noise monitoring shall also be measured for the post-installation compliance testing. The cut-in operation times of the wind turbine generators shall also be recorded and this shall be indicated on the results.
22. The best fit regression curves shall be provided in accordance with condition 19(f):
23. The appropriate regression curve of the  $L_{95,10min}$  of the wind turbine generator sound levels corrected for any special audible characteristics is not to exceed the noise limits specified in condition 17.
24. As compliance testing takes place at each site the applicant shall provide the raw results of noise and wind monitoring to the Council in a form that will allow the Council to undertake its own analysis and assessment of the results should it choose to do so.
25. The consent holder shall provide reports to the Council as soon as practical following testing at each location but no longer than 21 days after the completion of each test.
26. The Council may reasonably direct testing to take place at any location.
27. If the Council wishes to undertake separate compliance testing of part or of all of the wind farm operation then the consent holder shall share with the Council any wind data to allow Council to analyse their noise monitoring in accordance with the requirements of these conditions.
28. Nothing in these conditions shall prevent compliance monitoring of wind farm noise from being undertaken at any wind speed and direction or time of day.



29. Thereafter compliance testing shall be carried out at any reasonable request by the Council, this may be as a result of what the Council considers to be substantiated complaints regarding increased levels of noise from the wind farm or any change in the character of the noise emanating from the wind turbine generators.

### **Permanent Monitoring**

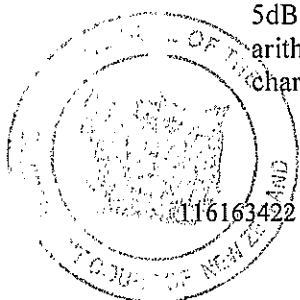
- 30A Continuous sound level monitoring shall be undertaken at a minimum of 4 and a maximum of 5 measurement locations which are representative of existing residential locations/dwellings. These measurement locations are to be agreed with the Consenting Authority and the Consent Holder. Measurements shall be made in accordance with the requirements contained within Condition 19 and 21-23. Pre and Post-Installation Testing for these agreed locations, Measurements shall be undertaken for a minimum period of 2 years and is subject to review in accordance with Condition 43.

### **All measurements**

30. Sound monitoring shall conform to the following measurement standards:
- a. The complete measurement and analysis method system shall conform to the requirements of NZS6808:1998 *Acoustics - The Assessment and Measurement of Sound from Wind Turbine Generators* and the Standards referred to by NZS6808; and
  - b. Microphones shall be fitted with a wind shield such that the noise generated by wind on the wind shield is, to the extent practicable, at least 10dBA below the noise being measured.
  - c. All sound monitoring shall be carried out by suitably qualified and experienced persons.
  - d. The operator shall provide all necessary data required to carry out the compliance testing, including:
    - i. wind speed and direction at hub height during periods of compliance testing;
    - ii. the times at which individual wind turbines are operating above the cut-in wind speed.
31. The operator of the wind turbines shall pay all costs associated with compliance testing.
32. Only wind turbines that can be de-rated to reduce noise levels shall be installed at the wind farm.

### **Assessment of Special Audible Characteristic**

33. When Wind Farm sound within the notional boundary of a dwelling has a special audible characteristic, i.e. impulsiveness, tonality and/or an audible modulation, the measured sound level of the source shall have a maximum 5dB penalty applied by adjustment of the measured sound level by the arithmetic addition of the penalty. The total penalty for all special audible characteristics shall be no more than 5dB.





34. Sound with a special audible characteristic includes clearly audible tones. A test for the presence of tonality shall be made by comparing the levels of neighbouring one-third octave bands in the sound spectrum. An adjustment of +5dB for tonality shall be applied if the level ( $L_{eq}$ ) in any one third octave band exceeds the arithmetic mean of the  $L_{eq}$  levels in the two adjacent bands by more than the values given in Table 1.

**Table 1 – One-third Octave Band Level Differences**

One-third octave band	Level difference
25-125Hz	12dB
160-400Hz	8dB
500-10,000Hz	5dB

There might be cases where this analysis does not result in a tonal component being defined although the sound is in fact tonal. For these cases it will be necessary to undertake a narrow band analysis in order to determine if a sound is tonal using Joint Nordic Method Version 2 with the penalties in that document applied.

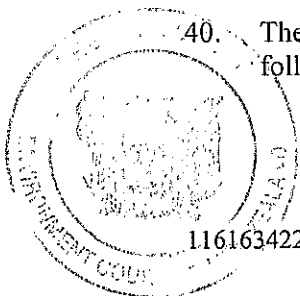
35. A test for modulation is if the measured peak to trough levels exceed 5dBA on a regularly varying basis or if the spectral characteristics, third octave band levels, exhibit a peak to trough variation that exceeds 6dB on a regular basis in respect of the blade pass frequency.

#### Reporting of Analysed Results

37. All analysed results shall be provided in accordance with NZS6808:1998 as soon as practical but at least within 21 days of the monitoring being completed to the Compliance and Monitoring Officer, Strategy and Planning.
38. Where compliance is not achieved with these Conditions then the consent holder shall operate the wind turbine generators at reduced noise output until remedies are identified and implemented. If sound emissions cannot be reduced such that they comply, then the consent holder shall cease to operate the non-compliant wind turbine generators during the appropriate operational parameters as set out in condition 19(f) until modifications are made to reduce the noise. Further operation of the non-compliant wind turbine generators shall only be for sound measurement checks as specifically agreed with the Compliance and Monitoring Officer, Strategy and Planning to demonstrate compliance.

#### Noise Management Plan

39. Prior to the commencement of the wind farm the consent holder shall prepare and implement a Noise Management Plan to manage the potential effects of noise. The Noise Management Plan shall be prepared by a person suitably qualified and experienced in noise assessment and control. That person shall act in liaison with the consent holder.
40. The Noise Management Plan shall include, but not be limited to, the following:



- a. Assessment of periods of low background sound conditions with respect to Condition 17 to ensure that derived regression curves are appropriate.
- b. An assessment of the contribution to the overall sound levels from individual wind turbine generators.
- c. An assessment of how individual wind turbine generators can be de-rated to comply with Condition 17.
- d. The implementation of an automatic control mechanism to de-rate or stop the wind turbine generators to ensure compliance with Condition 17.
- e. Continued assessment of the control measures to judge the success and to update where more information provides for improvements.

### **Community Liaison Programmes**

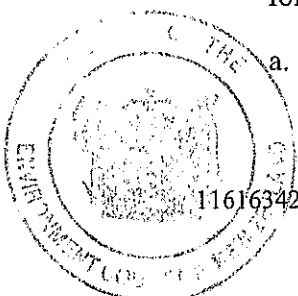
#### General Noise Management Plan Requirements

- f. The consent holder shall establish and publicise an 0800 number so that members of the Makara Community have a specified and known point of contact to raise any noise related issues that may arise during construction and operation of the wind farm. A log book of all calls made shall be kept, and details of all calls received shall be forwarded to the Compliance and Monitoring Officer, Strategy and Planning, within five working days. Any issues arising shall be reviewed and addressed by revising the Noise Management Plan where appropriate.
  - g. The consent holder shall nominate an appropriately experienced staff member to be responsible for:
    - i. Liaison with residents;
    - ii. Overseeing the assessment procedure;
    - iii. Receiving and dealing with complaints;
    - iv. Ensuring the implementation and updating of the above automatic control measuring system on an ongoing basis.
41. The information collected as part of the implementation of the Noise Management Plan shall be provided to the Compliance and Monitoring Officer, Strategy and Planning.

#### Review of Noise Conditions

43. The Council may review the noise conditions set out above, by giving notice of its intention to do so under section 128 of the Resource Management Act 1991, one, three and five years after the wind farm completion or, if the wind turbine generators are installed in stages, then one year after the completion of each stage and then three and five years after the final completion, for the following purposes:

- a. To deal with any adverse effects on the environment resulting from wind farm sound, including sound with any special audible



characteristics, which may arise from the operation of the wind turbines; and

- b. Review the low background sound criteria in Condition 17.
- c. To review the adequacy of any recommendations of the Noise Management Plan.
- d. Permanent monitoring requirements.
- e. To address any issues arising out of complaints

Such reviews may take place within six months of the specified dates.

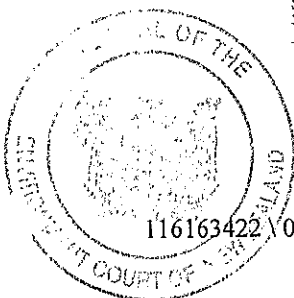
#### **Avifauna Monitoring**

44. The consent holder shall undertake a baseline avifauna survey covering four seasons (of the year) prior to construction. The baseline survey shall be completed to assist in detailed design and shall:

- Be conducted in a manner approved by the Compliance and Monitoring Officer, Strategy and Planning.
- Determine the range of avifauna species that require ongoing monitoring during and after construction.

The results of the survey shall be provided promptly to the Compliance and Monitoring Officer, Strategy and Planning. If the Compliance and Monitoring Officer determines that significant adverse effects may be caused by construction, then:

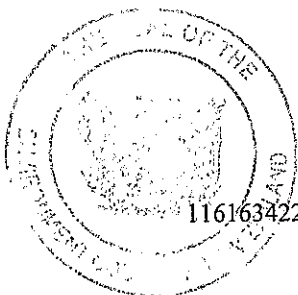
- The Compliance and Monitoring Officer may require the consent holder to report on appropriate and reasonable methods to avoid or minimise those effects;
  - The Compliance and Monitoring Officer may consult with the Director General of Conservation on methods to avoid or minimise those effects;
  - The Compliance and Monitoring Officer, after considering the report from the consent holder and any other relevant information, may determine appropriate and reasonable methods to avoid, remedy or mitigate the significant adverse effects.
  - The consent holder shall implement those methods.
45. The consent holder shall then monitor key populations of avifauna (as identified by the Compliance and Monitoring Officer, Strategy and Planning, including but not limited to species such as falcon, kaka, kereru and bat) during construction and for a further three years after the wind farm is completed. The monitoring programme is to be carried out as follows:
- the methodology for survey and monitoring is to be developed in consultation with the Director General of Conservation and the Ornithological Society, and shall be approved by the Compliance and Monitoring Officer, Strategy and Planning;



- monitoring of effects on birds shall commence during construction and continue for three-years after the wind farm becomes operational. If monitoring shows that the wind farm is having no more than minor effects on avifauna populations, then the consent holder may, with the prior consent of the Compliance and Monitoring Officer, Strategy and Planning, cease to monitor. In exercising the judgement to allow monitoring to cease, the Compliance and Monitoring Officer, Strategy and Planning, may consult with the Department of Conservation; and
  - reports will be produced annually. Copies of all reports will be provided to the Compliance and Monitoring Officer, Strategy and Planning, and the Director General of Conservation by the consent holder.
46. The consent holder shall record and report any evidence of bird and bat strikes. Should a bird or bat species that is nationally critical, nationally endangered, nationally vulnerable or in serious decline as listed in *New Zealand Threat Classification System 2002, Threatened Species Occasional Publication No: 23, Biodiversity Recovery Unit, Department of Conservation compiled by R. Hitchmough* be found injured or dead at the site, the Department of Conservation is to be notified immediately and the bird or bat provided to the Department of Conservation or its nominated agent for autopsy or rehabilitation. The procedures outlined by this condition shall form part of the project Site Environmental Management Plan.

#### **Earthworks**

47. The location, design, implementation and operation of all earthworks and associated discharges of sediment-laden stormwater to land and water shall be undertaken in general accordance with the following documents, unless any modifications are required to comply with any of the conditions of this consent:
- a) the consent application lodged with the Wellington City Council on 1 July 2005;
  - b) Wellington Regional Council's *Erosion and Sediment Control Guidelines for the Wellington Region* dated September 2002; and
  - c) any additional plans or information to be prepared and submitted to the Wellington City Council for approval in accordance with various conditions of this consent.
48. The Compliance and Monitoring Officer, Strategy and Planning, may review any or all conditions of this consent by giving notice of its intention to do so pursuant to Section 128 of the Resource Management Act 1991, at any time within six months of the first, third and fifth anniversaries of the date of commencement of this consent for any of the following purposes:
- a) To deal with any adverse effects on the environment, which may arise from earthworks relating to the exercise of this consent, and which it is appropriate to deal with at a later stage; and
  - b) To review the adequacy of any monitoring plans proposed and/or monitoring requirements so as to incorporate into the consent any monitoring or other requirements which may become necessary to deal with any adverse effects on the environment arising from the exercise of this consent.

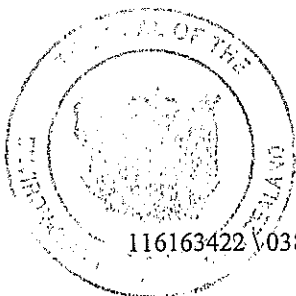


#### Pre-construction administration requirements

49. The consent holder shall provide written notification of the works commencing in each of the areas shown on drawing 24 (Revision 2), sheet 50 of Appendix B of the application to the Compliance and Monitoring Officer, Strategy and Planning, at least five working days prior to works commencing in each area.
50. The consent holder shall provide a copy of this consent and all documents referred to in this consent to any operator or contractor undertaking works authorised by this consent, prior to the works commencing.
51. The consent holder shall commence trials to assess the suitability of revegetation techniques and treatments of exposed rock cuttings no later than within three months of the granting of this consent.

A report of the results to date, identifying suitable revegetation techniques and rock treatments, shall be included in the environmental management plan required under condition 52. This report shall identify which techniques and treatments are generally suitable for different areas and works within the project site.

52. The consent holder shall prepare, submit and implement a site-wide **Environmental Management Plan (EMP)** for all construction works authorised by this consent to the Compliance and Monitoring Officer, Strategy and Planning, for approval at least 20 working days prior to works commencing. The EMP shall include, but not be limited to:
  - roles and responsibilities, including appointment of a representative to be the primary contact person in regard to matters relating to this consent;
  - arrangement and conduct of a pre-construction site meeting between all relevant parties, including all contractors and relevant local authorities, prior to any works commencing on the site to discuss implementation of erosion and sediment control measures;
  - sequencing of works over the whole site;
  - the method for preparation and submission of supplementary environmental management plans (SEMP);
  - the potential adverse effects of the works;
  - procedures for earthworks, erosion and sediment control and re-vegetation/stabilisation of the site;
  - monitoring, record-keeping and maintenance requirements;
  - contingency measures;
  - an investigation into the use of chemical flocculation for sediment retention ponds as an alternative stormwater treatment method;
  - the following rehabilitation principles should be expressly adopted:
    - Minimisation of sidling cuts wherever practicable, and locating road and turbine platforms on or as close to ridgelines as practicable.
    - To identify and give particular attention to high cuts that will be visible from dwellings and public open space including from at sea.
    - For the engineer, ecologist and landscape architect to work together to design the final shape of, and re-vegetation proposals for, earthworks and rock cuts as part of the detailed design process.



- To educate each excavator operator, so that s/he understands the rehabilitation objectives and is able to be flexible in response to the rock that is uncovered. *Note: Informing and gaining the active support of the machine operator will often lead to superior results where they take a pride in the finished result.*
  - To shape the finished cuts to emulate natural rock features and avoid the creation of uniform linear features. This may include rolling back the top, ripping sections to create shaped corners, creating gully like features and scree-like slopes, benching etc.
  - To shape the finished cuts to provide areas of fractured rock that will provide microhabitats for native grasses, ferns and shrubs. *Note: This can be achieved by ripping the face, shaping the face to create hollows and guts and so on.*
  - To shape the finished cuts to allow the deposition of soil in key areas so that tall shrubs can rapidly establish helping to break up the face. This can include benching, and bunding the toe of the cut when turbine erection has been completed and the 10.0m wide road carriageway is reduced to a width of 5.0m.
  - To vegetate cuts with plants equivalent to the slopes above and below the cut.
- the report of the results of the revegetation trials required by condition 51 of this consent;
  - principles and procedures for rehabilitation of exposed areas, including rehabilitation methods and vegetation mixes;
  - techniques to be used to revegetate rock cuts;
  - procedures for weed control; and
  - identification of baseline monitoring activities.

**Note:**

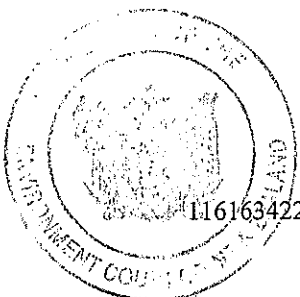
- The EMP provides an umbrella document that identifies the management processes and techniques to ensure appropriate environmental management of the site. The SEMP's are undertaken in general accordance with the procedures outlined in the EMP.
- Post-construction matters addressed by the EMP shall not be limited in duration.

53. The consent holder shall prepare, submit and implement a **Supplementary Environmental Management Plan (SEMP)** for each of the areas shown on drawing 24 (Revision 2), sheet 50 of Appendix B of the application, or as agreed by the Compliance and Monitoring Officer, Strategy and Planning. The SEMP shall be submitted to the Compliance and Monitoring Officer for approval at least 20 working days prior to works commencing in each plan area. A suitably qualified ecologist and environmental management specialist shall assist in the preparation of the SEMP's.

- a) The SEMP shall be in general accordance with the EMP and shall include, but not be limited to:
  - a detailed design and construction methodology for all works;
  - Demonstration that the earthworks will not adversely affect known stock or drinking water supplies;



- notification of any operator or contractor appointed to carry out the works authorised by this consent, including the contractor's company, address, named representative and their contact details;
  - a detailed schedule of construction activities including the expected commencement date and duration of works in each location within the area;
  - a staging of works to demonstrate that the area of disturbance will be kept to a minimum; and
  - evidence that a suitably qualified engineer has been appointed to carry out the overall design, supervision and certification of earthworks (including cut/fill batter stability and construction of all erosion and sediment controls).
- b) In respect of **erosion and sediment control**, the SEMP shall be prepared in general accordance with the *Erosion and Sediment Control Guidelines for the Wellington Region* and shall include, but not be limited to:
- detailed design specifications of all earthworks, including disposal sites, and all erosion and sediment control measures to be implemented, including supporting calculations where appropriate;
  - the expected commencement dates for the implementation of erosion and sediment controls measures in each area;
  - information regarding whether chemical flocculation of any of the proposed sediment retention ponds is required;
  - monitoring and maintenance schedules for all erosion and sediment control measures on a set frequency (at least weekly), or within 24 hours of each rainstorm event that is likely to impair the function or performance of the control measures;
  - a site plan showing contours at suitable intervals, cut and fill operations, the specific location of all sediment and erosion control measures, and catchment boundaries for the sediment controls;
  - demonstration that earthworks will not disrupt any groundwater source of domestic water supply that is known to the consent holder;
  - confirmation that, where possible, the outlets or discharge points from all erosion and sediment control measures are sited so that the stormwater runs over vegetated land prior to discharging to an ephemeral or permanent watercourse. Where not possible, the SEMP shall indicate the steps to be taken to avoid, remedy or mitigate the effects;
  - ensuring that temporary stockpiles of materials are not permitted within 50m of any ephemeral stream or permanent watercourse unless there is efficient treatment of stormwater (which may include discharging to vegetated land); and
  - identification of measures to ensure that there is no tracking of mud or earth onto the surrounding road network.
- c) In respect of **revegetation and rehabilitation** activities, the SEMP shall include, but not be limited to:
- identification of soil resource to be used for rehabilitation;
  - identification of the vegetation types to be used on a plan or schedule;
  - identification of a 35ha area, to be fenced with a stock proof fence, and details of reasonable measures to be taken to remove plant and animal pests. Such area to be located where vegetation regeneration is occurring, and is to mitigate the permanent loss of indigenous flora from roading and turbine sites.



- the control of goats;
- a programme for revegetation and maintenance activities for a period up to the expiry date of this consent (maintenance activities may include the exclusion of pest browsers and stock and the removal of weeds, and additional fencing may be required for the exclusion of stock);
- the desired percentage of surface cover to be achieved to reduce the adverse effects from sediment-laden stormwater run-off;
- identification of weed management activities to be undertaken; and
- identification of treatments of exposed rock cuttings that are to be used.

d) SEMP's shall demonstrate that full consideration has been given to:

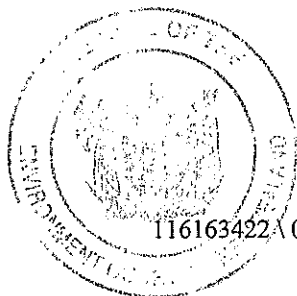
- minimising the extent of disposal sites and the discharge of sediment and stormwater within the Makara Stream catchment;
- avoiding, where possible, discharges to catchments used for domestic water supply;
- avoiding areas identified on the plan attached for the protection of geological features on Quartz Hill;
- avoiding disturbance and sedimentation to wetland areas, including the wetland area located north east of the former BCNZ receiving station;
- protecting the wetland area located north east of the former BCNZ receiving station by installing a silt fence around the entire wetland during the construction works period;
- minimising the extent and effects of earthworks, including but not limited to, the following techniques:
  - Following ridgelines where practicable;
  - Locating cuts so that they are hidden from views from residential and coastal locations outside the site as far as practicable; and
  - benching, contouring and otherwise softening rock cuts where practicable and appropriate;

And

- avoiding discharges to the catchment containing the Warren's QEII covenant area.

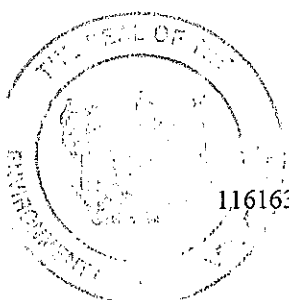
54. Prior to the use of chemical flocculation, if required by an SEMP and approved by the Compliance and Monitoring Officer, Strategy and Planning, under condition 53(b), the consent holder shall prepare, submit and implement a **Flocculation Management Plan (FMP)** for chemically-treated sediment retention ponds within each of the areas shown on drawing 24 (Revision 2), sheet 50 of Appendix B of the application, or as agreed by the Compliance and Monitoring Officer, Strategy and Planning. The FMP shall be submitted to the Compliance and Monitoring Officer, Strategy and Planning, for approval at least 20 days prior to any flocculation works commencing. The FMP shall include, but not be limited to:

- identification of the ponds in each area in which chemical flocculation will be incorporated;
- specific design details of the flocculation system;
- details of optimum dosage (including assumptions);
- procedures for the storage of flocculation chemical(s) onsite;
- procedures for the transportation of flocculation chemical(s);
- methods and responsibilities for monitoring and maintenance of the system;
- a flocculation chemical spill contingency plan; and





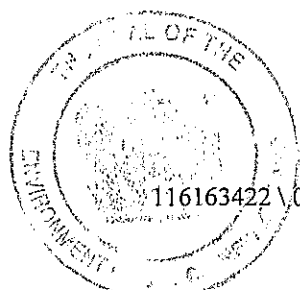
- identification of a suitably qualified and experienced person and their specific responsibilities for ensuring the operation, monitoring and maintenance of the chemical flocculation system to ensure that each sediment retention pond is operated as outlined in the FMP.
55. The consent holder shall prepare, submit and implement a site-wide **Contingency Plan** for containment of spills to the Compliance and Monitoring Officer, Strategy and Planning, for approval at least 20 working days prior to works commencing. The contingency plan shall:
- identify designated contaminant storage facilities and re-fuelling locations;
  - require that these locations are bunded, and that machinery is parked long-term only in these designated areas;
  - require that all mobile fuel tankers carry spill kits and that spill kits are stored at bulk storage tank locations at all times;
  - detail the contents of the spill kits, including absorbent pads, booms, pillow and socks and appropriate pegs/rope to hold the absorbent material in place;
  - record the names of operators trained in spill response and remediation;
  - detail an internal and external notification procedure in the event of a spill; and
  - identify measures to be undertaken to remediate a contaminant spill.
56. The consent holder shall prepare, submit and implement a **Monitoring Plan** (to assess compliance with conditions of this consent, and the various plans identified in condition 58 to be prepared by the applicant) to the Compliance and Monitoring Officer, Strategy and Planning, for approval at least 60 working days prior to works commencing. The monitoring plan for ongoing monitoring (during construction) shall include, but not be limited to:
- a process for determining, in consultation with the Council, ongoing monitoring locations, procedures, methods, timing, frequency and duration from the baseline monitoring;
  - identification of trigger levels for specific parameters that, if breached, require additional monitoring or the implementation of contingency measures; and
  - identification of specific measures to be implemented when trigger levels are breached.
57. The monitoring shall be undertaken by a suitably qualified person. All monitoring results obtained in accordance with the conditions of this consent shall be recorded in a log on-site, shall be available for inspection during normal office hours and shall be submitted to the Compliance and Monitoring Officer, Strategy and Planning, at quarterly intervals. Records shall also be kept to show where monitoring is not possible due to dry conditions or where no sediment retention pond inflow or outflow exists.
58. Works shall not commence in any area until the following documents have been approved by the Compliance and Monitoring Officer, Strategy and Planning:
- a) a site-wide environmental management plan (in accordance with condition 52 of this consent);



- b) a supplementary environmental management plan (in accordance with condition 53 of this consent) for the area covered by the works;
- c) a flocculation management plan (in accordance with condition 54 of this consent, if required);
- d) a site-wide contingency plan for contaminant spills (in accordance with condition 55 of this consent);
- e) a monitoring plan (in accordance with condition 56 of this consent); and
- f) a site-wide accidental discovery protocol (in accordance with condition 102 of this consent).

#### General Construction Conditions

- 59. The consent holder shall ensure that all sediment-laden discharges from the site are treated by the erosion and sediment control measures approved and implemented in general accordance with the relevant SEMP under condition 53 of this consent.
- 60. The consent holder may request amendments to the EMP or any SEMP by submitting the amendments in writing to the Compliance and Monitoring Officer, Strategy and Planning, for approval, prior to any changes taking effect.
- 61. The consent holder shall ensure that:
  - a) all fill slopes are keyed into the surrounding land, as far as practicable;
  - b) all fill material is placed and compacted so as to minimise any erosion and/or instability of the fill material;
  - c) fill material is restricted to natural rock and soil;
  - d) final disposal site slope profiles are contoured to merge in with the existing slope, as far as practicable, to minimise erosion and hydrological changes;
  - e) long-term stockpiles of topsoil and excavated material are suitably stabilised to minimise erosion potential; and
  - f) any erosion of fill material is immediately remedied or mitigated to the satisfaction of the Compliance and Monitoring Officer, Strategy and Planning,
- 62. The consent holder shall provide the Compliance and Monitoring Officer, Strategy and Planning, with an updated schedule of construction activities at monthly intervals during the works.
- 63. The consent holder shall, at all times, take all practicable steps for minimising erosion and/or minimising the suspended solids content of any discharge that may enter any ephemeral or permanent watercourse, which may result in any of the following effects after reasonable mixing:
  - the production of any conspicuous oil or grease films, scums or foams or floatable or suspended material;
  - any conspicuous change in colour or visual clarity;



- any emission of objectionable odour;
- the rendering of freshwater unsuitable for consumption by humans and farm animals;
- any significant adverse effect on aquatic life; and
- a change of more than 3° Celsius in the natural temperature of the water.

For the purposes of this condition, the zone of 'reasonable mixing' is defined as the length of stream that is ten times the average width of the stream, or 20 metres, whichever is greater.

64. The works authorised by this consent shall remain the responsibility of the consent holder and shall be maintained to the satisfaction of the Compliance and Monitoring Officer, Strategy and Planning.
65. The consent holder shall ensure that:
- a) all contaminant storage or re-fuelling areas are bunded or contained in such a manner so as to prevent the discharge of contaminants;
  - b) all machinery is thoroughly cleaned of unwanted vegetation (e.g. weeds), seeds or contaminants prior to entering the site;
  - c) all machinery is regularly maintained in such a manner so as to minimise the potential for leakage of contaminants; and
  - d) no machinery is cleaned, stored or refuelled within 50 metres of any ephemeral or permanent watercourse, and;
  - e) all contaminants (e.g. fuel, hydraulic oils, lubricants etc) are removed at the end of the construction period except for those required for ongoing maintenance of the wind farm and operational activities.
66. No sediment retention ponds, chemical flocculation systems or perimeter controls are to be removed or decommissioned before approval is applied for in writing, and received, from the Compliance and Monitoring Officer, Strategy and Planning, and the entire area is stabilised, unless such removal and decommissioning is in accordance with the requirements of the SEMP.
- Note: For the purposes of this condition 'stabilised' means inherently resistant to erosion or rendered resistant, such as by using indurated rock or by the application of basecourse, colluvium, grassing, mulch, or another method to the reasonable satisfaction of the Compliance and Monitoring Officer, Strategy and Planning, and as specified in *Erosion and Sediment Control Guidelines in the Wellington Region*. Where seeding or grassing is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once, on reasonable visual inspection by the Compliance and Monitoring Officer, Strategy and Planning, 80% vegetative ground cover has been established.
67. The consent holder shall ensure that all areas exposed by earthworks are re-grassed or re-vegetated within 10 days or as soon as practicable upon completion of the earthworks in each SEMP area.
68. The plant species used shall be consistent with the species in the immediate vicinity of the exposed area, replacing "like with like". The revegetation and rehabilitation of exposed areas shall be in accordance with the requirements of the relevant SEMP

developed in accordance with condition 53 of this consent. The consent holder shall ensure that the plants and seeds for any indigenous revegetation work carried out in regard to the proposed development shall be eco sourced, and where practicable, this shall be from within the wind farm site.

#### Incidents/public complaints

69. The consent permit/consent holder shall immediately notify the Compliance and Monitoring Officer, Strategy and Planning, if any contaminants (including sediment) or material is released from the site and enters any watercourse due to any of the following:

- a) discharges from unstabilised areas that are not treated by erosion and sediment control measures required under condition 54(b) of this permit; and/or
- b) failure of any erosion and sediment control measures; and/or
- c) any other incident which either directly or indirectly causes, or is likely to cause, adverse ecological effects in any watercourse.

If any of these events occur, the consent holder shall:

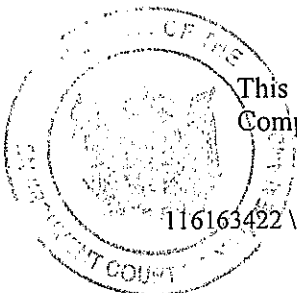
- d) liaise with the Compliance and Monitoring Officer, Strategy and Planning, to establish what remediation or rehabilitation works are required and whether such works are practical to implement;
- e) carry out any remedial action as required by and to the satisfaction of the Compliance and Monitoring Officer, Strategy and Planning; and
- f) maintain a permanent record of the incident at the work site, which shall include the date and time of the incident, the nature, manner and cause of the release of the contaminants, weather conditions at the time of the incident and the steps taken to contain any further release and to remedy the adverse ecological effects on the watercourse.

A copy of this record shall be provided to Compliance and Monitoring Officer, Strategy and Planning, within 5 working days of the incident being brought to the attention of the consent holder.

70. The consent holder shall maintain a permanent record of any complaints received alleging adverse effects from, or related to, the exercise of this consent. The record shall include:

- the name and address (as far as practicable) of the complainant;
- identification of the nature of the matter complained about;
- date and time of the complaint and of the alleged event;
- weather conditions at the time of the complaint (as far as practicable);
- the outcome of the consent holders investigation into the complaint; and
- measures taken to ensure that such a complaint does not occur again.

This record shall be maintained at the work site and shall be made available to the Compliance and Monitoring Officer, Strategy and Planning, upon request. The



consent holder shall notify the Compliance and Monitoring Officer, in writing of any such complaint, within a 5 working days of the complaint being brought to the attention of the consent holder.

### **Water Supply**

71. Prior to any works commencing in the vicinity of any domestic water supply source that is known to the consent holder, the consent holder shall undertake hydrological and geomorphologic investigations to confirm the works will not interfere with that water supply. The result of those investigations shall be approved by the Compliance and Monitoring Officer, Strategy and Planning, prior to commencement of construction in such areas.
72. Any interference with domestic water supply shall be rectified by the consent holder at its cost.
73. If any domestic water supply is interfered with by the consent holder during the exercise of this consent, the consent holder at its cost shall ensure that a sufficient supply of water is provided to the affected property owner until either the original supply is restored or a suitable replacement is established.
74. The consent holder shall upgrade and maintain the Makara School water supply to the extent necessary to ensure it is not interrupted during the construction of the wind farm.

### **Geology**

75. In order to preserve an area of the soil sequences on the Quartz Hill K-Surface remnant and the Quartz Hill quartzite body the consent holder shall not during the period of this consent undertake, or permit any of its employees, agents, or contractors to undertake, any works which disturb the reserved areas identified on the plan attached marked referenced "*Overall Site Development – Plan of Proposed Geological Preservation Areas*" – code 6504 – sheet 68.

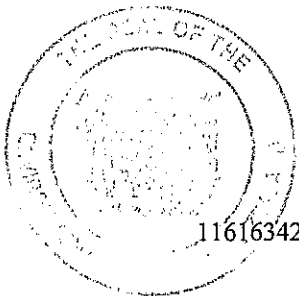
Should the reserve areas shown be affected by the proximity of turbines as shown on the Revised West Wind Site Layouts dated 12 March 2007, the final reserve areas shall be no lesser area than that shown on Sheet 68. Reserve areas shall be made available by the consent holder for reasonable use by suitably qualified scientists and their supervised students, for teaching purposes and scientific investigation and shall be kept free of competing uses and have unmodified soil profiles.

### **Traffic Management**

76. A **Construction Traffic Management Plan** shall be prepared by the consent holder and approved by the Chief Transportation Engineer, Wellington City Council, before the upgrades to the public road and transportation to the site begins, and before any significant upgrading or refurbishment of the wind farm. The purpose of the plan will be to set out in detail matters relating to the extent and timing of construction traffic activity to achieve the safe and efficient operation of the roading network, and traffic management provisions to be put in place during this time to achieve a safe and efficient road network. The plan shall be updated as reasonably required by the Chief Transportation Engineer, Wellington City Council to maintain safety and efficiency, and such amendments may take into account matters raised by the public, the community liaison group and other stakeholders during the construction process. This condition does not preclude advance agreement being reached between Wellington City Council and the consent holder for the agreed road improvements to start in

advance of all details of the Construction Traffic Management Plan being finalised, nor preclude flexibility in regard to other matters if such advance agreements would allow the project to proceed more efficiently and economically, and are in the public interest. The plan shall specifically include but not be limited to the following:

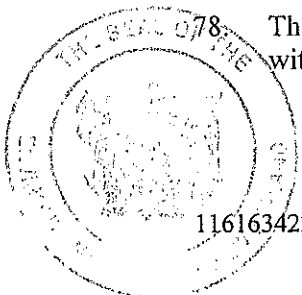
1. Large components (overweight and over-dimension turbine components) shall be taken to the site by barge, berthing at Oteranga Bay.
2. Bulk goods such as aggregates and water shall be transported to the site in suitable vehicles not greater than single-unit trucks of HCV – 1 rating, and shall not be transported to the site via public roads on Sundays or public holidays.
3. Trucks shall not access or depart the site using Takarau Gorge Road unless:
  - (a) Makara Road is closed to use by vehicles of the class being operated at that time; and
  - (b) Before commencing such use of Takarau Gorge Road a comprehensive and active traffic control system, approved by Wellington City Council's Chief Transportation Engineer is in operation.
4. Trucks accessing or departing the site shall not use engine braking within the Makara village area as defined in the Traffic Design Group drawing labelled "*Engine Breaking Exclusion Zone*", CAD:7877-2W1/8.
5. All trucks on Makara Hill driving to or from the site shall be required to pull over to allow traffic to pass at:
  - the Makara Hill Summit (both directions)
  - the layby 1.2km from the South Makara Road intersection (uphill)
  - the layby 2.3km from the South Makara Road intersection (uphill)
  - the layby 1.3km from the Summit (downhill).
6. The layby 1.3km from the Makara Hill Summit on the northern side of Makara Road shall be levelled and sealed before transportation begins.
7. The small bump in the road adjacent to the bridge by the Makara Model School shall be removed or modified to avoid truck tailgates banging.
8. Prior to construction of the wind farm commencing the consent holder shall engage an independent consultant approved by the Chief Transportation Engineer, Wellington City Council, to carry out at the consent holder's cost and to the satisfaction of the Chief Transportation Engineer a survey of the condition of Makara, South Makara and Opau Roads.
9. The consent holder shall maintain Makara, South Makara, and Opau Roads during construction to the standards approved by Wellington City Council's Chief Transportation Engineer, and restore them to a condition not less than they had at the commencement of construction works upon completion of construction.
10. The consent holder shall clean up promptly to the satisfaction of the Chief Traffic Engineer, Wellington City Council, any construction materials or components deposited on roads. The hill section of Makara Road shall be swept clear of any loose aggregate as deemed necessary by the Council, and at



the end of every week that aggregate transportation occurs. The rest of the haul route should be swept as required in accordance with the Traffic Management Plan.

11. A guard rail shall be installed on the northern side of Makara Road extending west from the existing concrete wall at the Summit for a length of 150m.
  12. Wind farm visitor traffic patterns shall be monitored, and formalised viewing areas (including signage and stopping restrictions) created at the cost of the consent holder if this is required by the Wellington City Council's Chief Transportation Engineer.
  13. A traffic control system shall be installed on Opau Road during construction.
  14. A "stop" sign control shall be installed on Opau Road at its intersection with Makara Road during construction.
  15. Vehicle actuated flashing amber warning lights shall be installed on the Makara Road approaches to Opau Road.
  16. A communication system shall be used to ensure trucks do not meet each other on South Makara Road.
  17. Procedures shall be used to ensure priority is given to traffic not associated with the wind farm, where practicable.
  18. The consent holder shall establish and publicise an 0800 number so that road users and the public have a specified and known point of contact to raise any traffic related issues that may arise during construction. A log book of all calls received shall be kept, and in each month in which calls are received details of those calls shall be forwarded to Wellington City Council's Chief Transportation Engineer at the end of that month.
  19. Movements of vehicles heavier than motorcars (as defined by the Transport (Vehicle and Driver Registration and Licensing) Act 1986) shall be scheduled under the Traffic Management Plan to avoid school pupil travel times, Monday to Friday.
  20. Movements of vehicles heavier than motorcars (as defined by the Transport (Vehicle and Driver Registration and Licensing) Act 1986) shall be scheduled under the Traffic Management Plan to avoid funeral processions and other such road users as far as practicable.
  21. Prior to construction, the consent holder shall at its cost and to the approval of the Chief Transportation Engineer, Wellington City Council:
    - provide a safe pedestrian route for children and pedestrians within Makara Village; and
    - seal the road between the Patterson dwelling and the foot of the hill accessing the site.
77. The consent holder shall take all reasonable steps to source water and aggregate from on-site sources.

78. The consent holder shall require all of its contractors and sub-contractors to comply with the Construction Traffic Management Plan.

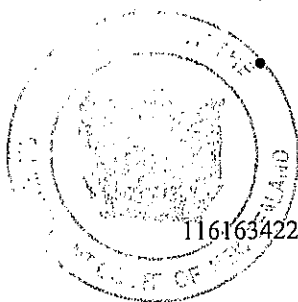


79. Prior to commencement of construction the consent holder shall at its cost undertake the roading improvements shown on Tonkin & Taylor drawing 83346.001 sheets 001 to 003 revision 1 dated 16/05.2006, and as further reflected in Traffic Design Group drawing CAD:7877/3W2/4 issue B dated 18/05/2006 and Traffic Design Group schedules "Makara Road Geometry" and "South Makara Road Geometry."
80. Traffic management techniques shall be used where considered necessary by the Chief Transportation Engineer, Wellington City Council to ensure safe movement of heavy vehicles at the locations shown on the plans listed above where the full 7.5m road cross section (minimum 5.5m sealed carriageway plus two 1m unsealed shoulders) cannot be achieved. These will apply for the duration of construction unless otherwise agreed. The detail of the traffic management techniques to be used, which may include traffic signals, manual control, signage, and associated road markings, shall be approved by the Chief Transportation Engineer, prior to commencement of construction.
81. The Wellington City Council may review the traffic related conditions set out above, by giving notice of its intention to do so under Section 128 of the Resource Management Act 1991, at any time during construction of the wind farm, for the following purposes:
- To deal with any adverse effects on the environment resulting from traffic related to the Wind Farm, either directly or indirectly.
  - To review the adequacy and implementation of any recommendations of the Construction Traffic Management Plan

Following review more appropriate conditions may be set if deemed necessary.

#### Archaeology

82. The access track from Oteranga Bay must be located over the mining embankment at the Albion Battery site (as per 'Option B' shown in the Plan entitled "Figure 4: Detail of alternative alignments through Albion Battery Site").
83. The consent holder shall engage at its own cost a suitably qualified archaeologist approved by the Compliance and Monitoring Officer, Strategy and Planning, Wellington City Council. The archaeologist shall:
- Monitor all surface clearing, trenching, construction or other invasive subsurface ground work required for construction at Oteranga Bay.
  - Be given the opportunity to examine any archaeological deposits disturbed by the development work, and to make recommendations for further detailed examination of these deposits where appropriate.
  - An archaeologist shall monitor track construction work that will impact on the Makara Pioneer mine adit, site Q27/115, to record construction detail of the mine and adit.
  - The consent holder will mark the location and alignment of historic roads and tracks shown on Survey Office plans SO 12145, 12138, 12150 and 11966, and an archaeologist shall monitor construction work that may impact on locations or alignments of historic roads or tracks, to record any construction details of the historic road bench prior to destruction.
  - Mark the location of Dowsett's Store prior to any construction activity in the vicinity of this site.
- Monitor all construction work in the vicinity of the marked site.





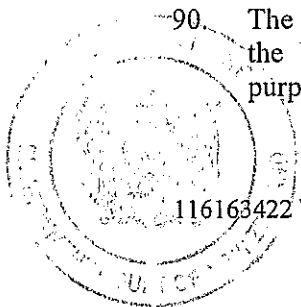
84. The consent holder shall avoid the site of Dowsett's Store so no works or activities take place there.
85. Artefacts and material uncovered and recorded during site clearing work shall be lodged with an appropriate repository. The consent holder will pay for the cost of any conservation required for artefacts or material.
86. The consent holder is to erect interpretation panels marking the whereabouts and significance of the Albion Battery site, Pioneer Mine, and Dowsett's store.
87. An authority shall be obtained from the Historic Places Trust prior to any disturbance occurring to part of site Q27/115 Makara Pioneer Mine, Albion battery, possible remnants of sites at Oteranga Bay (Q27/43, Q27/46) or site Q27/50 at Ohau Bay and/or any further unrecorded sites at Ohau Bay and some sections of the unrecorded miners' tracks.
88. The consent holder shall avoid the karaka grove, site Q27/42 in Black Gully, in road construction work; and it shall avoid any works or activities damaging the karaka grove.

### **Recreation**

89. Within three months of this consent coming into force the consent holder shall establish and administer a "West Wind Recreational Group" in a manner approved by the Compliance and Monitoring Officer, Strategy and Planning. The purposes of this group shall include:
  - To bring together stakeholders with an interest in the use of the site for recreational and cultural purposes who are willing to participate in the Group;
  - To identify and develop recreation and visitor opportunities that are feasible and are compatible with the established farming activities and the wind farm;
  - Recognise the Maori significance and history of areas within the site;
  - Recognise the special areas, including wahi tapu, urupā, and Maori precinct locations within the site and ensure they are protected and available to all with a special connection to them;
  - Enhance the natural and historic heritage of Makara Farm and Terawhiti Station;
  - Provide education/interpretation about the natural/cultural features (including archaeological) of the wind farm;
  - Provide education and interpretation about Quartz Hill, Terawhiti Station; and
  - Build and support effective recreation and conservation partnerships with local and regional partnerships;
  - Ensure the interests of the Department of Conservation in the Makara Walkway and covenanted areas are respected and promoted; and
  - Maintain and strengthen the conservation and rural values of the site including in particular those areas which have been reserved from use for farming and wind generation because of such values.
  - An assessment of the parameters of public pedestrian and cycling access to Opau Bay.

Note: This leaves open the question of the route to be used but confirms that some access for pedestrians and cyclists is intended.

90. The consent holder will provide seed funding of \$50,000.00 for costs associated with the West Wind Recreation Group. This funding will be used for the following purposes:



- Establishment of the group;
  - Development of a group charter or similar document;
  - Costs associated with Recreation Advisors to the group; and
  - Such other purposes the Group determines will promote the use of the site for public recreation.
91. The first meeting of the West Wind Recreational Group shall occur within 6 months (or sooner if possible) of the consent being granted.

Progress reports from the West Wind Recreational Group shall be submitted to the Compliance and Monitoring Officer, Strategy and Planning annually from the date of grant of this consent.

92. During the construction period the consent holder shall provide a contact person for recreation groups to co-ordinate access to the site in accordance with a plan for the use of the site for recreational purposes during the construction period. Consent to such access shall be required in each case from the relevant landowner and Meridian Construction Manager; access may be refused for farming and health and safety reasons arising from construction.

#### **Transmission lines**

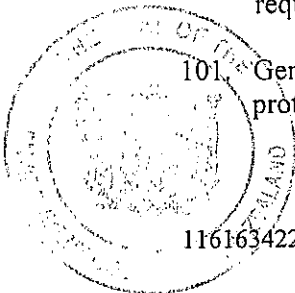
94. Transmission lines shall be constructed in accordance with drawing LTC 1189/MI/3, with final pole locations to be within 20m of the locations shown.
95. Transmission poles will be similar to the pole type shown in drawing 12732-61, with no pole exceeding 38m in height above ground level.
96. International Commission for Non-Ionising Radiation Protection Guidelines (ICNIRP 13/2003) shall be met at boundaries of the national grid transmission line easement area and at all areas in the transmission corridor to which the public has access.
97. International Commission for Non-Ionising Radiation Protection Guidelines (ICNIRP 13/2003) shall be met at all areas within the site where overhead transmission lines are to be used to connect turbines to the substation building.

#### **De-commissioning**

98. At the end of the operational life of the wind farm, or of any individual turbine or turbines which are not renewed or replaced, every inoperative turbine and all other inoperative above ground structures shall be removed, and turbine footings covered in topsoil and re-vegetated.

#### **Lighting**

99. Lights shall only be installed on the turbines when required to meet Civil Aviation Authority requirements. Lights shall be low intensity steady red lights, to be directed upwards, shielded downwards, and installed on top of the nacelles.
100. If required, navigational lights on the berthing structure shall only be installed when required to meet Maritime New Zealand requirements.
101. Generally, the consent holder shall limit lighting as far as reasonably practicable to protect the night sky from unnecessary light pollution.



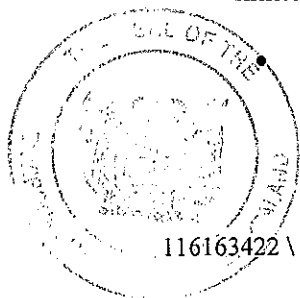
## Cultural

102. The consent holder, in consultation with the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc, and the New Zealand Historic Places Trust, shall prepare an Accidental Discovery Protocol to be implemented in the event of discovery of cultural or archaeological material. This protocol shall be submitted to the Compliance and Monitoring Officer, Strategy and Planning, for approval at least 20 working days prior to works commencing. The protocol shall include, but not be limited to:
- training procedures for all contractors regarding the possible presence of cultural or archaeological sites or material, what these sites or material may look like, and the relevant provisions of the Historic Places Act 1993 if any sites or material is discovered;
  - parties to be notified in the event of an accidental discovery (these shall include, but not be limited to, the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc, the New Zealand Historic Places Trust the Wellington Regional Council, Wellington City Council, and the New Zealand Police, if necessary);
  - procedures to be undertaken in the event of an accidental discovery (these shall include immediate ceasing of all works in the vicinity); and
  - procedures to be undertaken before works may recommence in the vicinity (these shall include allowance for appropriate tikanga (protocols), recording of sites and material, recovery, and obtaining approval of the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc, the New Zealand Historic Places Trust prior to recommencing works).
103. The consent holder in conjunction with the Wellington Tenth Trust and Te Runanga o Toa Rangatira, shall make a record of events where sites are destroyed or seriously modified, for the history of the rohe of Te Atiawa and Taranaki whānui ki te Whanganui-a-Tara.
104. A field survey shall be conducted by an archaeologist assigned to the project and iwi representatives in the following proposed turbine sites at the construction phase, prior to earthworks commencing:
- Te Rama a Paku N03A
  - Māori garden site at the saddle between Ohau Bay and Black Gully K01A
  - Waiariki H29B
105. A Memorandum of Understanding will be developed between the consent holder, the land owners, the Wellington Tenth Trust, Ngāti Tama and Te Runanga o Toa Rangatira as an effective means of addressing issues as the development progresses.

Note: the Trust and the Runanga will consult with different branches of Ngati Tama prior to the Memorandum being accepted.

106. The consent holder in conjunction with the Wellington Tenth Trust and Te Runanga o Toa Rangatira and Transpower shall prepare an action plan (including time-lines) for the protection and enhancement of the urupā and Oterongo Bay, including but not limited to:

further investigate identified sites and record their status prior to earthworks or construction;



- investigate whether the bounds of the urupā can be extended and a protective fence and Ara Huarahi (gate and pathway) to the urupā be constructed;
- prepare an imu waharoa (ceremonial oven for the dead) and for rites to be performed;
- erect an interpretation panel of the pā site adjacent to the urupā; and
- ensure that areas around the urupā are planted to secure its integrity as a wider site.

### **Community Liaison Group**

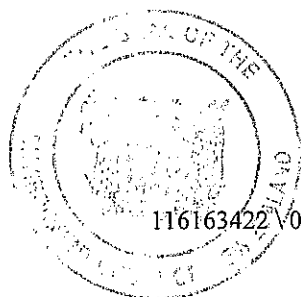
107. The consent holder shall facilitate the creation of a Community Liaison Group, at its cost and to the satisfaction of the Compliance and Monitoring Officer, Strategy and Planning, with the following organisations or interested parties being invited to nominate a representative or representatives:

- Wellington City Council (convenor)
- Makara/Ohariu Community Board
- Makara area Residents (2 representatives)

One representative nominated by the consent holder will also be a member of this group.

108. The function of the Community Liaison Group shall be to:

- i. Review performance of the consent holder in terms of the following matters:
  - noise control
  - construction traffic impact
  - parking management
- ii. Make recommendations to and receive feedback from the consent holder in respect of any of the above matters where considered necessary and appropriate.
- iii. Produce an annual report for presentation to the Strategy and Policy Committee of the Wellington City Council.
- iv. Review implementation of the noise management plan.
- v. To work with the consent holder to facilitate the establishment of an appropriate mechanism for the well being and enhancement of the communities adjoining the site, including Makara, South Makara, Makara Beach and Takarau Gorge.
- vi. Varied functions:
  - the group may vary its functions as it thinks fit from time to time to enable it to liaise more effectively with the community and the consent holder provided the variation is approved by the Compliance and Monitoring Officer, Strategy and Planning.



109. The first meeting of the Community Liaison Group shall be convened 3 months after construction of the wind farm commences and thereafter at six monthly intervals or at such other frequency as the Group decides.

#### **Air Traffic Control**

110. The consent holder shall continue to consult with Airways Corporation of New Zealand Limited to ensure adverse effects arising from the turbine installation are adequately avoided, remedied or mitigated to ensure the safe and efficient operation of the air transport network. Without limiting the generality of this condition, such consultation will include consultation throughout the detailed design and installation process to help avoid, remedy or mitigate any radar obstructions.
111. The consent holder shall ensure that any requirements of Airways Corporation of New Zealand Limited are applied to all turbine installations to avoid, remedy or mitigate any effects on the safe and efficient operation of the air transport network.

#### **Monitoring**

112. Prior to construction of the wind farm commencing and subsequently prior to any part of the work as determined by the Compliance and Monitoring Officer, the consent holder shall give at least 48 hours notice before work starts. This advice shall be given to the Wellington City Council's Compliance & Monitoring Team (Strategy and Planning), by either telephone (801 4017) or facsimile (801 3165), and must include the address of the property and the service request number.
113. The consent holder shall pay to the Wellington City Council the actual and reasonable costs associated with the monitoring of conditions, or review of consent conditions, or supervision of the resource consent as set in accordance with section 36 of the Resource Management Act 1991. These costs\* may include site visits, correspondence and other activities, the actual costs of materials or services, including the costs of consultants or other reports or investigations which may have to be obtained.

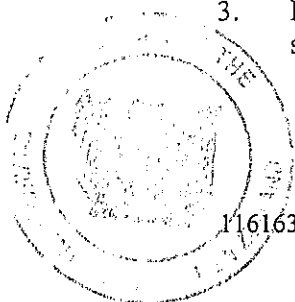
Please refer to the current schedule of Resource Management Fees for guidance on the current administration charge and hourly rate chargeable for Council officers.

#### **Nominated Council Officers**

114. The Chief Executive of the City Council may nominate any council officer to be substituted for any council officer named in these conditions, to the intent that if the title of a named officer changes then some other officer will be named instead.

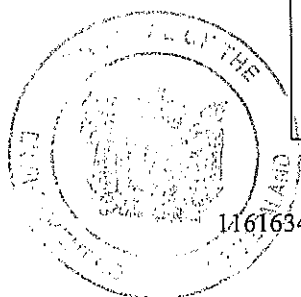
#### **Advice Notes:**

1. Where appropriate, the Council may agree to reduce the required monitoring charges where the consent holder will carry out appropriate monitoring and reporting back to the Council.
2. This resource consent is not a consent to build. Such a consent must be obtained under the Building Act 2004 prior to commencement of construction.
3. It is the responsibility of the consent holder to identify and at all times operate within site boundaries.

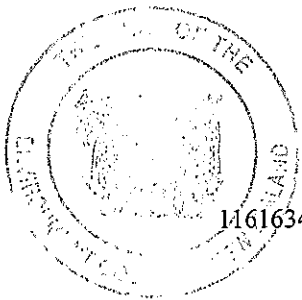


4. Prior to commencement of any work, including excavations, an Earthworks Consent under Part 8 of the Wellington Consolidated Bylaw 1991 will be required.
5. Any demolition material or construction waste that does not fit the definition of clean fill must be removed from the site to an approved disposal area.
6. For the purposes of conditions imposed under this consent, the ACOUSTIC DEFINITIONS AND TERMINOLOGY are to be applied, as shown in the table overleaf:

Background Sound Level,	$L_{95}$ , in decibels, is the level equalled or exceeded for 95% of the time and is the component of sound that subjectively is perceived as continuously present. N.B. $L_{95}$ is used in the 1991 versions of NZS6801 and NZS6802 to describe background sound level whereas $L_{90}$ is used in the 1999 versions of these Standards. There is normally an insignificant difference between the two measured values.
dBA	The term used to describe the A-weighted sound level in decibels. By A-weighting the measured sound level a representative reading is provided that correlates to human hearing.
Impulsive Sound	Is transient sound having a high peak level of very short duration, typically less than 50 milliseconds.
Intrusive Sound	As a guide to establishing limits of acceptability, and within limitations (described in NZS6802:1991) $L_{10}$ should not exceed the background sound level by 10dB or more.
$L_{10}$	Is that sound level which is equalled or exceeded for 10% of the time, in decibels.
$L_{eq}$	Time average level which is the continuous steady level that is equivalent to the time varying level, in decibels.
$L_{max}$	The maximum sound level in the period of interest, in decibels.
Notional Boundary	The notional boundary is defined as a line 20 metres from any side of a dwelling, or the legal boundary where this is closer to the dwelling.
Special Audible Characteristics	Noise that has tonality or impulsiveness such that it is likely to arouse adverse community response at lower levels than noise without such characteristics. When a noise has special audible characteristics the relevant performance standard $L_{10}$ descriptor may be reduced arithmetically by 5dB for comparison with the measured $L_{10}$ descriptor of the noise. N.B. Tonality is already accounted for in the tables in the NZS6803:1999 <i>Acoustics - Construction Noise</i> and no further penalty made for construction noise that has special audible characteristics when assessed using



	that Standard.
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## APPENDIX B

### GREATER WELLINGTON REGIONAL COUNCIL CONSENT CONDITIONS

#### **1. Roading and earthworks**

**Land use consent WGN060001 [24564]** to undertake any roading or tracking activity that during any 12 month period will result in a road or track having a continuous length of new upslope batter extending for greater than 200 metres, with a height of greater than 2 metres measured vertically; and to undertake earthworks on erosion prone land that involves the disturbance of greater than or equal to 1,000 m<sup>3</sup> of soil within any 10,000 m<sup>2</sup> area (calculated using a minimum width of 10 metres) and within any continuous 12 month period.

**Discharge permit WGN060001 [24565]** to discharge contaminated stormwater, associated with roading and tracking activities, earthworks, a mobile gravel crushing plant, a concrete batching plant and a substation, to land that may enter water.

**Discharge permit WGN060001 [24566]** to discharge contaminated stormwater originating from any area of bulk earthworks greater than 0.3 hectares to fresh water.

#### **General conditions**

- (1) The location, design, implementation and operation of all earthworks and associated discharges of sediment-laden stormwater to land and water shall be undertaken in general accordance with the following documents, unless any modifications are required to comply with any of the conditions of this consent:
  - a) the consent application lodged with the Wellington Regional Council on 1 July 2005, as amended through the Environment Court decision and the Revised West Wind layouts dated 12 March 2007;
  - b) Wellington Regional Council's *Erosion and Sediment Control Guidelines for the Wellington Region* dated September 2002; and
  - c) any additional plans or information to be prepared and submitted to the Wellington Regional Council for approval in accordance with various conditions of this consent.
- (2) The Manager, Consents Management, Wellington Regional Council, may review any or all conditions of this consent by giving notice of its intention to do so pursuant to Section 128 of the Resource Management Act 1991, at any time within six

months of the first, third and fifth anniversaries of the date of commencement of this consent for any of the following purposes:

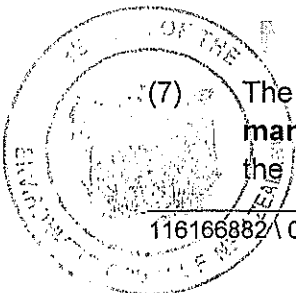
- a) To deal with any adverse effects on the environment, which may arise from the exercise of this consent, and which it is appropriate to deal with at a later stage; and
  - b) To review the adequacy of any monitoring plans proposed and/or monitoring requirements so as to incorporate into the consent any monitoring or other requirements which may become necessary to deal with any adverse effects on the environment arising from the exercise of this consent.
- (3) The Wellington Regional Council shall be entitled to recover from the consent holder the actual and reasonable costs of the conduct of any review, calculated in accordance with and limited to the Council's scale of charges in-force and applicable at that time pursuant to Section 36 of the Resource Management Act 1991.

#### **Pre-construction requirements**

- (4) The consent holder shall provide written notification of the works commencing in each of the areas shown on drawing 24 (Revision 2), sheet 50 of Appendix B of the application to the Manager, Consents Management, Wellington Regional Council, at least five working days prior to works commencing in each area.
- (5) The consent holder shall provide a copy of this consent and all documents referred to in this consent to any operator or contractor undertaking works authorised by this consent, prior to the works commencing.
- (6) The consent holder shall commence trials to assess the suitability of revegetation techniques and treatments of exposed rock cuttings within three months of the granting of this consent.

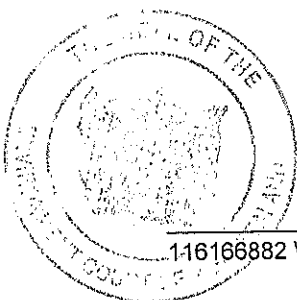
A report of the results to date, identifying suitable revegetation techniques and rock treatments, shall be included in the environmental management plan required by condition 7 of this consent. This report shall identify which techniques and treatments are generally suitable for different areas and works within the project site.

- (7) The consent holder shall prepare, submit and implement a site-wide **environmental management plan (EMP)** for all construction works authorised by this consent to the Manager, Consents Management, Wellington Regional Council, for approval at



least 20 working days prior to works commencing. The EMP shall include, but not be limited to:

- roles and responsibilities, including appointment of a representative to be the primary contact person in regard to matters relating to this consent;
- arrangement and conduct of a pre-construction site meeting between all relevant parties, including all contractors and relevant local authorities, prior to any works commencing on the site to discuss implementation of erosion and sediment control measures;
- sequencing of works over the whole site;
- the method for preparation and submission of supplementary environmental management plans (SEMP);
- the potential adverse effects of the works;
- procedures for earthworks, erosion and sediment control and re-vegetation/stabilisation of the site;
- monitoring, record-keeping and maintenance requirements;
- contingency measures;
- an investigation into the use of chemical flocculation for sediment retention ponds as an alternative stormwater treatment method;
- the following rehabilitation principles should be expressly adopted:
  - Minimisation of sidling cuts wherever practicable, and locating road and turbine platforms on or as close to ridgelines as practicable.
  - To identify and give particular attention to high cuts that will be visible from dwellings and public open space including from at sea.
  - For the engineer, ecologist and landscape architect to work together to design the final shape of, and re-vegetation proposals for, earthworks and rock cuts as part of the detailed design process.
  - To educate each excavator operator, so that s/he understands the rehabilitation objectives and is able to be flexible in response to the rock that is uncovered. *Note: Informing and gaining the active support of the machine operator will often lead to superior results where they take a pride in the finished result.*
  - To shape the finished cuts to emulate natural rock features and avoid the creation of uniform linear features. This may include rolling back the top, ripping sections to create shaped corners, creating gully like features and scree-like slopes, benching etc.



- To shape the finished cuts to provide areas of fractured rock that will provide microhabitats for native grasses, ferns and shrubs. *Note: This can be achieved by ripping the face, shaping the face to create hollows and guts and so on.*
  - To shape the finished cuts to allow the deposition of soil in key areas so that tall shrubs can rapidly establish helping to break up the face. This can include benching, and bunding the toe of the cut when turbine erection has been completed and the 10.0m wide road carriageway is reduced to a width of 5.0m.
  - To vegetate cuts with plants equivalent to the slopes above and below the cut.
- the report of the results of the revegetation trials required by condition 6 of this consent;
  - principles and procedures for rehabilitation of exposed areas including rehabilitation methods and vegetation mixes;
  - techniques to be used to revegetate rock cuts;
  - procedures for weed control; and
  - identification of baseline monitoring activities.

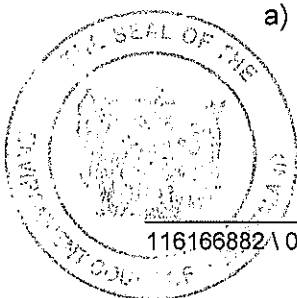
**Note:**

- The EMP provides an umbrella document that identifies the management processes and techniques to ensure appropriate environmental management of the site. The SEMP's are undertaken in general accordance with the procedures outlined in the EMP.
- Post-construction matters addressed by the EMP shall not be limited in duration.

- (8) The consent holder shall prepare, submit and implement a **supplementary environmental management plan (SEMP)** for each of the areas shown on drawing 24 (Revision 2), sheet 50 of Appendix B of the application, or as agreed by the Manager, Consents Management, Wellington Regional Council. The SEMP shall be submitted to the Manager, Consents Management, Wellington Regional Council, for approval at least 20 working days prior to works commencing in each plan area. A suitably qualified ecologist and environmental management specialist shall assist in the preparation of the SEMP's.

- a) The SEMP shall be in general accordance with the EMP and shall include, but not be limited to:

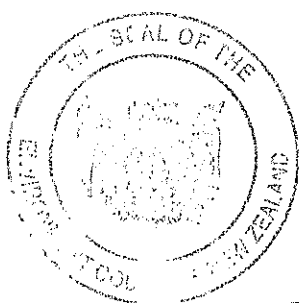
- a detailed design and construction methodology for all works;



- demonstration that the earthworks will not adversely affect known stock or drinking water supplies;
- notification of any operator or contractor appointed to carry out the works authorised by this consent, including the contractor's company, address, named representative and their contact details;
- a detailed schedule of construction activities including the expected commencement date and duration of works in each location within the area;
- a staging of works to demonstrate that the area of disturbance will be kept to a minimum; and
- evidence that a suitably qualified engineer has been appointed to carry out the overall design, supervision and certification of earthworks (including cut/fill batter stability and construction of all erosion and sediment controls).

b) In respect of erosion and sediment control, the SEMP shall be prepared in general accordance with the Erosion and Sediment Control Guidelines for the Wellington Region and shall include, but not be limited to:

- detailed design specifications of all earthworks, including disposal sites, and all erosion and sediment control measures to be implemented, including supporting calculations where appropriate;
- the expected commencement dates for the implementation of erosion and sediment controls measures in each area;
- information regarding whether chemical flocculation of any of the proposed sediment retention ponds is required;
- monitoring and maintenance schedules for all erosion and sediment control measures on a set frequency (at least weekly), or within 24 hours of each rainstorm event that is likely to impair the function or performance of the control measures;
- a site plan showing contours at suitable intervals, cut and fill operations, the specific location of all sediment and erosion control measures, and catchment boundaries for the sediment controls;
- confirmation that, where possible, the outlets or discharge points from all erosion and sediment control measures are sited so that the stormwater runs over vegetated land prior to discharging to an ephemeral or permanent watercourse. Where not possible, the SEMP shall indicate the steps to be taken to avoid, remedy or mitigate the effects;
- ensuring that temporary stockpiles of materials are not permitted within 50m of any ephemeral stream or permanent watercourse unless there is efficient treatment of stormwater (which may include discharging to vegetated land); and
- identification of measures to ensure that there is no tracking of mud or earth onto the surrounding road network.

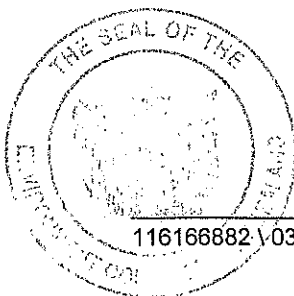


c) In respect of revegetation and rehabilitation activities, the SEMP shall include, but not be limited to:

- identification of soil resource to be used for rehabilitation;
- identification of the vegetation types to be used on a plan or schedule;
- a programme for revegetation and maintenance activities for a period up to the expiry date of this consent (maintenance activities may include the exclusion of pest browsers and stock and the removal of weeds, and additional fencing may be required for the exclusion of stock);
- the desired percentage of surface cover to be achieved to reduce the adverse effects from sediment-laden stormwater run-off;
- identification of weed management activities to be undertaken; and
- identification of innovative treatments of exposed rock cuttings that are to be used.
- eco-sourcing of seeds/plants where practicable.

d)SEMPs shall demonstrate that full consideration has been given to:

- minimising the extent of disposal sites and the discharge of sediment-laden stormwater within the Makara Stream catchment ;
- avoiding, where possible, discharges to catchments used for domestic water supply;
- avoiding areas identified on the plan attached for the protection of geological features on Quartz Hill;
- avoiding disturbance to wetland areas, including the wetland area located north east of the former BCNZ receiving station;
- protecting the wetland area located north east of the former BCNZ receiving station by installing a silt fence around the entire wetland during the construction works period;
- minimising the extent and effects of earthworks, including, but not be limited to, the following techniques:
  - following ridgelines where practicable;
  - locating cuts so that they are hidden from views from residential and coastal locations outside the site as far as practicable; and
  - benching, contouring and otherwise softening rock cuts where practicable and appropriate;



and

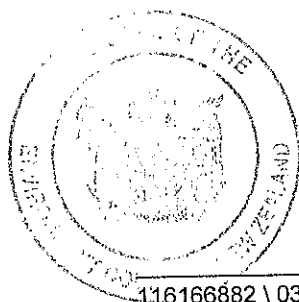
- avoiding discharges to the catchment containing the Warren's QEII covenant area.

(9) Prior to the use of chemical flocculation, if required by an SEMP and approved by the Manager, Consents Management, Wellington Regional Council under condition 8(b), the consent holder shall prepare, submit and implement a **flocculation management plan** (FMP) for chemically-treated sediment retention ponds within each of the areas shown on drawing 24 (Revision 2), sheet 50 of Appendix B of the application, or as agreed by the Manager, Consents Management, Wellington Regional Council. The FMP shall be submitted to the Manager, Consents Management, Wellington Regional Council, for approval at least 20 days prior to any flocculation works commencing. The FMP shall include, but not be limited to:

- identification of the ponds in each area in which chemical flocculation will be incorporated;
- specific design details of the flocculation system;
- details of optimum dosage (including assumptions);
- procedures for the storage of flocculation chemical(s) onsite;
- procedures for the transportation of flocculation chemical(s);
- methods and responsibilities for monitoring and maintenance of the system;
- a flocculation chemical spill contingency plan; and
- identification of a suitably qualified and experienced person and their specific responsibilities for ensuring the operation, monitoring and maintenance of the chemical flocculation system to ensure that each sediment retention pond is operated as outlined in the FMP.

(10) The consent holder shall prepare, submit and implement a site-wide **contingency plan** for contaminant of spills to the Manager, Consents Management, Wellington Regional Council, for approval at least 20 working days prior to works commencing. The contingency plan shall:

- identify designated contaminant storage facilities and re-fuelling locations;
- require that these locations are bunded, and that machinery is parked long-term only in these designated areas;
- require that all mobile fuel tankers carry spill kits and that spill kits are stored at bulk storage tank locations at all times;
- detail the contents of the spill kits, including absorbent pads, booms, pillow and socks and appropriate pegs/rope to hold the absorbent material in place;



- record the names of operators trained in spill response and remediation;
- detail an internal and external notification procedure in the event of a spill; and
- identify measures to be undertaken to remediate a contaminant spill.

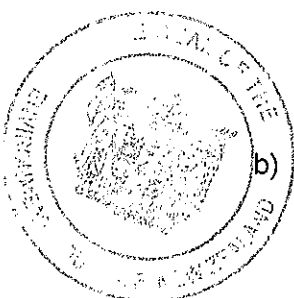
(11) The consent holder shall prepare, submit and implement a **monitoring plan** to the Manager, Consents Management, Wellington Regional Council, for approval at least 60 working days prior to works commencing. The monitoring plan shall include, but not be limited to:

a) for baseline monitoring of streams (prior to works commencing):

- identification of monitoring locations that are representative of the receiving waters and the discharge points;
- identification of monitoring locations that can be used as control points;
- monitoring procedures and responsibilities;
- a monitoring time table that identifies when monitoring will commence and the frequency and duration of monitoring; and
- monitoring parameters and methods, which shall include:
  - (i) observations in accordance with condition 18 of this consent;
  - (ii) pH;
  - (iii) temperature (°C);
  - (iv) turbidity (NTU);
  - (v) suspended solids (g/m<sup>3</sup>);
  - (vi) dissolved oxygen (% and/or mg/L);
  - (vii) fish surveys; and
  - (viii) macroinvertebrate community index (MCI) calculations.

A report on the results of baseline monitoring shall be prepared and submitted to the Manager, Consents Management, Wellington Regional Council, prior to the submission of the first SEMP. The results of baseline monitoring shall inform the development of the detailed design of the earthworks authorised by this consent and the preparation of the SEMP.

b) for ongoing monitoring:





- a process for determining, in consultation with Wellington Regional Council, ongoing monitoring locations, procedures, methods, timing, frequency and duration from the baseline monitoring;
- identification of trigger levels for specific parameters that, if breached, require additional monitoring or the implementation of contingency measures; and
- identification of specific measures to be implemented when trigger levels are breached.

The monitoring shall be undertaken by a suitably qualified person. All monitoring results obtained in accordance with the conditions of this consent shall be recorded in a log on-site, shall be available for inspection during normal office hours and shall be submitted to the Manager, Consents Management, Wellington Regional Council, at quarterly intervals. Records shall also be kept to show where monitoring is not possible due to dry conditions or where no sediment retention pond inflow or outflow exists.

- (12) The consent holder, in consultation with the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc and the New Zealand Historic Places Trust, shall prepare an **accidental discovery protocol** to be implemented in the event of discovery of cultural or archaeological material. This protocol shall be submitted to the Manager, Consents Management, Wellington Regional Council, for approval at least 20 working days prior to works commencing. The protocol shall include, but not be limited to:

- training procedures for all contractors regarding the possible presence of cultural or archaeological sites or material, what these sites or material may look like, and the relevant provisions of the Historic Places Act 1993 if any sites or material is discovered;
- parties to be notified in the event of an accidental discovery (these shall include, but not be limited to, the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc, the New Zealand Historic Places Trust, the Wellington Regional Council, Wellington City Council and the New Zealand Police, if necessary);
- procedures to be undertaken in the event of an accidental discovery (these shall include immediate ceasing of all works in the vicinity); and
- procedures to be undertaken before works may recommence in the vicinity (these shall include allowance for appropriate tikanga (protocols), recording of sites and material, recovery, and obtaining approval of the



Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc and the New Zealand Historic Places Trust prior to recommencing works).

(13) Works shall not commence in any area until the following documents have been approved by the Manager, Consents Management, Wellington Regional Council:

- a) a site-wide environmental management plan (in accordance with condition 7 of this consent);
- b) a supplementary environmental management plan (in accordance with condition 8 of this consent) for the area covered by the works;
- c) a flocculation management plan (in accordance with condition 9 of this consent, if required);
- d) a site-wide contingency plan for contaminant spills (in accordance with condition 10 of this consent);
- e) a monitoring plan (in accordance with condition 11 of this consent); and
- f) a site-wide accidental discovery protocol (in accordance with condition 12 of this consent).

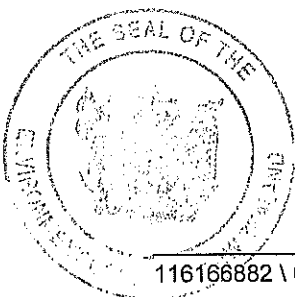
**General construction conditions**

(14) The consent holder shall ensure that all sediment-laden discharges from the site are treated by the erosion and sediment control measures approved and implemented in general accordance with the relevant SEMP under condition 8(b) of this consent.

(15) The consent holder may request amendments to the EMP or any SEMP by submitting the amendments in writing to the Manager, Consents Management, Wellington Regional Council, for approval, prior to any changes taking effect.

(16) The consent holder shall ensure that:

- a) all fill slopes are keyed into the surrounding land, as far as practicable;
- b) all fill material is placed and compacted so as to minimise any erosion and/or instability of the fill material;

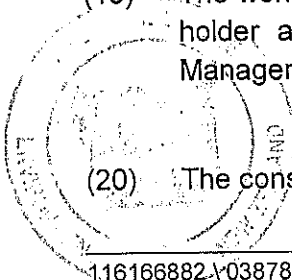


- c) fill material is restricted to natural rock and soil;
  - d) final disposal site slope profiles are contoured to merge in with the existing slope, as far as practicable, to minimise erosion and hydrological changes;
  - e) long-term stockpiles of topsoil and excavated material are suitably stabilised to minimise erosion potential; and
  - f) any erosion of fill material is immediately remedied or mitigated to the satisfaction of the Manager, Consents Management, Wellington Regional Council.
- (17) The consent holder shall provide the Manager, Consents Management, Wellington Regional Council, with an updated schedule of construction activities at monthly intervals during the works.
- (18) The consent holder shall, at all times, take all practicable steps for minimising erosion and/or minimising the suspended solids content of any discharge that may enter any ephemeral or permanent watercourse, which may result in any of the following effects after reasonable mixing:
- the production of any conspicuous oil or grease films, scums or foams or floatable or suspended material;
  - any conspicuous change in colour or visual clarity;
  - any emission of objectionable odour;
  - the rendering of freshwater unsuitable for consumption by humans and farm animals;
  - any significant adverse effect on aquatic life; and
  - a change of more than 3° Celsius in the natural temperature of the water.

For the purposes of this condition, the zone of 'reasonable mixing' is defined as the length of stream that is ten times the average width of the stream, or 20 metres, whichever is greater.

- (19) The works authorised by this consent shall remain the responsibility of the consent holder and shall be maintained to the satisfaction of the Manager, Consents Management, Wellington Regional Council.

- (20) The consent holder shall ensure that:

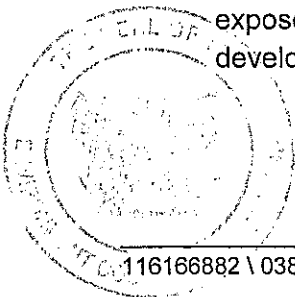


- a) all contaminant storage or re-fuelling areas are bunded or contained in such a manner so as to prevent the discharge of contaminants
  - b) all machinery is thoroughly cleaned of unwanted vegetation (e.g. weeds), seeds or contaminants prior to entering the site;
  - c) all machinery is regularly maintained in such a manner so as to minimise the potential for leakage of contaminants;
  - d) no machinery is cleaned, stored or refuelled within 50 metres of any ephemeral or permanent watercourse; and
  - e) all contaminants (e.g. fuel, hydraulic oils, lubricants etc) are removed at the end of the construction period, except for those required for ongoing maintenance of the wind farm and operational activities
- (21) No sediment retention ponds, chemical flocculation systems or perimeter controls are to be removed or decommissioned before approval is applied for in writing, and received, from the Manager, Consents Management, Wellington Regional Council, and the entire area is stabilised, unless such removal and decommissioning is in accordance with the requirements of the SEMP.

**Note:** For the purposes of this condition 'stabilised' means inherently resistant to erosion or rendered resistant, such as by using indurated rock or by the application of basecourse, colluvium, grassing, mulch, or another method to the reasonable satisfaction of the Manager, Consents Management, Wellington Regional Council and as specified in *Erosion and Sediment Control Guidelines in the Wellington Region*. Where seeding or grassing is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once, on reasonable visual inspection by the Manager, Consents Management, Wellington Regional Council, 80% vegetative ground cover has been established.

- (22) The consent holder shall ensure that all areas exposed by earthworks are re-grassed or re-vegetated within 10 days or as soon as practicable upon completion of the earthworks in each SEMP area.

The plant species used shall be consistent with the species in the immediate vicinity of the exposed area, replacing "like with like". The revegetation and rehabilitation of exposed areas shall be in accordance with the requirements of the relevant SEMP developed in accordance with condition 8(c) of this consent.



### Incidents/public complaints

- (23) The consent holder shall immediately notify the Manager, Consents Management, Wellington Regional Council, if any contaminants (including sediment) or material is released from the site and enters any watercourse due to any of the following:
- a) discharges from unstabilised areas that are not treated by erosion and sediment control measures required under condition 8(b) of this permit; and/or
  - b) failure of any erosion and sediment control measures; and/or
  - c) any other incident which either directly or indirectly causes, or is likely to cause, adverse ecological effects in any watercourse.

If any of these events occur, the consent holder shall:

- d) liaise with the Manager, Consents Management, Wellington Regional Council, to establish what remediation or rehabilitation works are required and whether such works are practical to implement;
- e) carry out any remedial action as required by and to the satisfaction of the Manager, Consents Management, Wellington Regional Council; and
- f) maintain a permanent record of the incident at the work site, which shall include the date and time of the incident, the nature, manner and cause of the release of the contaminants, weather conditions at the time of the incident and the steps taken to contain any further release and to remedy the adverse ecological effects on the watercourse.

A copy of this record shall be provided to the Manager, Consents Management, Wellington Regional Council, within 5 working days of the incident being brought to the attention of the consent holder.

- (24) The consent holder shall maintain a permanent record of any complaints received alleging adverse effects from, or related to, the exercise of this consent. The record shall include:

- the name and address (as far as practicable) of the complainant;
- identification of the nature of the matter complained about;
- date and time of the complaint and of the alleged event;



- weather conditions at the time of the complaint (as far as practicable);
- the outcome of the consent holders investigation into the complaint; and
- measures taken to ensure that such a complaint does not occur again.

This record shall be maintained at the work site and shall be made available to the Manager, Consents Management, Wellington Regional Council, upon request. The consent holder shall notify the Manager, Consents Management, Wellington Regional Council, in writing of any such complaint within 5 working days of the complaint being brought to the attention of the consent holder.

## 2. Stream modifications and structures

### 2.1 Conditions for all consents WGN060001 [24567], [24568], [24574], [24585]

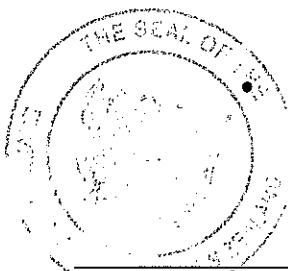
#### General conditions

- (1) Unless any modifications are required to comply with any of the conditions of this consent, the location, design, implementation and operation of the works shall be in general accordance with the:
  - a) consent application and its associated plans and documents lodged with the Wellington Regional Council on 1 July 2005, as amended through the Environment Court decision and the Revised West Wind layouts dated 12 March 2007; and
  - b) information to be prepared and submitted to the Wellington Regional Council in accordance within condition 2 of this consent.

#### Pre-construction administration conditions

- (2) The consent holder shall prepare and submit **detailed design plans and construction methodology**, including proposed duration and timing for all structures and stream works authorised by this consent, to the Manager, Consents Management, Wellington Regional Council, for approval at least 20 working days prior to works commencing.

The detailed design plans and construction methodology shall include:



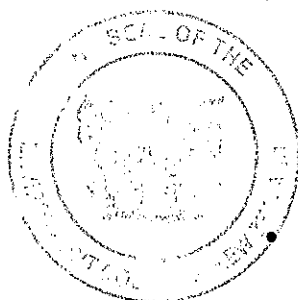
- measures/methods to ensure that fish passage is maintained during and on completion of construction works along the stretches of stream affected by the exercise of this consent;

- details of culvert inlet/outlet protection structures e.g. pre-cast wing walls or rock rip-rap;
  - appropriate sizing of culverts and allowances for secondary flow paths during high flows; and
  - any other measures or details as appropriate to ensure compliance with all conditions of this consent.
- (3) Works shall not commence until the detailed design plans and construction methodology required by condition 2 of this consent have been approved by the Manager, Consents Management, Wellington Regional Council.
- (4) The Manager, Consents Management, Wellington Regional Council, shall be given a minimum of 48 hours notice in writing, prior to works commencing in each location (including any maintenance works).

**Note:** This condition excludes works/activities permitted by the Regional Freshwater Plan for the Wellington Region.

- (5) The consent holder shall pass a copy of this consent, including any relevant site plans and attachments, to the contractor undertaking the works authorised by this consent, prior to the works commencing.
- (6) The consent holder, in consultation with the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc and the New Zealand Historic Places Trust, shall prepare an **accidental discovery protocol** to be implemented in the event of discovery of cultural or archaeological material. This protocol shall be submitted to the Manager, Consents Management, Wellington Regional Council, for approval at least 20 working days prior to works commencing. The protocol shall include, but not be limited to:

- training procedures for all contractors regarding the possible presence of cultural or archaeological sites or material, what these sites or material may look like, and the relevant provisions of the Historic Places Act 1993 if any sites or material is discovered;
- parties to be notified in the event of an accidental discovery (these shall include, but not be limited to, the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc, the New Zealand Historic Places Trust the Wellington Regional Council, Wellington City Council, and the New Zealand Police, if necessary);



- procedures to be undertaken in the event of an accidental discovery (these shall include immediate ceasing of all works in the vicinity); and

- procedures to be undertaken before works may recommence in the vicinity (these shall include allowance for appropriate tikanga (protocols), recording of sites and material, recovery, and obtaining approval of the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc, the New Zealand Historic Places Trust prior to recommencing works).

(7) The consent holder shall prepare and implement a **revegetation and mitigation strategy** for the stream modifications and structures authorised by this consent. The strategy shall be submitted and approved by the Manager, Consents Management, Wellington Regional Council, at least 20 working days prior to any works commencing. The revegetation and mitigation strategy shall include, but not be limited to:

- details, methods, timing and responsibilities for revegetation of all exposed areas of stream bank or dewatered channel or culvert fill slopes as a result of this consent, including the methods for the protection of such areas;

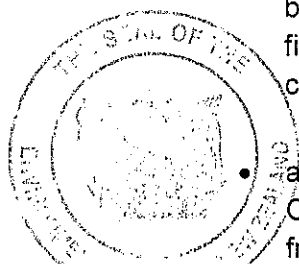
In respect of Oteranga Stream only:

- details, methods, timing and responsibilities for the complete removal of all structures and reinstatement of natural stream bed, at existing crossing sites where these will become obsolete due to the creation of the access track; and
- details, methods, timing and responsibilities for the permanent fencing and retirement of the three areas identified on the map attached.

**Note:** the plant species used to revegetate areas shall be consistent with the species in the immediate vicinity of the exposed areas ("like-with-like"), with native species suitable for stream side and spawning habitats preferred at all times.

(8) The consent holder shall prepare and implement a **monitoring plan** for the Oteranga or Ohau Stream and tributaries to assess the effects of the stream modifications and structures authorised by this consent. The plan shall be submitted and approved by the Manager, Consents Management, Wellington Regional Council, at least 20 working days prior to any works commencing. The plan shall include, but not be limited to:

- location, procedures, methodology, timing, duration and frequency of baseline monitoring to confirm the presence and distribution of indigenous fish and indicator species of freshwater invertebrates prior to works commencing;
- a process for determining, in consultation with Wellington Regional Council, the location, procedures, methodology, timing, duration and frequency of monitoring during construction and for one migration season





after the wind farm is completed to confirm recovery of these waterbodies and continued fish passage. The results of baseline monitoring will be used to inform this process; and

- remedial and/or mitigation action(s) to be undertaken if monitoring indicates that fish passage has been affected by construction or that the freshwater habitat has been significantly modified.

In preparing this plan, the consent holder shall consult with the Director General of Conservation. The monitoring shall be undertaken by a suitably qualified person.

A report on the results of baseline monitoring shall be prepared and submitted to the Manager, Consents Management, Wellington Regional Council, prior to any works authorised by this consent commencing. This report shall assist in the development of the detailed design and construction methodology of the works authorised by this consent.

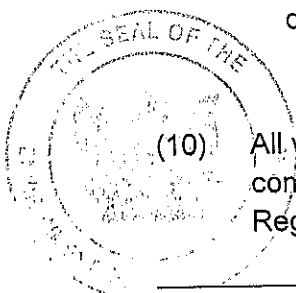
All monitoring results obtained in accordance with the conditions of this consent shall be recorded in a log on-site, shall be available for inspection during normal office hours and shall be submitted to the Manager, Consents Management, Wellington Regional Council, at quarterly intervals.

A copy of the results will be provided to the Director General of Conservation.

### **General construction conditions**

(9) The consent holder shall ensure that:

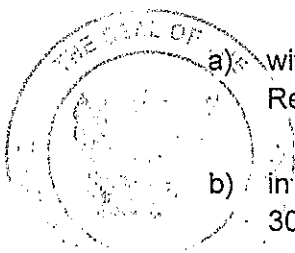
- a) all contaminant storage or re-fuelling areas are bunded or contained in such a manner so as to prevent the discharge of contaminants;
- b) all machinery is thoroughly cleaned of unwanted vegetation (e.g. weeds), seeds or contaminants prior to entering the site;
- c) all machinery is regularly maintained in such a manner so as to minimise the potential for leakage of contaminants; and
- d) no machinery is cleaned, stored or refuelled within 50 metres of any ephemeral or permanent watercourse.



(10)

All works affecting the stream, including tidy up on completion of the works, shall be completed to the satisfaction of the Manager, Consents Management, Wellington Regional Council.

- (11) The consent holder shall take all practicable steps to minimise sedimentation and disturbance of the stream during the construction and implementation of the works, including:
- a) completing all works in the minimum time practicable;
  - b) minimising the area of disturbance at all times;
  - c) avoiding placement of excavated material in the wetted channel;
  - d) separating construction activities from the wetted channel;
  - e) minimising time spent by machinery in the wetted channel, including the number of vehicle crossings; and
  - f) immediately removing any excess material from the bed and banks of the stream on completion of the works.
- (12) The consent holder shall ensure that appropriate sediment-laden stormwater run-off controls are installed prior to, and during, all construction works. These controls shall include diverting runoff from adjacent disturbed areas and installing silt fences along stream banks.
- (13) The consent holder shall ensure that all exposed areas are stabilised against erosion by re-vegetating the area within 10 working days or as soon as practicable upon completion of the works in each location.
- (14) The consent holder shall ensure that fish passage is maintained at all times during and on completion of the construction works along the stretches of stream affected by the exercise of this consent. Any fish stranded or trapped by the construction works as authorised by this consent shall be immediately relocated upstream to clear water.
- (15) During whitebait migration season (between 1 September to 30 November inclusive) and/or the adult fish spawning season (between 1 April to 31 July inclusive), works within the wetted channel of the stream are only permitted:



- a) with the prior approval of the Manager, Consents Management, Wellington Regional Council; and
- b) in any case, will be limited to 1 day out of 7 and no more than 2 days in any 30 days.

**Note:** This condition excludes works as permitted by Rule 22 of the Regional Freshwater Plan for the Wellington Region.

- (16) The consent holder shall ensure that no in-stream works (i.e. affecting the wetted channel of the stream) occur past 6.00pm during the time of the year recognised as daylight savings, or 5.00pm at all other times.

## **2.2 Conditions relevant to specific consents/permit**

**Land use consent WGN060001 [24567]** to undertake works in the bed of Oteranga Stream and associated tributaries, including the construction, use and maintenance of culverts and fords; the construction and maintenance of gabion baskets and rock rip-rap erosion protection structures; and associated channel realignment and disturbance of the beds of those streams.

- (17) The consent holder shall incorporate the use of geotextile fabric to line the fill behind gabion basket or rock rip-rap erosion protection structures.
- (18) All structures, including culvert wing walls, gabion basket and rock rip-rap, shall be inset into the bed at least 500 millimetres below the level of the deepest scour hole in the immediate vicinity of the works.
- (19) The consent holder shall ensure that:
- a) the culverts are set below the natural bed level in the immediate vicinity of the works; and
  - b) flow velocities during normal flow within the culverts are not so excessive as to prevent fish passage.
- (20) The consent holder shall ensure that larger boulders are randomly placed along the toe of any rock rip-rap structures to form an undulating bank profile.
- (21) The consent holder shall ensure that the constructed stream bed channels include natural-like meanders and an undulating bed profile.

- (22) The consent holder shall only use natural rock and soil material to backfill behind gabion basket and rock rip-rap structures and construct stream crossings. All fill material shall be placed and compacted so as to minimise any erosion and/or instability.

(23) The works shall remain the responsibility of the consent holder and shall be regularly inspected and maintained by the consent holder so that:

- a) the waterway of the culverts and fords remains substantively clear of debris;
- b) any erosion of the stream banks or bed that is attributable to the works authorised by this consent are remedied by the consent holder;
- c) the structural integrity of the structures remains sound; and
- d) fish passage through the culverts and fords is not impeded.

**Note:** Maintenance does not include any works outside of the scope of the application. Any additional works (including structures, reshaping or disturbance to the stream bed) following completion of the construction works as proposed in the application, may require further resource consents.

**Land use consent WGN060001 [24585]** to permanently reclaim sections of the bed of Oteranga Stream.

(17) The consent holder shall only use natural rock and soil material to reclaim the stream bed. All fill material shall be placed and compacted so as to minimise any erosion and/or instability.

**Water permit WGN060001 [24568]** to permanently divert the flow of Oteranga Stream.

(17) The consent holder shall ensure that all works authorised by this permit to be undertaken in the dry bed of the stream, are completed before the flow of the stream is diverted.

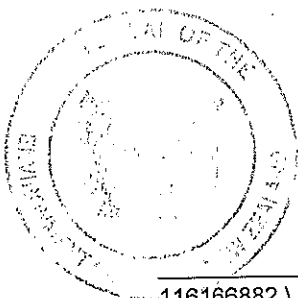
**Land use consent WGN060001 [24574]** to undertake works in the bed of Ohau Stream and associated tributaries, including the construction, use and maintenance of culverts and fords, and any associated temporary diversion and disturbance of the beds of those streams.

(17) All structures, including culvert wing walls, shall be inset into the bed at least 500 millimetres below the level of the deepest scour hole in the immediate vicinity of the works.

(18) The consent holder shall ensure that:

- a) the culverts are set below the natural bed level in the immediate vicinity of the works; and
  - b) flow velocities within the culverts are not excessive so as to prevent fish passage.
- (19) The consent holder shall only use natural rock and soil material to backfill to construct stream crossings. All fill material shall be placed and compacted so as to minimise any erosion and/or instability.
- (20) The works shall remain the responsibility of the consent holder and shall be regularly inspected and maintained by the consent holder so that:
- a) the waterway of the culverts and fords remains substantively clear of debris;
  - b) any erosion of the stream banks or bed that is attributable to the works authorised by this consent are remedied by the consent holder;
  - c) the structural integrity of the structures remains sound; and
  - d) fish passage through the culverts and fords is not impeded.

**Note:** Maintenance does not include any works outside of the scope of the application. Any additional works (including structures, reshaping or disturbance to the stream bed) following completion of the construction works as proposed in the application, may require further resource consents.



### 3. Coastal structures and activities

#### 3.1 Conditions for construction activities

Oteranga Bay:

**Coastal permit WGN060001 [24570]** to construct, exclusively use and maintain a berthing structure within the coastal marine area.

**Coastal permit WGN060001 [24571]** to disturb the foreshore and seabed during the construction, use, maintenance and removal of a berthing structure and associated drilling of piles.

**Coastal permit WGN060001 [24572]** to discharge sediment to coastal water during the construction, use, maintenance and removal of a berthing structure.

#### Pre- construction requirements

- (1) The permit holder shall prepare and submit **detailed design plans** for the berthing structure that will be placed in the coastal marine area (including its location) to the Manager, Consents Management, Wellington Regional Council, for approval at least 20 working days prior to the proposed date of commencement of construction of the structure.
- (2) The permit holder shall provide a detailed **construction management plan (CMP)** for all activities related to the construction of the berthing structure, at least 20 working days prior to the proposed date of commencement of construction of the structure. The CMP shall include, but not be limited to:
  - a detailed construction methodology;
  - identification of materials to be used to fill the berthing structure, including type of material, quantities and source;
  - sediment control methods to be used on site;
  - a construction timetable;
  - identification of contractor responsible for the works;
  - contact details for the contractor responsible for the works;
  - identification of experienced persons to manage environmental issues on site;
  - a procedure for monitoring, reporting and responding to any adverse environmental effects caused by the works; and
  - an accidental discovery protocol for kōiwi, taonga and other cultural and archaeological artefacts.



This permit shall be exercised in general accordance with the CMP (as approved by Wellington Regional Council).

- (3) The permit holder shall provide a **spill contingency plan** (SCP) for all activities related to the construction of the berthing structure, at least 20 working days prior to the proposed date of commencement of construction of the structure. The SCP shall include, but not be limited to:

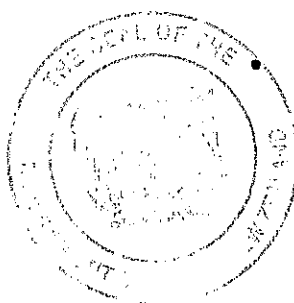
- identification and evaluation of potential spill hazards (on and off shore);
- identification of small, medium and worst-case scenarios and response actions;
- detailed implementation plan for containment and disposal of spills;
- procedures to notify the relevant authorities (e.g. Wellington Regional Council's Harbours Department and Consents Management Department);
- description and location of response equipment;
- details of responsible personnel on site, and any training undertaken; and
- procedures to review and update the document, for example in the event of a spill occurring.

Any proposed alterations to the SCP shall be submitted to the Manager, Consents Management, Wellington Regional Council, for approval.

In the event of a spill of contaminants, the SCP shall be followed.

- (4) The permit holder, in consultation with the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc and the New Zealand Historic Places Trust, shall prepare an **accidental discovery protocol** to be implemented in the event of discovery of cultural or archaeological material. This protocol shall be submitted to the Manager, Consents Management, Wellington Regional Council, for approval at least 20 working days prior to works commencing. The protocol shall include, but not be limited to:

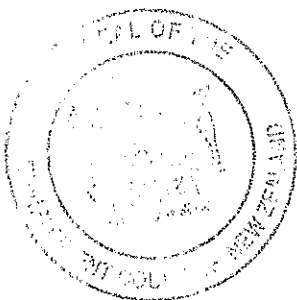
- training procedures for all contractors regarding the possible presence of cultural or archaeological sites or material, what these sites or material may look like, and the relevant provisions of the Historic Places Act 1993 if any sites or material is discovered;
- parties to be notified in the event of an accidental discovery (these shall include, but not be limited to, the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc, the New Zealand Historic Places Trust the Wellington Regional Council, Wellington City Council, and the New Zealand Police, if necessary);



- procedures to be undertaken in the event of an accidental discovery (these shall include immediate ceasing of all works in the vicinity); and
- procedures to be undertaken before works may recommence in the vicinity (these shall include allowance for appropriate tikanga (protocols), recording of sites and material, recovery, and obtaining approval of the Wellington Tenth Trust, Te Runanga o Toa Rangatira Inc, the New Zealand Historic Places Trust prior to recommencing works).

(5) Construction works shall not commence until the following documents have been approved by the Manager, Consents Management, Wellington Regional Council:

- a) detailed design plans (in accordance with condition 1 of this consent);
- b) a construction management plan (in accordance with condition 2 of this consent);
- c) a spill contingency plan (in accordance with condition 3 of this consent); and
- d) an accidental discovery protocol (in accordance with condition 4 of this consent).



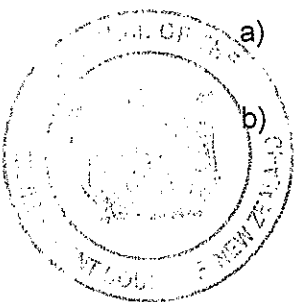


### **Operational conditions**

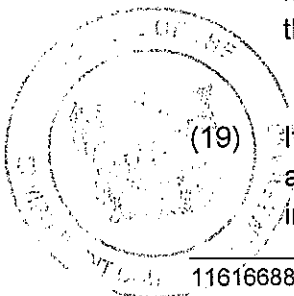
- (6) The location, design and implementation of the works authorised by this permit shall be in general accordance with the consent application and its associated plans and documents received by Wellington Regional Council on 1 July 2005, and the information provided by the permit holder in accordance with conditions 1, 2, 3 and 4 of this permit.
- (7) The Manager, Consents Management, Wellington Regional Council, shall be given a minimum of 5 working days notice prior to the construction of the berthing structure commencing.
- (8) The permit holder shall give a copy of this permit, the Construction Management Plan, the Spill Contingency Plan, the Accidental Discovery Protocol and the detailed designs to any contractor responsible for all or part of the works authorised by this permit prior to them commencing works on site.
- (9) The permit holder shall ensure that a spill kit is available on site at all times. The kit must be maintained to the satisfaction of the Manager, Consents Management, Wellington Regional Council.

### **Minimisation of sedimentation and disturbance**

- (10) Material used to fill the core of the berthing structure (if required) shall not be sourced from the coastal marine area, other than material displaced in constructing the access way to the berthing structure. Additional fill material shall be clean rock sourced from outside the coastal marine area.
- (11) The berthing structure shall not be located on a subtidal reef.
- (12) The permit holder shall at all times take all practicable steps to minimise sediment loading and increased turbidity of the coastal marine area due to the implementation and operation of the construction works. These steps include, but are not limited to, the following:
  - a) completing all works in the minimum time practicable;
  - b) avoiding placement of excavated material in the coastal marine area, other than berthing structure fill and roading material for the associated access way;



- c) separation of construction activities from the coastal marine area, where practicable;
  - d) no stockpiling of material below mean high water springs; and
  - e) undertaking the works in such weather, tidal or sea conditions where the potential for sediment to be mobilised into the coastal marine area is minimised.
- (13) The permit holder shall keep the use of vehicles or machinery in the coastal marine area to an absolute practicable minimum, and shall operate any such vehicles or machinery in a manner that does not cause unnecessary disturbance of sand or other material.
- (14) The permit holder shall:
- a) take all practicable steps to ensure that all machinery and plant is thoroughly cleaned of unwanted vegetation (e.g. weeds), seeds or contaminants prior to entering the site;
  - b) ensure that all machinery and plant is regularly maintained in such a manner so as to minimise the potential for leakage of fuels, hydraulic fluids and lubricants; and
  - c) ensure that no equipment or machinery is cleaned in any part of the coastal marine area.
- (15) Refuelling of machinery and plant (except for machinery operating on a barge that may require refuelling) shall occur at least 50 metres from any waterbody or the coastal marine area.
- (16) No fuels, lubricants, or other hazardous substances shall be stored in the coastal marine area. In any case, such items should be stored in a bunded area.
- (17) Upon completion of the works, all materials surplus to the works shall be removed from the area.
- (18) Any fish that are trapped or stranded during construction of the berthing structure must be immediately relocated to water in the coastal marine area not affected by the works.
- (19) If Blue Penguins, Banded Dottrels or Caspian Terns are discovered nesting in the area affected by the works the permit holder shall ensure that works are immediately stopped.



Before recommencing works, the permit holder shall consult with a suitably qualified individual or organisation (e.g. the Department of Conservation) approved by the Manager, Consents Management, Wellington Regional Council, to assess the risk to bird life and ensure that the birds are relocated or appropriate mitigation measures are undertaken.

### **Maintenance and keeping of records**

- (20) The permit holder shall keep a permanent record of any incident that results, or could result in, an adverse environmental effect. This record shall be maintained at the works site and shall be made available to the Wellington Regional Council on request.

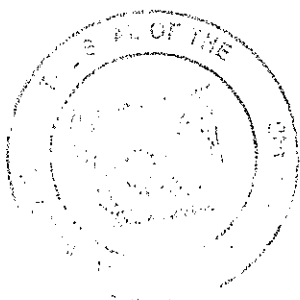
The incident record shall include:

- The type and nature of the incident
- Date and time of the incident
- Weather conditions at the time of the incident
- Measures taken to remedy the effects of the incident;
- Measures put in place to prevent occurrence of a similar incident.

The permit holder shall notify the Manager, Consents Management, Wellington Regional Council, of any such incident within 24 hours of the incident being brought to the attention of the permit holder or the next working day.

The permit holder shall forward an incident report to the Manager, Consents Management, Wellington Regional Council, within seven working days of the incident occurring, unless otherwise agreed with the Manager, Consents Management, Wellington Regional Council. The report shall describe reasons for the incident, measures taken to mitigate the incident and measures to prevent recurrence.

- (21) The permit holder shall keep a permanent record of any complaints received. This record shall be maintained at the works site and shall be made available to the Wellington Regional Council on request.



- The complaints record shall contain the following information:
- The name and address of the complainant (if supplied);
- Identification of the nature of the complaint;
- Date and time of the complaint and alleged event;

- Weather conditions at the time of the alleged event;
- The outcome of the consent holders investigation into the complaint; and
- Any mitigation measures adopted.

The permit holder shall provide to the Manager, Consents Management, Wellington Regional Council, a quarterly summary of any complaints received relating to the exercise of this permit. The first of these summaries should be submitted three months after construction commences, and quarterly thereafter.

### **General conditions**

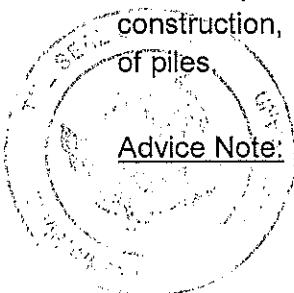
- (22) The Wellington Regional Council may review any or all conditions hereof by giving notice of its intention to do so pursuant to Section 128 of the Resource Management Act 1991, within six months of the first, third and fifth anniversaries of the granting of this coastal permit for either of the following purposes:
- a) To deal with any adverse effects on the environment which may arise from the exercise of this permit, and which are appropriate to deal with at that time; and
  - b) To review the adequacy of the maintenance procedures and the monitoring requirements for this permit, so as to incorporate any modification to the maintenance procedures or monitoring that may be necessary to deal with any adverse effects on the environment arising from the presence of the structures in the coastal marine area.
- (23) The Wellington Regional Council shall be entitled to recover from the permit holder the costs of the conduct of any review, calculated in accordance with and limited to the Council's scale of charges in-force and applicable at that time pursuant to section 36 of the Resource Management Act 1991.

### **3.2 Advice notes and/or conditions relevant to specific construction permits**

Oteranga Bay:

**Coastal permit WGN060001 [24571]** to disturb the foreshore and seabed during the construction, use, maintenance and removal of a berthing structure and associated drilling of piles.

Advice Note:



The permit holder in conjunction with the Wellington Tenth Trust and Te Runanga o Toa Rangatira and Transpower shall prepare an action plan (including time-lines) for the protection and enhancement of the urupa and Oterongo Bay, including, but not limited to, the following measures:

- further investigation of identified sites and recording of their status prior to earthworks or construction;
- investigation of whether the bounds of the urupā can be extended and a protective fence and Ara Huarahi (gate and pathway) to the urupā can be constructed;
- preparation of an imu waharoa (ceremonial oven for the dead) and arranging for rites to be performed;
- erection of an interpretation panel of the pā site adjacent to the urupā; and
- planting of the areas around the urupā to secure its integrity as a wider site.

Oteranga Bay:

**Coastal permit WGN060001 [24572]** to discharge sediment to coastal water during the construction, use, maintenance and removal of a berthing structure.

(24) During the exercise of this permit, the permit holder shall take all practicable steps to minimise any discharge to coastal water, which may result in any of the following effects after reasonable mixing:

- the production of any conspicuous oil or grease films, scums or foams or floatable or suspended material;
- any conspicuous change in colour or visual clarity; and
- a change of more than 3o Celsius in the natural temperature of the water.

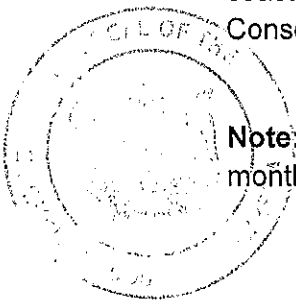
### 3.3 Conditions for occupation permits

Oteranga Bay:

**Coastal permit WGN060001 [24569]** to exclusively occupy the coastal marine area with a berthing structure.

- (1) The permit holder shall prepare and submit detailed design plans for the berthing structure that will be placed in the coastal marine area (including its location) to the Manager, Consents Management, Wellington Regional Council for approval, at least 20 working days prior to the proposed date of commencement of construction of the structure.
- (2) Construction work shall not commence until the detailed design plans required by condition 1 of this consent have been approved by the Manager, Consents Management, Wellington Regional Council.
- (3) The location, design and implementation of the works authorised by this consent shall be in general accordance with the consent application and its associated plans and documents received by Wellington Regional Council on 1 July 2005, and the information provided by the permit holder in accordance with condition 1 of this permit.
- (4) The Manager, Consents Management, Wellington Regional Council, shall be given a minimum of 5 working days notice prior to the construction of the berthing structure in the coastal marine area commencing.
- (5) The structure shall, at all times, be fitted with any navigational lights necessary to conform with the International Association of Marine Aids to Navigation and Lighthouse Authorities standards.
- (6) The structure shall maintain the responsibility of the permit holder and be maintained so that:
  - a) any erosion of the foreshore and seabed that is attributable to the structure is repaired by the permit holder;
  - b) the structural integrity of the structure remains sound; and
  - c) the structure does not pose a hazard to navigation.
- (7) The structure authorised by this permit shall be removed within six months of the completion of Project West Wind. The structure shall be fully removed from the coastal marine area as far as is practicable and to the satisfaction of the Manager, Consents Management, Wellington Regional Council.

**Note:** For the purposes of this condition, 'completion' is defined as within six months of the end of the commissioning period for the entire wind farm.

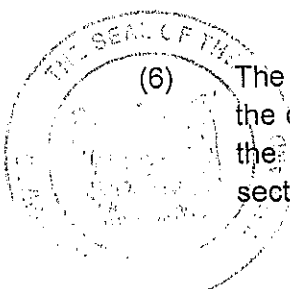


### 3.4 Conditions for diversion permits

Oteranga Bay:

**Coastal permit WGN060001 [24573]** to divert coastal water by a berthing structure.

- (1) The permit holder shall prepare and submit detailed design plans and construction methodology for the berthing structure that will be placed in the coastal marine area (including its location) to the Manager, Consents Management, Wellington Regional Council for approval, at least 20 working days prior to the proposed date of commencement of construction of the structure.
- (2) Construction works shall not commence until the detailed design plans and construction methodology required by condition 1 of the consent have been approved by the Manager, Consents Management, Wellington Regional Council.
- (3) The location, design and implementation of the works authorised by this consent shall be in general accordance with the consent application and its associated plans and documents received by Wellington Regional Council on 1 July 2005, and the information provided by the permit holder in accordance with condition 1 of this permit.
- (4) The Manager, Consents Management, Wellington Regional Council, shall be given a minimum of 5 working days notice prior to the construction of the berthing structure in the coastal marine area commencing.
- (5) The Wellington Regional Council may review any or all conditions hereof by giving notice of its intention to do so pursuant to Section 128 of the Resource Management Act 1991, within six months of the first, third and fifth anniversaries of the granting of this coastal permit for either of the following purposes:
  - a) To deal with any adverse effects on the environment which may arise from the exercise of this permit, and which are appropriate to deal with at that time; and
  - b) To review the adequacy of the maintenance procedures and the monitoring requirements for this permit, so as to incorporate any modification to the maintenance procedures or monitoring that may be necessary to deal with any adverse effects on the environment arising from the presence of the structures in the coastal marine area.



- (6) The Wellington Regional Council shall be entitled to recover from the permit holder the costs of the conduct of any review, calculated in accordance with and limited to the Council's scale of charges in-force and applicable at that time pursuant to section 36 of the Resource Management Act 1991.

#### 4. Discharge to Air from Concrete Batching Plant

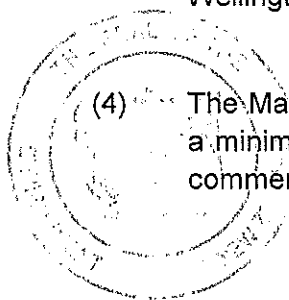
**Discharge permit WGN060001 [24584]** to discharge contaminants to air associated with the pneumatic conveying of bulk materials for a concrete batching plant.

##### Administration conditions

- (1) The permit holder shall prepare and submit details regarding the chosen contractor, and the detailed design, location and implementation of the concrete batching plant to the Manager, Consents Management, Wellington Regional Council, at least 20 working days prior to the commencement of construction of the plant.

**Note:** The location of the concrete batching plant shall not be within 100 metres of any permanent watercourse or the coastal marine area.

- (2) The permit holder shall prepare and submit for approval a management plan to the Manager, Consents Management, Wellington Regional Council, at least 20 working days prior to the commencement of construction of the plant. The management plan is to include:
  - a) an operation and maintenance manual detailing regular monitoring to be undertaken, including visual checks and maintenance of all plant machinery and equipment to prevent against accidental discharges;
  - b) a contingency plan for spills and/or discharges to the environment from the plant; and
  - c) mitigation measures to be implemented during the operation of the plant, including the installation of a water sprinkler system to minimise dust emissions, the installation of a level control alarm in the cement storage silo, speed restrictions within the plant boundary, and general yard management.
- (3) Construction works shall not commence until the environmental management plan, detailed design plans and construction methodology required by conditions 1 and 2 of this permit have been approved by the Manager, Consents Management, Wellington Regional Council.
- (4) The Manager, Consents Management, Wellington Regional Council, shall be given a minimum of 48 hours notice prior to the operation of the concrete batching plant commencing.



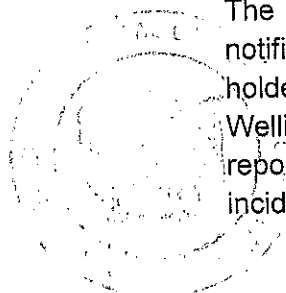


### **Operational conditions**

- (5) The location, design and operation of the plant shall be in general accordance with:
- a) the consent application and its associated plans and documents received by the Wellington Regional Council on 1 July 2005, and as approved by the Court and condition 8 of the Wellington City Council land use consent; and
  - b) any information provided by the permit holder in accordance with conditions 1 and 2 of this permit.
- (6) There shall be no discharges to air resulting from the exercise of this permit that are noxious, dangerous, offensive or objectionable at or beyond a 20 metre wide buffer zone around the physical boundary of the plant.
- (7) No alteration shall be made to the operation of the plant which may cause significant changes in the nature or quantity of the discharges of contaminants to air without seeking and obtaining the prior approval of the Manager, Consents Management, Wellington Regional Council.

### **Maintenance and keeping of records**

- (8) Regular maintenance of the process, including weekly visual inspections of the equipment prior to use, shall be carried out by a trained operator. Records of maintenance and visual inspections shall be kept and made available to the Wellington Regional Council on request.
- (9) The permit holder shall keep a record of all deliveries of bulk materials to, and dispatches of concrete from, the plant. These records shall be made available to the Wellington Regional Council on request.
- (10) The permit holder shall keep a record of any incident that results, or could result, in adverse effects on the environment at or beyond a 20 metre wide buffer zone around the physical boundary of the plant. The incident record shall be made available to the Wellington Regional Council on request.



The Manager, Consents Management, Wellington Regional Council, shall be notified of any such incidents within 24 hours, or the next working day. The permit holder shall forward an incident report to the Manager, Consents Management, Wellington Regional Council, within 7 working days of the incident occurring. The report shall describe reasons for the incident, measures undertaken to mitigate the incident and measures undertaken to prevent recurrence.

- (11) The permit holder shall keep a record of any complaints received. The complaints record shall contain the following where practicable:

- The name and address of the complainant (if supplied);
- Identification of the nature of the complaint;
- Date and time of the complaint and alleged event;
- Weather conditions at the time of the alleged event;
- The outcome of the consent holders investigation into the complaint;  
and
- Any mitigation measures adopted.

The complaints record shall be made available to the Wellington Regional Council on request.

The permit holder shall notify the Manager, Consents Management, Wellington Regional Council, in writing of any complaints received relating to the exercise of this permit within 24 hours of being received by the permit holder, or the next working day.

#### **Review conditions**

- (12) The Wellington Regional Council may review any or all conditions hereof by giving notice of its intention to do so pursuant to Section 128 of the Resource Management Act 1991, within six months of the first, third and fifth anniversaries of the granting of this discharge permit for either of the following purposes:
- a) To deal with any adverse effects on the environment which may arise from the exercise of this permit, and which are appropriate to deal with at that time; and
  - b) To review the adequacy of the operating and maintenance procedures and the monitoring requirements for this permit, so as to incorporate any modification to the operation and maintenance procedures or monitoring that may be necessary to deal with any adverse effects on the environment arising from the management or operation of the processes undertaken by the permit holder.

