# Combined s95 Non Notification and s42a Planning Report for Resource Consent

Applicant: Taumatatotara Wind Farm Limited

Address of Site: Taumatatotara West Road, Te Anga

Application Number:APP141827File No.:61 34 30AProject Code:RC25287Application16340543

document:

### 1 PROPOSAL

Taumatatotara Wind Farm Limited has made an application for resource consent to undertake earthworks totalling approximately 259,000m3 of soil disturbance associated with the construction of roading and platforms for a wind farm at Taumatatotara West Road, Te Anga at or about NZTM 1756000 E 5768000 N as identified on Figure 1 below.

The activities to be considered are as follows:

Reference Id	Activity Subtype	Activity Description
AUTH141827.01.01	Land - disturbance	Undertake earthworks totalling approx. 200,000m3 of soil disturbance associated with the construction of tracks

This report assesses the application, the potential environmental effects and the relevant planning provisions in the Resource Management Act 1991 and Waikato Regional Council policies and plans. The report recommends whether to process the consent with or without notification and whether consent(s) should be granted.

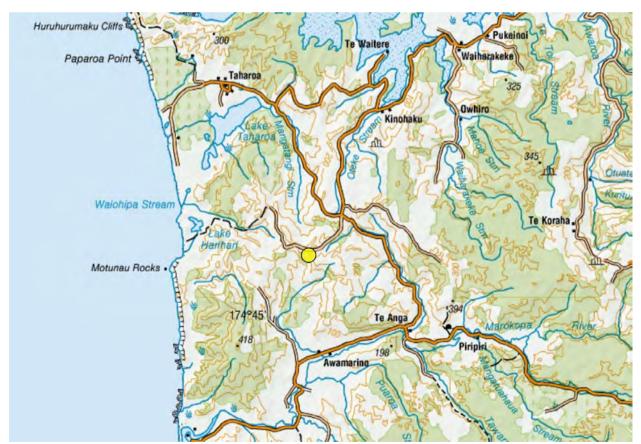


Figure 1: Aerial photo of site location & surrounds



### 2 BACKGROUND

Earthworks associated with the construction and development of 22 windfarm turbines was granted consent in 2008.

"Shortly after the consents were granted, wholesale electricity market slumped, largely due to the economic downturn associated with the global financial crisis, which made the project uneconomic. In recent times the electricity market has improved and, in association with larger turbine rotors which reduce the cost of energy, wind farms are now a viable alternative to other forms of electricity generation. Larger turbines capture greater energy from the wind for a disproportionately small increase in capital cost."

The earthworks consent expired and in 2013 Taumatatotara Wind Farm Limited applied for another similar earthworks consent. This consent application has been on hold since 2013. In 2020 Taumatatotara Wind Farm Limited submitted more information to proceed the application but for a smaller windfarm — 11 wind turbines. The environmental effects of the earthworks have been determined by the applicant to be less than in the original proposal. The most recent information submitted for the smaller scale proposal being assessed in this report is being treated as a new application.

### 3 SITE AND PROPOSAL

The proposed windfarm site is 10km south of Taharoa Village and above the Taumatatotara Gorge in the Waitomo District. It is located on farms owned by three separate landowners.

Below is a description of the site as described in the application documents:

"The site and the adjacent hills generally have very defined but level ridgelines with steep slopes on the flanks, particularly on the southern side. The local peak to the northern end of the site has an elevation of 340m with the remainder of the site ranging between 300m and 320m at the southern end. The gradient of the construction site is moderate to steep with slopes generally between 1 in 20 and 1 in 5. The site is currently used for grazing cattle and sheep with a very small plantation of radiata pines at the location of turbine 7. Further details on the site's slopes can be seen in Attachment 2."

The proposal is to undertake bulk earthworks associated with the development of 11 turbine sites and associated tracking needed to access those sites.

There are to be two access points into the site, both from Taumatatotara West Road. An access road 2.03 km long will be formed to the north, serving turbines 1-6. Turbine 7 can be accessed via a short track directly off Taumatatotara West Road. Turbines 8-11 are accessed via a 2.1km road heading south. These roads generally follow existing farm tracks. The roads will be 6m wide to allow for large machinery such as mobile cranes and transporters.

The application provides a Road Construction Methodology which can be seen on pages 7 and 8 in section 3.3.

The wind turbines foundations will be constructed from reinforced concrete and will be 2.5m to 3.5m below ground surface. Retaining walls may be required to support cut faces where steep batters are required. The design life of the turbines is based on 50 years.

The method of transportation of the turbines has been amended from the previous application. The new application document proposes:

"In relation to movement of the turbine components, there are three distinct types with each having their own criticality:

- Nacelle heaviest (and bulky)
- Tower Sections bulkiest
- Blades longest

The basic outcome from the analysis on new transportation methods is:

- Nacelles can now be easily split into components to reduce size and weight.
- Tower Sections are made with thicker steel and shorter lengths to keep the diameter low and the weight manageable.
- Blades can be transported with a specialist cantilevered transporter system to allow the blades to negotiate tight corners - see photograph in Figure 2 below. This modern trailer unit will therefore minimise roadside cuts such as identified in previously consented proposals.

These improvements will lead to reduced loads on the roading network, thereby reducing potential for instability, and easier movement around tight corners."

An underground cable network will also need to be installed during development of the windfarm. Interconnecting cables will be laid underground following the road alignment. This will be done using a specialised cable laying machine. The cable laying is part of this application and earthworks for the interconnecting cables will be incorporated into the erosion and sediment control plan.

The application documents suggest that the development of the wind farm will be constructed at one time and during one earthworks season.

A final location of the wind turbines has not yet been confirmed. I recommend a requirement to finalise the location of the turbines and submit to WRC before works commence, to be added into the condition set.

Taumatatotara Wind Farm Limited hold a Land Use consent from Waitomo District Council (WDC) which was granted in 2008. A lapse date extension was applied in 2016 for a further 8 years. This consent expires in 2024.

The applicant has also lodged an application with WDC for a change in conditions for the active consent it holds from WDC. At the time of writing this report, the change in conditions application with WDC is still being processed.

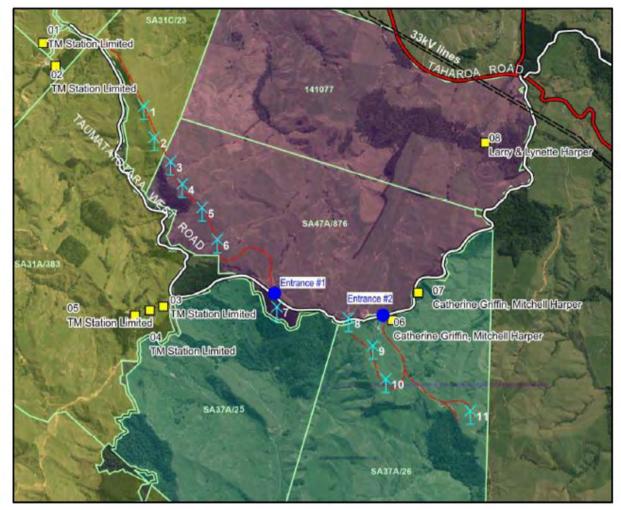


Figure 2: Indicative location of turbines

### 4 STATUS OF ACTIVITIES UNDER THE PLANS

The application has been assessed against the Waikato Regional Plan (WRP) as follows:

• AUTH141827.01.01 is assessed as a Discretionary under Rule 5.1.4.13 of the Waikato Regional Plan

# <u>5.1.4.13 Discretionary Activity Rule – Soil Disturbance, Roading and Tracking and Vegetation Clearance</u>

- 1. Any soil disturbance, roading and tracking, and vegetation clearance and any associated deposition of slash into or onto the beds of rivers and any subsequent discharge of contaminants into water or air that does not comply with the conditions of Permitted Activity Rule 5.1.4.11;
- 2. Soil cultivation within two metres of the bed of a river or lake that does not comply with Rule 5.1.4.12;

are discretionary activities (requiring resource consent).

# **Advisory Notes:**

- District plans may have rules, which restrict land disturbance and vegetation clearance in areas outside of high risk erosion areas.
- Information requirements to enable the assessment of any application under this Rule are set out in Section 8.1.4.1 of this Plan. In addition, assessment shall also take into account the matters identified in Policy 1 of Section 5.1.3.

The provisions of section 104B and 105 of the Act which are relevant to the determination of applications for discretionary activities, also apply.

### **5 PROCESS MATTERS**

The resource consent application was accepted on 8/05/2020. The application was put on hold for the following period:

The application was placed on s92(1) request for further information hold from 21 May 2020.

The applicant supplied the further information on the 24<sup>th</sup> July 2020.

The information was accepted on the 3<sup>rd</sup> August 2020 and the application was taken off hold on this date and continued to be processed.

The application was placed on hold under s37 of the Act for draft condition review. The timeframe for processing the application was extended from the 7<sup>th</sup> August 2020 to the 20 August 2020.

# 6 ASSESSMENT FOR THE PURPOSE OF NOTIFICATION

### 6.1 Adequacy of information

It is my opinion that the information contained within the application is substantially suitable and reliable for the purpose of making a recommendation of and decision on notification. The information within the application is sufficient to understand the characteristics of the proposed activity as it relates to provisions of the Regional/Coastal Plan, for identifying the scope and extent of any adverse effects on the environment, and to identify persons who may be affected by the activity's adverse effects.

### 6.2 S95A: Determining whether the application should be publicly notified

Step 1(a): Has the applicant requested public notification? (s95A(3)(a))

The applicant has not requested public notification.

# Step 1(b): Is there further information to consider? (s95A(3)(b))

The applicant has not failed to respond as statutorily required to a further information request (s92(1))or to the commissioning of a report (s92(2)) under s95C.

### Step 2(a): Is there a Rule or NES that precludes public notification? (s95A(5)(a))

There are no rules in the Regional Plan or national environmental standard relevant to this proposal that preclude public notification.

# Step 2(b): Is the activity for one or more <u>controlled activity</u>, or "<u>residential activity</u>" under the Regional Plan? (s95A(5)(b)(i) and (ii))

The activity is not for a controlled activity or "residential activity" which is a discretionary or restricted discretionary activity under the Regional Plan.

# Step 3(a): Is there a rule or NES that requires public notification? (s95A(8)(a))

There are no rules in the Regional Plan or national environmental standard relevant to this proposal that require public notification.

# Step 3(b): Will the activity have adverse effects on the environment that will be, or are likely to be, more than minor? (s95A(8)(b))

In forming this opinion (a) to (e) are assessed as below.

- (a) There are no persons on which effects can be disregarded. (s95D(a)
- (b) There are no rules in the Regional Plan or national environmental standard relevant to this proposal that permit an activity with this effect. (s95D(b))
- (c) There are no restricted discretionary activities for which effects must be disregarded as the effect does not relate to a rule in the Plan or NES which restricts discretion.(s95D(c))
- (d) There are no trade competition effects to be disregarded (s95D(d))
- (e) There are no persons who have given written approval (s95D(e))

The assessment below considers adverse effects on the environment that are potentially more than minor.

### **Table 2: Potential Adverse Environmental Effects Assessment**

**Erosion and sediment control:** Construction works at the proposed site will result in areas of soil becoming exposed and therefore vulnerable to erosion. Steeper parts of the site are particularly prone to erosion and subsequent instability. Without appropriate erosion and sediment control, the earthworks and vegetation clearance phase of the development may result in significant discharge of sediment into receiving waterways.

A s92 further information request was issued to the applicant to provide further details on the erosion and sediment control on site. The applicant provided two erosion and sediment control plans (one for turbines 1-6 and one for turbines 7-11 – WRC doc#16933196 and #16931482 respectively) and an erosion and sediment control report (WRC doc#16932982).

Kerry Pearce (Land Management Consultant) provided a technical review of the erosions and sediment control documents which I have relied on for this assessment. His technical assessment can be found in WRC doc #16949686.

Mr Pearce's summary states:

"Overall, the applicant's proposed erosion and sediment control methodology is considered to be appropriate for the scale of earthworks to be undertaken provided the above information is provided and certified by WRC prior to the commencement of earthworks. Provided that all erosion and sediment controls are constructed and maintained in general accordance with WRC Guidelines, it is considered that sediment laden flows will be treated to an appropriate standard prior to being discharged off site.

It is also considered that provided the conditions of consent are complied with the resulting effects on the environment from sediment discharges during the earthworks will be appropriately managed. Recommendations to ensure this is the case have been included in this memorandum. In principle, the overall proposed earthworks and erosion and sediment control methodology is

generally appropriate for this site."

Based on the technical review Mr Pearce has provided, I recommend conditions requiring a final erosion and sediment control plan, a flocculation management plan, and an earthworks construction management plan.

I rely on Mr Pearce's review of the application and further information in a technical capacity and

consider, provided the earthworks and construction align with what is submitted in the application and supporting documents, that the effects of erosion and sediment control will be less than minor.

**Dust Management:** In the joint hearing report prepared by Peter Stevens (Environmental Consultant, PS Environmental Services) in 2014 an assessment of dust emissions has been documented. I consider that there are no changes in the effects of dust emissions from the 2004 assessment of the application compared to the assessment being undertaken in this report. This is due to the minimal change in the proposal other than the scale of the site (i.e 22 turbines is now proposed as 11 turbines).

I therefore have adopted the assessment from the 2004 joint hearing report (WRC DOC# 1059635):

"At earthworks sites, where areas of vegetation have been cleared, there is potential for significant exposure of the soil surface, which in turn can lead to the discharge of dust beyond the boundary of the work site. The risk and severity of dust generation and movement is determined by the influence of factors such as wind velocity, the moisture content of the soil, the percentage of fine soil particles, and the roughness of the soil surface (McClaren and Cameron 1996). Vehicle movements over dry bare soil surfaces can also generate nuisance dust emissions.

Adverse effects associated with the emission of dust relate to:

- Potential health effects from breathing in dust particles;
- Soiling and amenity effects. Dust discharges can deposit on surfaces such as cars, window ledges
  and household washing. For most people the primary effect of dust nuisance is annoyance at the
  increased requirement for cleaning;
- Visibility effects. These effects are largely related to aesthetics and are usually only of concern in the immediate area of a specific activity;
- Effects on vegetation. Excessive dust deposits can adversely effect vegetation through reduced
  photosynthesis due to reduced light penetration through the leaves, increased incidence of plant
  pests and diseases (i.e. dust deposits can act as a medium for the growth of fungal disease), and
  reduced effectiveness of pesticide sprays due to decreased penetration.

In my opinion the adverse effects at the proposed site, relating to the emission of dust, will be minor for the following reasons:

- i.) The proposed development site is relatively isolated from nearby dwellings and built up areas.
- ii.) The mitigation measures proposed by the applicant including minimising the area of bare soil exposed as well as retaining as much vegetation as possible and replanting throughout the site, will help to reduce emissions.
- iii.) A series of conditions are recommended, which will help to avoid and/or minimise dust emissions at the site."

I agree with the above assessment and conclude that if resource consent conditions are complied with the effects of dust emissions will be no more than minor.

**Effects on Indigenous Vegetation:** The vegetation at the sites chosen for the wind turbines consists entirely of exotic pasture. The primary impact on vegetation from the proposal involve the upgrading of the access road. The existing area is currently heavily grazed heavily by stock, and contains only common species, almost all of them exotic according to the 2004 joint hearing report.

As the proposed road realignments follow the existing formed roads, effects on wildlife habitat and corridors for species with large home ranges is likely to be minor. Therefore, effort toward fauna habitat replacement is not considered to be necessary provided no nesting or roosting sites of

threatened species are found within the extension footprint during construction.

Machinery bought in from other areas increase the risk of new exotic weed species establishing in the area. Therefore, it is critical that all machinery is thoroughly cleaned before it is bought on site to remove any attached seed or plant matter. Ensure all machinery is thoroughly cleaned before being allowed on site to prevent the introduction of weeds.

Provided consent conditions are adhered to, I consider these effects would be no more than minor.

**Effects on Waterways:** No significant streams or wetlands would be directly affected by the proposed wind turbines or public road realignments. All the waterways in question are small, upper catchment, ephemeral and significantly impacted by agricultural practices.

A drainage channel will be formed between the toe of the uphill batter and the edge of the road. This will intercept any rainwater runoff, which will then be directed under the road via appropriately sized pipes or culverts into channels where available.

As the roading will be near to the main ridgelines, catchments serving the culverts will be small, and generally less than 0.5 ha. The culverts have been identified as a permitted activity.

However, there is still a risk that sediments from road works and turbine site construction could enter waterways and adversely affect aquatic macroinvertebrate or fish and their habitats downstream of the proposed works. Provided good practice silt control techniques are implemented during construction, these effects would be no more than minor, and appropriate resource consent conditions would ensure that these measures are implemented.

Further discharges to waterways could result from construction material, lubrication fluid or fuel spillage from machinery. In order to minimise the likelihood of discharges of this nature, I recommend that no refuelling of machinery occur near surface water or drainage systems.

# Tangata Whenua values: The application states the following:

"In respect of Iwi, their issues were canvassed at the 2008 hearing (Joint hearing with Waitomo District Council). A representative of the Maniopoto Iwi Trust Board attended the hearing, as did a representative of the Marakopa Marae. Both generally supported the application. At that time Ventus agreed that a representative of Iwi would monitor the construction phase of the project and Ventus supports this still occurring. Ventus Energy supports appropriate conditions being applied if there are any cultural issues encountered on the project – for example an accidental discovery protocol applied in the event of any remains of significance being discovered during the earthworks phase."

I had requested in the s92 further information letter for any further communication about the updated proposal to be submitted to council as part of the application process.

Maniapoto representatives were contacted and sent the application documents to review. Maniapoto responded with the following:

"Further to our discussion, Ngā Tai o Kāwhia are neutral towards the application as presented providing that there are appropriate conditions to:

- 1. Manage environmental effects, including discharges to air, land and water, sediment and erosion controls, so that these effects will be less than minor.
- 2. Manage accidental discoveries of wāhi tapu and archaeological sites.
- 3. Invite at least two tāngata whenua representatives to monitor the construction phase of the project, including appropriately resourcing those representatives."

Although there are no wahi tapu sites/archaeological sites in the vicinity, I recommend including a condition around the accidental discovery protocol and a condition that supports a representative of the lwi groups being able to monitor the on-site works and accommodate for management of the environmental effects as proposed by iwi.

I consider, if conditions are complied with, that effects on Tangata Whenua Values will be less than minor.

**Geotechnical Effects:** The application document provides a geotechnical review for the proposed windfarm. They have concluded:

"This inspection has indicated many proposed turbine sites are located in close proximity to slopes affected by creep/ground movement on the basis of the walkover inspection and desktop study. All sites are considered geotechnically feasible and will require specific assessment at detailed design stage.

Setbacks will be needed from the steeper slopes. Foundations are likely to consist of a variety of large pad and piled systems. Some sites are likely to require inground protection walls. Specific subsurface investigation will need to be undertaken at each of the sites.

The access route to the site appears adequate, though may need to be locally widened. Such works are envisaged to be relatively minor.

A suitable aggregate could be sourced from a quarry north of the subject site."

As the exact locations of each turbine platform are yet to be determined, I recommend that a Land Stability Plan is prepared by a suitably qualified geotechnical engineer and submitted to the council prior to works commencing. The Land Stability Plan will include detailed geotechnical investigations for each turbine site and any required earthworks as well as for the stability of the overburden disposal areas.

In addition, I have recommended that an independent peer review of the Land Stability Plan be undertaken prior to works commencement.

Provided that the consent conditions are complied with, I consider that any potential adverse geotechnical effects will be minimised during and post construction.

The actual or potential adverse effects of the proposal on the environment will be, or are likely to be, minor or less than minor.

# Step 4: Are there special circumstances that warrant public notification (s95A(9))?

There are no other matters or special circumstances that warrant public notification.

### 6.3 S95B: Determining whether the application should be limited notified

### Step 1: Is there a Statutory Acknowledgment Area under s95E? (s95B(3)(a))

The activity is not on, or adjacent to, or might affect, any land that is the subject of a statutory acknowledgement nor is the person to who the statutory acknowledgment is made, considered affected under s95E.

# Step 2: Is there a rule or NES that precludes limited notification? (s95B(6)(a))

There are no rules in the Regional Plan or national environmental standard relevant to this proposal that preclude limited notification.

# Step 3: Are there persons who are affected to a "minor or more than minor" extent? (s95B(8))

- (a) There are no rules in the Regional Plan or national environmental standard relevant to this proposal that permit an activity with this effect on a person. (s95E(2)(a))
- (b) There are no controlled or restricted discretionary activities for which effects must be disregarded on persons as the effect does not relate to a rule in the Plan or NES which reserves control or restricts discretion.(s95E(2)(b))
- (c) There are no persons who have given written approval (s95E(3)(a))
- (d) There are no persons whose approval it is unreasonable to seek. (s95E(3)(b))

# **Step 4: Are there Special Circumstances? (s95B(10))**

There are no special circumstances existing that warrant notification to any other persons not already determined to be eligible for limited notification.

#### 7 SECTION 95 NOTIFICATION RECOMMENDATION AND DECISION UNDER DELEGATED **AUTHORITY**

**Date: 18 August 2020** 

It is recommended the application proceed on a **non notified** basis for the reasons discussed above:

**Reporting Officer:** 

**Emma Symes** 

**Resource Officer** 

Resource Use Directorate

Approved By:

Team L

Resource Use Directorate

Date: 20 August 2020

Acting under authority delegated subject to the provisions of the RMA 1991 which at the time of decision had not been revoked.

### 8 SECTION 104

A decision was made under section 95 of the Act to process the application on a non-notified basis. An assessment of and decision on the application under section 104 of the Act is provided below.

# 9 SECTION 104(1)(a) - ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

### 9.1 Effects Disregarded

Section 104(2) states that when forming an opinion for the purposes of s104(1)(a) a council may disregard an adverse effect of the activity on the environment if the plan or a NES permits an activity with that effect (i.e. a council may apply the "permitted baseline").

Section 104(3)(a) states that when forming an opinion for the purposes of s104(1)(a) a council must not have regard to any effect on a person who has given written approval to the proposal, nor any effects of trade competition.

# 9.2 The following actual and potential effects are relevant to this proposal:

Section 104(1)(a) of the RMA provides that when considering a consent application, the consent authority must, subject to Part 2, have regard to the actual and potential effects on the environment of allowing the activity. Case law has determined that the "environment" must be read as the environment which exists at the time of the assessment and as the environment may be in the future as modified by the utilisation of permitted activities under the plan and by the exercise of resource consents which are being exercised, or which are likely to be exercised in the future. It does not include the effects of resource consents which might be sought in the future nor any past reversible effects arising from the consent being considered.

The assessment of adverse effects in the approved notification report is also relevant for the purposes of the assessment required under s104(1)(a).

Positive effects that have been identified in the application document have been copied below:

"The proposed earthworks will assist in facilitating the development of the wind farm project which will in turn lead to a greater amount of electricity being generated. Up to 47MW will be able to be produced, up from the output of the consented turbines. The power output from the proposed new machines demonstrates the significant improvements in wind power technology and the positive benefits such technology can bring to the wider community."

In summary, it is considered the actual and potential effects of the proposal are able to be avoided, remedied or mitigated through the imposition of conditions and are therefore acceptable.

# 10 SECTION 104(1)(b) - RELEVANT POLICIES & PLANS

# 10.1 National Environmental Standards for Electricity Transmission Activities

The National Environmental Standards for Electricity Transmission Activities (NES) are regulations made under the Resource Management Act 1991. The NES came into effect on 14 January 2010.

The National Environmental Standard for Electricity Transmission Activities is relevant to this proposal.

# 10.2 National Policy Statement for Fresh Water Management / Renewable Electricity Generation / Electricity Transmission/ NZ Coastal Policy Statement/Urban Development Capacity

The National Policy Statement for Renewable Electricity Generation 2011 (NPS REG) sets out the objective and policies for renewable electricity generation under the Resource Management Act 1991. The NPS REG came into effect on 13 May 2011.

This NPS REG will drive a consistent approach to planning for renewable electricity generation in New Zealand. It gives clear government direction on the benefits of renewable electricity generation and requires all councils to make provision for it in their plans.

The NPS REG is relevant to this proposal. Relevant policies within the NPS REG are:

- Policy A Recognising the benefits of renewable electricity generation activities
- Policy B Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources
- Policy C1 Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities

The application provides an assessment on the relevant policies in the NPSREG. I agree with the applicant's assessment therefore will not repeat the assessment from the report here. Please refer to the application document, pages 14-15 for further details.

I consider the proposal is not inconsistent with the NPSREG.

# 10.3 Waikato Regional Policy Statement (RPS)

The RPS is a high-level broad-based document containing objectives and policies of which the purpose is to provide an overview of the resource management issues of the region and to achieve integrated management of the natural and physical resources of the Region.

RPS is relevant to this proposal. The application identifies individual objectives and policies:

Objective 3.5 - Energy

Objective 3.14 - Mauri and values of freshwater bodies

Objective 3.25 - Values of Soil

Policy 6.6 – Significant infrastructure and energy resources

Tangata Whenua Values are recognised and acknowledged in the application. I have identified relevant policies and objectives that relate to Tangata Whenua and the proposal in the RPS:

Objective 3.9 – Relationship of Tangata Whenua with the environment

Policy 4.3 - Tangata Whenua

I have also identified relevant policies in relation to the proposal which include:

Policy 14.1 - Maintain or enhance the life supporting capacity of the soil resource

Policy 14.3 – Soil Contaminants

I agree with the objectives and policies the application identifies.

I consider the proposal is not inconsistent with the RPS.

# 10.4 Waikato Regional Plan

The Waikato Regional Plan ("WRP") is operative. The purpose of regional plans is to help the Council carry out its functions under s30 of the RMA.

The application document identifies the objectives and policies below:

Chapter 5 – Land and Soil Module

Objective 5.1.2 – Accelerated soils

Policies under 5.1.3:

- Policy 1 Managing Activities that Cause or Have the Potential to Cause Accelerated Erosion and Encouraging Appropriate Land Management Practices
- Policy 2 Use of Regulatory and Non-Regulatory Approaches of Management for Soil Disturbance/Vegetation Clearance Activities in High Risk Erosion Areas
- Policy 3: Promote Good Practice
- Policy 4: Approved Operators Approach

Overall, I agree with the assessment in the application and consider that the proposal is not inconsistent with the Land and Soil module provisions of the Waikato Regional Plan.

# 11 SECTION 104(1)(c) – ANY OTHER MATTER CONSIDERED RELEVANT AND REASONABLY NECESSARY

### 11.1 Other Relevant Matters

The following policy initiatives, as per s104(1)(c) of the RMA are considered relevant to this assessing this application as they outline the higher-level strategic goals identified for New Zealand in achieving its goals for renewable energy:

- New Zealand Energy Strategy 2011–2021
- The Government's 100 per cent renewable electricity target by 2035
- Transpower's 2018 long-range planning report called "Te Mauri Hiko, Electricity Futures".

The application has been assessed against these policy documents and is not inconsistent with the above initiatives.

### 11.2 Iwi Environmental Plans

"The Maniapoto Environmental Management Plan is a direction setting document and describes issues, objectives, policies and actions to protect, restore and enhance the relationship of Maniapoto with the environment including economic, social, cultural and spiritual relationships." (Taken from Maniapoto Maori Trust Board Website.)

The applicant has been in contact with Maniapoto regarding the proposal.

The application states the applicant is happy to work with local iwi throughout the construction of the project.

### 12 PART 2 MATTERS

Section 104 of the RMA is subject to Part 2 of the Act:

- Section 5 of the RMA outlines the Act's purpose, the basic principle of which is sustainable management.
- Section 6 of the RMA outlines matters of national importance.
- Section 7 outlines the other matters for consideration.
- Section 8 concerns the principles of the Treaty of Waitangi.

I have established throughout my report that the activity will have a less than minor effect on the environment and is consistent with the policy intent of the relevant objectives and policies of the Waikato Regional Plan.

Overall, the application is considered to meet the relevant provisions of Part 2 of the RMA as the proposal achieves the purpose (section 5) of the RMA, being the sustainable management of natural and physical resources.

### 13 CONCLUSIONS

In considering the subject resource consent the main potential adverse environmental effects associated with the proposed works are considered to be erosion and sediment controls, dust management, effects on Indigenous Vegetation, effects on waterways and Tangata Whenua values.

However, for the reasons outlined in section 6 of this report, I am satisfied that these adverse effects can be avoided, remedied or mitigated such that the adverse environmental effects associated with the works are likely to be minor.

The overall proposal has been assessed in respect to their consistency with the objectives and policies of the Regional Council's policies and plans, and the statutory provisions of the RMA. Provided the activity is undertaken in accordance with the application for consent and subsequent supporting documentation, and the recommended consent conditions in the attached Resource Consent Certificate, I consider that the application will not be inconsistent with Council's policy and plans, or the statutory provisions of the RMA.

# 14 CONSENT TERM

The Applicant has requested a consent term of 15 years and a lapse period of 10 years.

In assessing the consent term, I have considered the following matters:

- certainty and security for the applicant given the substantial investment;
- Actual and potential adverse effects of the proposed activities on the environment; and
- Section 123 of the Resource Management Act.

I recommend a term be granted for 15 years with a lapse period of 10 years based on the above points.

### 15 MONITORING

The Waikato Regional Council has a statutory obligation under section 35 of the RMA 1991 to monitor the exercise of resource consents being carried out within the Waikato Region. Consequently, Waikato Regional Council staff or its authorised agents will monitor this site both during and after the works have been completed.

If resource consent is granted for the project, then I consider that monitoring requirements should be included as conditions of the consents. This monitoring should address issues such as:

- the quality of discharges from the construction site;
- the maintenance of erosion and sediment control devices;
- the performance of erosion and sediment controls.

### 16 RECOMMENDATION

I recommend that in accordance with s104B, and 108 resource consent application APP141827 be granted in accordance with the duration and conditions prescribed in the attached Resource Consent Certificate for the following reasons:

- The activity will have no more than minor actual or potential adverse effects on the environment
- The activity is not contrary to any relevant plans, policies or regulations
- The activity is consistent with the purpose and principles of the Resource Management Act 1991



Emma Symes
Resource Officer

Resource Use Directorate

17 DECISION

Jorge Rodriguez

Team Leader

Resource Use Directorate

Date: 20 August 2020

Date: 20 August 2020

# RESOURCE CONSENT CERTIFICATE

**Resource Consent:** AUTH141827.01.01

**File Number:** 61 34 30A

Pursuant to the Resource Management Act 1991, the

Regional Council hereby grants consent to:

Taumatatotara Wind Farm Limited

C/- VGA PO Box 99983 Newmarket Auckland 1149

(hereinafter referred to as the Consent Holder)

Consent Type: Land Use Consent

Consent Subtype: Land - disturbance

Activity authorised: Undertake earthworks totalling approx. 259,000m3 of excavation associated

with the development of a wind farm including construction of tracks and wind

turbine platforms.

**Location:** Taumatatotara West Road, Te Anga

Map reference: NZTM 1756000.0000 E 5768000.0000 N

**Consent duration:** This consent will commence on the date of decision notification

and will expire on 25 August 2035

Lapse Period: This consent lapses ten years after the date it is granted unless the consent is

given effect to or the Council extends the period after which the consent lapses.

Subject to the conditions overleaf:

### **General Conditions**

1. The soil disturbance and construction related activities authorised by this resource consent shall be undertaken in general accordance with the application for this resource consent, and all associated information submitted in relation to this application, except where otherwise required in the resource consent conditions below, titled:

# **Documents:**

- "Taumatatotara Wind Farm Application for Resource Consent for Bulk Earthworks." Prepared for Ventus Energy (NZ) Ltd and dated April 2020 (The Application).
- "Taumatatotara Wind Farm Turbines T1-T11 EROSION AND SEDIMENT CONTROL PLAN 19142-EN-REP-001 Rev A". Prepared by Blue Wallace Surveyors Limited, dated 17 July 2020 (The Erosion and Sediment Control Plan).

#### Plans:

- Overall Site Plan. Drawing Number #1 Rev F.
- Extents of Works Plan. Drawing Number #2 Rev F.
- Erosion and Sediment Control Layout Plans. Drawing Numbers #13 through to #17 Rev
- Sediment Control Pond Detail. Drawing Number #18 and #19 Rev F.
- Decanting Earth Bund Detail. Drawing Number #20 Rev F.
- Diversion Channel / Bund Detail. Drawing Number #21 Rev F.
- Silt & Super Silt Fence Detail. Drawing Number #22 Rev F.
- 2. The consent holder shall be responsible for all contracted operations related to the exercise of this resource consent; and shall ensure contractors are made aware of the conditions of this resource consent and ensure compliance with those conditions.
- 3. A copy of this consent shall be kept onsite at all times that physical works authorised by this resource consent are being undertaken and shall be produced without unreasonable delay upon request from a servant or agent of the Waikato Regional Council.
- 4. The consent holder shall notify the Waikato Regional Council as soon as practicable and as a minimum requirement within 24 hours of the consent holder becoming aware of any of the conditions of this resource consent being exceeded and/or of any accidental discharge, sediment control device failure, or other circumstances which are likely to result in the conditions of this resource consent being exceeded. The consent holder shall, within 7 days of the non-compliance, provide a written report to the Waikato Regional Council, identifying the non-compliance, possible causes, steps undertaken to remedy the effects of the incident and measures that will be undertaken to ensure future compliance.

# **Pre-Start Requirements**

- 5. The consent holder shall inform the Waikato Regional Council in writing at least 10 working days prior to the commencement of activities of the start date of the works authorised by this resource consent.
- 6. Prior to activities commencing as authorised by this resource consent, the consent holder shall appoint a representative(s) who shall be the Waikato Regional Council's principal contact person(s) in regard to matters relating to this resource consent. The consent holder shall inform the Waikato Regional Council of the representative's name and how they can be contacted, prior to this resource consent being exercised. Should that person(s) change during the term of this resource consent, the consent holder shall immediately inform the Waikato Regional

Council and shall also give written notice to the Waikato Regional Council of the new representatives' name and how they can be contacted.

7. The consent holder shall arrange and conduct a pre-construction site meeting and invite, with a minimum of 10 working days' notice, the Waikato Regional Council, the site representative(s) nominated under condition 7 of this consent, the contractor, and any other party representing the consent holder prior to any work authorised by this consent commencing on site.

The following information shall be made available at the pre-start meeting:

- Timeframes for key stages of the works authorised under this consent
- Resource consent conditions
- Finalised Erosion and Sediment Control Plan
- Flocculation Management Plan

A pre-start meeting shall be held prior to the commencement of the earthworks activity in each period between October 1 and April 30 that this consent is exercised.

**Advice Note:** In the case that any of the invited parties, other than the site representative does not attend this meeting, the consent holder will have complied with this condition, provided the invitation requirement is met.

8. Prior to exercising this consent the consent holder shall establish a sediment control team which is to be managed by an appropriately qualified person experienced in erosion and sediment control and associated environmental issues. The sediment control team shall consist of personnel who have clearly defined roles and responsibilities to monitor compliance with the consent conditions and will be available to meet with the Waikato Regional Council monitoring personnel on a weekly basis, or as otherwise agreed in writing, to review erosion and sediment control issues. The person managing the sediment control team shall: Be experienced in erosion and sediment control implementation and monitoring; Be recognised by his/her peers as having a high level of knowledge and skill as appropriate for the role; Have completed recognised training in erosion and sediment control; and, be approved in writing by the Waikato Regional Council.

### **Earthworks Design and Management Plan**

9. The consent holder shall prepare an "Earthworks Design and Management Plan" and submit this to the Waikato Regional Council for written approval in a technical certification capacity no later than 20 working days prior to the commencement of any earthworks on the site.

This plan shall include but not be limited to:

- The staging of works planned and the description of earthworks in each stage including general site plans;
- b) Outline the engineering controls, supervision and certification that will be applied to each stage;
- c) Outline the site specific design parameters and performance standards that will be applied to each stage, considering both static and seismic conditions;
- d) Outline stability analysis design procedures that will be used for each stage, including the method of determining turbine setback zones and stability of existing natural slopes loaded by the works;
- e) Outline engineering and management procedures for material sources, use, disposal and treatment, stockpiling, fill placement and disposal of unsuitable materials;
- f) Detail measures for groundwater control, including details of subsoil drainage, within disposal areas;

- g) Confirm volumes of cut, fill and unsuitable material (based on available information at the time). A contingency of plus or minus 20% shall be added to the total excavation of 259,000m3 provided for in this consent, and for the access road to be up to 10m in width dependent upon the type of transporter chosen;
- h) Detail measures for dealing with situations that do not conform at the time of construction with the design assumptions;
- Outline the methods of site assessment by suitably qualified persons that will be used to determine the need for the installation of sub soil drainage systems to all earthworks activities that will be required during construction;
- j) Such other procedures that will be employed to ensure land stability is not compromised by construction works.
- k) The format of Producer Statements to be adopted for Design (PS1), Design Review (PS2), Construction (PS3) and Construction Review (PS4).
- 10. Any changes to the Earthworks Design and Management Plan shall be approved in writing by the Waikato Regional Council, acting in a technical certification capacity, prior to the implementation of any changes proposed.
- 11. The consent holder shall ensure that a copy of the certified ESCP, including any certified amendments, is kept onsite and this copy is updated within 5 working days of any amendments being certified.
- 12. The Consent Holder shall engage Chartered Professional Engineers with geotechnical and civil engineering experience to direct and supervise appropriate site investigations, and undertake design, peer review, supervision and certify the construction of all works in accordance with the procedures set out in the Earthworks Design and Management Plan. The peer review resources engaged by the consent holder shall be agreed in writing by the Waikato Regional Council.
- 13. Producer Statements as detailed in condition 9 above for Design and Design Review shall be submitted to the Waikato Regional Council no later than 10 days prior to subject works commencing.
  - <u>Advisory Note:</u> The consent holder may at any time and with notification to the Waikato Regional Council (but without written approval) undertake minor works such as are required to carry out site investigations for the purposes of design, including the formation of minor access required for the same. It is expected that these activities will be undertaken in accordance with the permitted activity rules and associated criteria of the Waikato Regional Council.
- 14. The consent holder shall ensure that all cut and fill batters associated with access roads, borrow areas, and turbine platforms and pads (and associated hard stand) shall be re-contoured to visually reintegrate into the natural landform, and within 3 months of earthworks being completed in each of these areas shall be re-vegetated to visually integrate with surrounding vegetation patterns. This re-contouring and re-vegetation shall occur in a progressive manner on the site as earthworks have been completed.
- 15. The Consent Holder shall employ a suitably qualified geotechnical engineer to ensure that cut slopes and spoil disposal sites are individually and appropriately assessed for stability prior to, during and following individual cutting and filling operations, and to ensure that appropriate drainage is installed at each site.

### **Erosion and Sediment Control Plan**

16. The consent holder shall provide the Waikato Regional Council with a finalised 'Erosion and Sediment Control Plan' (ESCP), at least 20 working days prior to the commencement of

earthworks for the activities authorised by this consent. The objective of the ESCP shall be to minimise sediment discharge from the site to the extent practicable over the earthworks period.

- 17. The ESCP shall be based on those specific principles and practices which are contained within the Waikato Regional Council document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities" (Technical Report No. 2009/02 dated January 2009), and including at least the following:
  - a) Details of all principles, procedures and practices that will be implemented to undertake erosion and sediment control to minimise the potential for sediment discharge from the site:
  - b) The final location of the turbines and subsequent design criteria and dimensions of all key erosion and sediment control structures. Final turbine locations may vary by up to 150m from those set out in the plans accompanying the application;
  - c) A site plan of a suitable scale to identify:
    - i. The locations of waterways
    - ii. The extent of soil disturbance and vegetation removal
    - iii. Any "no go" and/or buffer areas to be maintained undisturbed adjacent to watercourses
    - iv. Areas of cut and fill
    - v. Locations of topsoil stockpiles
    - vi. All key erosion and sediment control structures
    - vii. The boundaries and area of catchments contributing to all sediment retention structures
    - viii. The locations of all specific points of discharge to the environment.
  - d) Construction timetable for the erosion and sediment control works and the bulk earthworks proposed;
  - e) Timetable and nature of progressive site rehabilitation and re-vegetation proposed;
  - f) Maintenance, monitoring and reporting procedures;
  - g) Rainfall response and contingency measures including procedures to minimise adverse effects in the event of extreme rainfall events and/or the failure of any key erosion and sediment control structures.

The ESCP shall be approved in writing by the Waikato Regional Council, acting in a technical certification capacity, prior to commencement of any works authorised by this consent and the consent holder shall undertake these works in accordance with the approved ESCP.

- 18. Any changes proposed to the ESCP provided as part of the application shall be confirmed in writing by the consent holder and certified in writing by the Waikato Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.
- 19. The consent holder shall ensure that a copy of the certified ESCP, including any certified amendments, is kept onsite and this copy is updated within 5 working days of any amendments being certified.
- 20. Prior to bulk earthworks commencing, a certificate signed by a suitably qualified and experienced person shall be submitted to the Waikato Regional Council, to certify that the erosion and sediment controls have been constructed in accordance with the erosion and sediment control plan.

Certified controls shall include the Decanting Earth Bunds, Dirty Water Diversions, and Clean Water Diversions. The certification for these subsequent measures shall be supplied immediately upon completion of construction of those measures. Information supplied if applicable, shall include:

- a) Contributing catchment area;
- b) Shape and volume of the structure (dimensions of structure);
- c) Position of inlets/outlets: and
- d) Stabilisation of the structure.

### **Flocculation**

- 21. Prior to the commencement of bulk earthworks, the consent holder shall undertake flocculent bench testing to determine the reactivity of soils to chemical treatment within those areas of the site where runoff is proposed to be treated by sediment retention ponds and decanting earth bunds.
- 22. If/where soils positively react to chemical treatment, the implementation of a flocculation treatment system shall be maintained as a contingency throughout the duration of earthworks and shall be implemented at the request of the Waikato Regional Council monitoring officer in accordance with the Flocculation Management Plan required by Condition 14.
- 23. Prior to the commissioning of any flocculation treatment system, the consent holder shall provide the Waikato Regional Council with a 'Flocculation Management Plan' (FMP), for the written approval of the Waikato Regional Council acting in a technical certification capacity. The FMP shall include as a minimum:
  - a) Specific design details for the flocculation system;
  - b) Monitoring, maintenance (including posts-storm) and including a record system;
  - c) Details of optimum dosage (including assumptions);
  - d) Results of any initial flocculation trial;
  - e) A spill contingency plan; and
  - f) Contact details of the persons responsible for the operation and maintenance of the flocculation treatment system and the organisational structure to which this person shall report.
- 24. The FMP required by Condition 14 shall be approved in writing by the Waikato Regional Council, acting in a technical certification capacity, prior to the commencement of bulk earthworks and the consent holder shall undertake all flocculation activities in accordance with the approved FMP.
- 25. Any changes proposed to the FMP required by Condition 14 shall be confirmed in writing by the consent holder and approved in writing by the Waikato Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.

### Construction

- 26. The consent holder shall ensure that sediment losses to natural water arising from the exercise of this resource consent are minimised during the duration of the works and during the term of this consent. In this regard, erosion and sediment control measures shall be established and maintained in accordance with Waikato Regional Council document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities" (Technical Report No. 2009/02 dated January 2009).
- 27. All sediment retention ponds and decanting earth bunds implemented on site shall incorporate the following measures to ensure that treatment efficiencies are maximized over the duration of the earthworks activities:
  - a) Reverse grading invert to maximise sediment capture at the front end of the device; and

- b) Installation of silt fence baffles extending across the width of the device invert single baffles for decanting earth bunds and double baffles for sediment retention ponds.
- c) The minimum volume of sediment retention ponds and decanting earth bunds shall be 3 percent of the contributing catchment (300m³ capacity for each hectare of contributing catchment).
- 28. Dirty water diversion drains shall incorporate sediment pits excavated at no greater than 50m intervals along the drains to allow for capture of gross sediment particles and minimise sediment loading on treatment devices.
- 29. All earthmoving machinery, pumps, generators and ancillary equipment shall be operated in a manner, which ensures spillages of fuel, oil and similar contaminants are prevented, particularly during refuelling and machinery servicing and maintenance. Refuelling and lubrication activities shall be carried out away from any water body, ephemeral water body, or overland flow path, such that any spillage can be contained so that it does not enter surface water.
- 30. The consent holder shall ensure that, as far as practicable, all clean water run-off from stabilised surfaces including catchment areas above the site shall be diverted away from the exposed areas via a stabilised system to prevent erosion. The consent holder shall also ensure the outfall(s) of these systems are protected against erosion.
- 31. No vehicles or earth moving machinery shall enter any waterways on the subject site at any time. All machinery shall be operated from an appropriate distance beyond any waterways to avoid bank instability.
- 32. All activities undertaken on site shall be conducted and managed in a manner that ensures that all dust emissions are kept to a practicable minimum. To this end there shall be no discharge of dust as a result of the activities authorised by this consent that causes an objectionable or offensive effect beyond the boundary of the property that the activities are being undertaken on

**Note:** For the purposes of Condition 23 of this consent, the Waikato Regional Council will consider an effect that is objectionable or offensive to have occurred if any appropriately experienced officer of the Waikato Regional Council determines it so after having regard to:

- The frequency, intensity, duration, location and effect of the dust emission(s), and/or
- Receipt of complaints from neighbours or the public, and/or
- Where relevant written advice from an experienced officer of the Waitomo District Council or the Waikato District Health Board has been issued.

# **Winter Works**

- 33. The consent holder shall ensure that the site is appropriately stabilised by 30 April of each year unless otherwise approved in writing by the Waikato Regional Council. Stabilisation shall be undertaken by providing adequate measures (vegetative and/or structural and including, pavement, metalling, hydro-seeding, re-vegetation and mulching) that will minimise erosion of exposed soil to the extent practical.
- 34. Earthworks shall not be conducted during the period 1 May to 30 September inclusive during any year that this consent is current, apart from necessary maintenance works, unless agreed to in writing by the Waikato Regional Council.
- 35. Requests to undertake earthworks during the period 1 May to 30 September inclusive, for any year that this consent is current, shall be submitted in writing to the Waikato Regional Council

by 1 April and shall be in the form of amendments to the certified E&SCP in accordance with condition 16 of this consent.

**Advice Note:** In considering a request for the continuation of winter earthworks, the Waikato Regional Council will consider a number of factors; including:

- The nature of the site and the winter soil disturbance works proposed;
- The quality of the existing/proposed erosion and sediment controls;
- The compliance history of the site/operator;
- Seasonal/local soil and weather conditions;
- Sensitivity of the receiving environment; and
- Any other relevant factor.

# **Water Quality**

- 36. The consent holder shall measure the suspended solids concentration and turbidity at the outlet of all stormwater retention structures approved in the Erosion and Sediment Control Plan.
- 37. Water sampling shall be undertaken where there is a rainfall event of greater than 25 millimetres in the preceding 24 hours and at a minimum of monthly intervals. The consent holder shall within twenty-four hours of the rainfall reading being taken, measure the suspended solids concentration and turbidity at the discharge points specified. Results shall be forwarded to the Waikato Regional Council within 7 days of analysis.
- 38. Additionally, if flocculants are being used and if recommended in the Flocculation Management Plan, water sampling at the respective sediment retention device/s shall include testing for pH, and soluble aluminium.

**Advice Note:** In the event that the sediment retention structures are not discharging when sampling is due, water sampling shall be undertaken at the next discharge event.

- 39. The activity or discharge shall not result in the suspended solids concentration in the stormwater discharged from the site exceeding 80 grams per cubic metre, unless there is a rainfall event greater than 50mm in the preceding 24 hours in which case the activity or discharge shall not result in the suspended solids concentration in the stormwater discharged from the site exceeding 100 grams per cubic metre.
- 40. The consent holder shall ensure that the stormwater discharge shall not cause a conspicuous change in the colour or visual clarity of the receiving water body. If a conspicuous change to colour or visual clarity of the receiving water body is observed by the Consent Holder, the Waikato Regional Council shall be advised in writing within 24 hours.
- 41. Any sampling required by the conditions of this resource consent, the frequency of sampling, analyses and reporting may be altered or reduced with the written approval of the Waikato Regional Council if the applicant can demonstrate that its erosion and sediment control measures are effective in managing discharges from the site.
- 42. The consent holder shall ensure that all sediment laden run-off from the site is treated by sediment retention structures. These structures shall be fully operational before bulk earthworks commence and shall be maintained to perform at least at 80% of their operational capacity.

### Dust

- 43. The consent holder shall manage the earthworks, filling and ancillary activities in such a manner to ensure that dust emissions are kept to a practicable minimum, including;
  - a) Measures including, but not limited to, the use of water to suppress dust from the site and from access roads;
  - b) The revegetation of disturbed land which is currently not being worked;
  - c) The regrassing of topsoil stockpiles;
  - d) The area of land open for stockpiling, load out and rehabilitation activities shall be kept to a practicable minimum.
- 44. There shall be no discharge of airborne particulate matter that causes an adverse effect beyond the boundary of the site.
- 45. Should airborne particulate matter resulting from the exercise of this consent generate a complaint, the consent holder shall provide a written report to the Waikato Regional Council within five (5) working days of the complaint being made known to the consent holder. The report shall specify:
  - a) The cause or likely cause of the event and any factors that influenced its severity;
  - b) The nature and timing of any measures implemented by the consent holder to avoid, remedy or mitigate any adverse effects; and,
  - c) The steps to be taken in future to prevent recurrence of similar events.

**Advice Note:** Chapter 6.4 of the Waikato Regional Plan 2012 provides guidance on the assessment of the effect of odour and dust emissions.

- 46. If so required by the Waikato Regional Council, the consent holder shall carry out immediate sealing of any problematic dust generating surfaces within the site using hydro-seed/hydro-mulch, polymer soil stabilisers or a similar dust control product to provide instant remediation of dust effects to the satisfaction of the Waikato Regional Council.
- 47. The consent holder shall ensure that an adequate supply of water for dust control and an effective means for applying that quantity of water, is available at all times during construction, and until such time as the site is fully stabilised unless otherwise agreed in writing with the Waikato Regional Council.

# **Monitoring and Maintenance**

- 48. The consent holder shall ensure that all erosion and sediment control structures are inspected on a weekly basis and within 24 hours of each rainstorm event that is likely to impair the function or performance of the controls.
- 49. The consent holder shall carry out monitoring and maintenance of erosion and sediment controls in accordance with the conditions of this resource consent and shall maintain records detailing:
  - a) The date, time and results of the monitoring undertaken; and
  - b) The erosion and sediment controls that required maintenance; and
  - c) The date and time when the maintenance was completed.

These records shall be provided to the Waikato Regional Council at all reasonable times and within 72 hours of a written request to do so.

50. The consent holder shall provide to the Resource Use Group of the Waikato Regional Council, a report by 1 May each year a Compliance and Monitoring Report. As a minimum this report shall include the following:

- a) earthworks and filling activities undertaken during the preceding 12 months and proposed to be carried out during the following 12 months;
- b) any water quality data collected;
- c) daily rainfall records;
- d) a compliance audit of all consent conditions;
- e) any reasons for non-compliance or difficulties in achieving compliance with all consent conditions;
- f) recommendations on alterations to monitoring required by consent conditions;
- g) any necessary updates to the management plans;
- h) any other issues considered important by the consent holder;
- i) Provision of any sediment discharge monitoring data; and discussion and interpretation of the monitoring results.

### **Site Restoration**

- 51. The removal of any erosion and sediment control measure from any area where soil has been disturbed as a result of the exercise of this resource consent shall only occur after consultation and written approval has been obtained from the Waikato Regional Council acting in a technical certification capacity. In this respect, the main issues that will be considered by the Waikato Regional Council include:
  - a) The quality of the soil stabilisation and/or covering vegetation;
  - b) The quality of the water discharged from the rehabilitated land; and
  - c) The quality of the receiving water.
- 52. The consent holder shall ensure those areas of the site which have been completed shall be progressively stabilised against erosion as soon as practically possible and within a period not exceeding 3 days after completion of any works authorised by this resource consent. Stabilisation shall be undertaken by providing adequate measures (vegetative and/or structural) that will minimise sediment runoff and erosion and in accordance with Waikato Regional Council document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities" (Technical Report No. 2009/02 dated January 2009). The consent holder shall monitor and maintain the site until vegetation is established to such an extent that it prevents erosion and prevents sediment from entering any surface water.
- 53. Re-vegetation and/or stabilisation of all disturbed areas shall be completed in accordance with the measures detailed in Waikato Regional Council document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities" (Technical Report No. 2009/02 dated January 2009).

# Rehabilitation

- 54. As soon as practicable after the completion of any of the works authorised by this resource consent, the consent holder shall stabilise and re-contour all disturbed areas to limit/prevent sediment runoff and erosion. The consent holder shall maintain the site until vegetation is established to such an extent that it prevents erosion and prevents sediment from entering any watercourse.
- 55. The consent holder shall undertake hydro-seeding of all cut slopes and batters, or other means of stabilisation as proposed by the consent holder in relation to turbine platforms, as soon as practicable after their formation to ensure rapid revegetation.
- 56. The consent holder shall undertake a maintenance programme to ensure rehabilitation of disturbed areas including weed control, to the satisfaction of the Waikato Regional Council. The

programme shall ensure the re-establishment of indigenous plant species on areas where soil is disturbed on Taumatatotara West Road.

# **Land Stability Plan**

- 57. At least 20 working days prior to works commencement, the consent holder shall provide to the Waikato Regional Council a Land Stability Plan containing the following information for all works authorised by this consent:
  - a) A detailed geotechnical investigation, including current site stability, slope stability, and potential risks;
  - b) Road design including all crossings, stormwater, and erosion control measures;
  - c) Measures that will be undertaken to avoid land instability and/or erosion;

The Land Stability Plan shall be written by an appropriately experienced, and qualified geotechnical engineer.

- 58. The consent holder shall exercise this consent in accordance with the approved Land Stability Plan. Any subsequent changes to the Land Stability Plan shall only be made with the written approval of the Waikato Regional Council. In the event of any conflict or inconsistency between the conditions of this consent and the provisions of the Land Stability Plan, then the conditions of this consent shall prevail.
- 59. The consent holder shall ensure that a copy of the approved Land Stability Plan including any approved amendments, is kept onsite at all times that physical works authorised by this consent are being undertaken and the onsite copy of the Land Stability Plan shall be updated within 5 working days of any amendments being approved. The Land Stability Plan shall be produced without unreasonable delay upon request from a servant or agent of the Waikato Regional Council.

### **Peer Review**

- 60. Prior to exercising this consent, the consent holder shall engage, at its own cost, an Independent Peer Reviewer(s) to review the Land Stability Plan required by condition 57 of this consent, to assess whether or not the design has been undertaken by appropriately qualified personnel in accordance with best practice.
- 61. The peer review required by condition 60 of this consent shall include review of the following aspects as a minimum:
  - (a) Design
  - (b) Site Stability
  - (c) Construction methods
  - (d) Hazards and hazard mitigation should the works result in erosion and/or slope failure
- 62. The Independent Peer Reviewer(s) shall be:
  - (a) Independent of the planning, design, construction, management and monitoring of this site:
  - (b) Experienced in road and earthworks design, construction, management and monitoring;
  - (c) Recognised by his/her peers as having such experience, knowledge and skill;
  - (d) Approved in writing by the Waikato Regional Council.
- 63. The Independent Peer Reviewer(s) shall report directly to the Waikato Regional Council in writing on all matters which are submitted to it for review, other than draft proposals submitted to it by the consent holder and which are superseded.

64. The consent holder shall provide the Peer Reviewer(s) with all records, plans, designs, etc, that the Peer Reviewer requests, and shall afford the Peer Reviewer full access to the site at all reasonable times.

# **Archaeological sites**

- 65. The consent holder shall ensure that the exercise of this resource consent does not disturb sites of spiritual or cultural significance to Tangata Whenua. In the event of any archaeological remains being discovered, the works in the vicinity of the discovery shall cease immediately and the Waikato Regional Council shall be notified within 24 hours. Works may recommence on the written approval of the Waikato Regional Council after considering:
  - (a) Tangata Whenua interests and values;
  - (b) The consent holder's interests; and
  - (c) Any archaeological or scientific evidence

### Administration

66. The Consent Holder shall pay the Waikato Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act (1991), or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act (1991).

# **Lapse Date**

67. This consent shall lapse ten years after the date it is granted unless the consent is given effect to or the Council extends the period after which the consent lapses.