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22 March 2021 Our Ref: 19097.05

Minister for Planning c/- Michael Juttner Manager Renewable Team Dept. Environment, Land, Water & Planning

Via DELWP Permits Online portal

Dear Michael,

## **Application to Amend Planning Permit PA1900743 5MW Solar Energy Facility & Utility Installations** McQualters Road, Raywood VIC 3570 (incl. adjacent road reserve)

This application is prepared on behalf of Greentech 8 Pty. Ltd., as the current permitholder and applicant in this matter – referred to herein as "the applicant".

This application is submitted subsequent to the most recent endorsement of plans via Secondary Consent in September 2020. The applicant now seeks to reconfigure the facility from solar panels fixed array solar panels to tracking array panels. As a result of this change, there will be an increase the site area of approximately 50% (or ~5ha) to incorporate the new array system onto the subject site, which remains unchanged from the original permit.

Further to pre-application discussions and advice from DELWP's renewables team, as the proposed change in the type of arrays represents a material change to the previously approved facility, we hereby apply to amend Planning Permit PA1900743 via Section 72 of the Planning and Environment Act.

As part of the pre-application process, the applicant has obtained specialist assessments of the proposed changes to demonstrate that the reconfiguration of the facility would not unduly impact any nearby sensitive land uses.

Consequently, the following plans and documents are submitted in support of this application, and for endorsement with amended permit:

- Proposal Plans
- **Updated Glint and Glare Assessment**
- **Updated Acoustic Report**

#### **Glint and Glare Assessment**

Undertaken by Environmental Ethos, this assessment has considered the potential impact of the amended facility on nearby receptors within a 2km radius of the facility.

Within this radius, there were fifteen (15) dwellings that were identified as having potential visibility to the site – illustrated in **Appendix A** of this submission.

There would be no glare on any nearby dwellings, nor any other sensitive receptors as a result of the proposed tracking arrays. This includes any nearby roads, railways and the Raywood airport to the east of the site.



#### **Acoustic Assessment**

Prepared by Watson Moss Growcott to assess the potential noise impacts on the surrounding area against the standards of the EPA's Noise from Industry in Regional Victoria ("NIRV" herein).

The proposed changes remain well below the acceptable NIRV standards. Any noise generated from the inverters, batteries and from the array motors would adequately dissipate prior to reaching any of the identified receptors – being the four (4) nearest dwellings.

For reference, the minimum acceptable noise levels under NIRV are illustrated in the below table. This table should be cross referenced with the anticipated noise levels at each respective receptor/dwelling modelled in **Appendix B**.

EPA Assessment Period	Relevant Days	Relevant Time Periods	Calculated NIRV RMNL Values	
Day	Monday to Friday	7:00am to 6:00pm	46	
Day	Saturday	7:00am to 1:00pm		
	Saturday	1:00pm to 6:00pm		
Evening	Evening Sunday, Public Holidays		41	
	All Days	6:00pm to 10:00pm		
Night	All Days	10:00pm to 7:00am	36	

#### **Proposed Changes**

This application now seeks approval from the Minister to alter the approved solar energy facility and utility installations to incorporate the new solar array system. The full extent of changes is listed below:

- Change from fixed array solar panels to tracking array
  - o Reduction in total number of panels (from 17,612 to 14,784)
  - Reconfiguration of PV arrays (from rectangular blocks into linear arrays)
  - o Increase in height of solar arrays of 1.5m (from 0.9m to 2.4m)
- Increased site dimensions:
  - Increase width (east-west) dimensions of facility (by 58m)
  - o Increase depth of facility (by 79m)
  - Total increase in area of approximately 4.8ha (from 10.2 hectares to 15 hectares)

To accommodate the increases in site area outlined above, the approved facility would expand to the west and south – thereby reducing the respective setbacks. The eastern and front setbacks are not meaningfully changed, however.



### **Amendment Pathway (Section 72 Amendment vs Secondary Consent)**

In considering the proposed changes, these changes are generally considered to accord with the criteria for Secondary Consent (i.e. the Westpoint test), insofar that the changes:

- Do not authorise something for which primary consent was required under the planning scheme
- Do not result in any consequence having regard to the purpose of the planning control under which the permit was granted
- Do not result in a contradiction to a specific requirement.

However, although the changes to the proposal do not strictly trigger primary consent under the provisions of the permit which allows the reconfiguration, written pre-application from the Minister's office has made clear that the Minister considers that the changes in built form "result in a transformation of the proposal" which warrants a formal amendment of the permit Under 72 of the Act.

Nevertheless, on the whole the changes to the endorsed plans do not result in a substantial transformation to the approved solar energy facility and utility installations. The external dimensions of the facility remain comparable and the setback from the northern/front boundary remains as per the currently approved facility.

Amenity impacts on surrounding dwellings will be appropriately managed by the landscape screening currently approved and no acoustic or visual mitigation beyond that required by the existing permit would be required.

It is unlikely that there would be any undue impact on off-site amenity arising from the proposed amendment.

Therefore, it is requested that the Minister approve the sought changes to Planning Permit PA1900743.

Upon acknowledgement of application receipt, our client will make arrangement for payment of the prescribed application fee.

If you require any further information in this matter, please do not hesitate to contact our office.

Yours sincerely.

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### **Appendix A - Glint and Glare Overview**

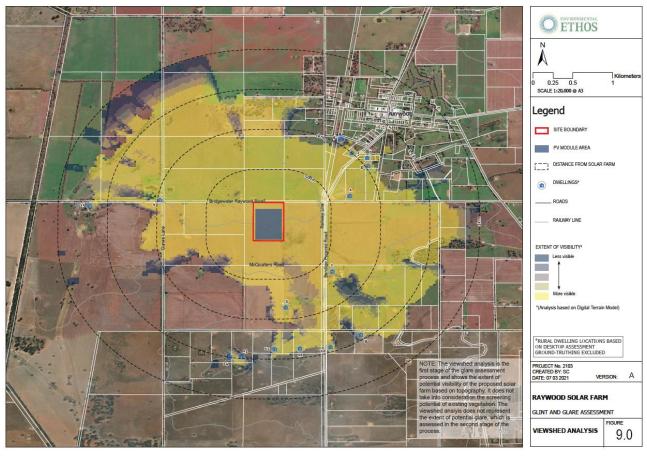


Table 3. SGHAT Assessment Results – Horizontal Single Axis Tracking System (Resting angle 60 degrees)

Sensitive Receptor	Glare Potential
Observation Points OP1 to OP15	No Glare
Rural and residential dwellings	
Bendigo Pyramid Road	No Glare
Bridgewater Raywood Highway	No Glare
Gunes Lane	No Glare
McQualters Road	No Glare
Railway Line	No Glare
Flight Path 1 – Bendigo Gliding Club Grass Runway (south)	No Glare
Flight Path 2 – Bendigo Gliding Club Grass Runway (north)	No Glare



Table 4. SGHAT Assessment Results – Resting Angle Analysis of 45 and 0 degrees

Sensitive Receptor	Resting Angle 45 degrees *- Glare Potential	Stowing Angle 5 degrees **- Glare Potential
Observation Points OP1 to OP15 Rural and residential dwellings	No Glare – all dwellings	No Glare – all dwellings
Bendigo Pyramid Road	No Glare	No Glare
Bridgewater Raywood Highway	No Glare	No Glare
Gunes Lane	No Glare	No Glare
McQualters Road	No Glare	No Glare
Railway Line	No Glare	No Glare
Flight Path 1 – Bendigo Gliding Club Grass Runway (south)	No Glare	No Glare
Flight Path 2 – Bendigo Gliding Club Grass Runway (north)	No Glare	No Glare



# **Appendix B - Acoustic Overview**



Noise Sensitive Receptor	Predicted Noise Level During Relevant Assessment Period		
(R1)	Day Period	Evening Period	Night Period
Predicted Contribution due to Solar Farm	25 dB(A)	25 dB(A)	25 dB(A)
Tonal adjustment	+2 / +5 dB(A)	+2 / +5 dB(A)	+2 / +5 dB(A)
Effective noise level at receptor	27 / 30 dB(A) L <sub>eq</sub>	27 / 30 dB(A) L <sub>eq</sub>	27 / 30 dB(A) L <sub>eq</sub>
Noise Emissions Compliant with NIRV RMNL	<b>✓</b> (Note 1)	<b>✓</b> (Note 1)	✓ (Note 1)



Noise Sensitive Receptor	Predicted Noise Level During Relevant Assessment Period		
(R2)	Day Period	Evening Period	Night Period
Predicted Contribution due to Solar Farm	23 dB(A)	23 dB(A)	23 dB(A)
Tonal adjustment	+2 / +5 dB(A)	+2 / +5 dB(A)	+2 / +5 dB(A)
Effective noise level at receptor	25 / 28 dB(A) L <sub>eq</sub>	25 / 28 dB(A) L <sub>eq</sub>	25 / 28 dB(A) L <sub>eq</sub>
Noise Emissions Compliant with NIRV RMNL	✔ (Note 1)	✔ (Note 1)	✓ (Note 1)

Noise Sensitive Receptor	Predicted Noise Level During Relevant Assessment Period		
(R3)	Day Period	Evening Period	Night Period
Predicted Contribution due to Solar Farm	< 20 dB(A)	< 20 dB(A)	< 20 dB(A)
Tonal adjustment	+2 / +5 dB(A)	+2 / +5 dB(A)	+2 / +5 dB(A)
Effective noise level at receptor	< 22 / 25 dB(A) Leq	< 22 / 25 dB(A) Leq	< 22 / 25 dB(A) Leq
Noise Emissions Compliant with NIRV RMNL	<b>✓</b> (Note 1)	<b>✓</b> (Note 1)	✓ (Note 1)

Noise Sensitive Receptor	Predicted Noise Level During Relevant Assessment Period		
(R4)	Day Period	Evening Period	Night Period
Predicted Contribution due to Solar Farm	23 dB(A)	23 dB(A)	23 dB(A)
Tonal adjustment	+2 / +5 dB(A)	+2 / +5 dB(A)	+2 / +5 dB(A)
Effective noise level at receptor	25 / 28 dB(A) L <sub>eq</sub>	25 / 28 dB(A) L <sub>eq</sub>	25 / 28 dB(A) L <sub>eq</sub>
Noise Emissions Compliant with NIRV RMNL	<b>✓</b> (Note 1)	✓ (Note 1)	✓ (Note 1)