Response No: 9

Submission 09 - Angela Payne

Q1 Short Text

Full Name:

Angela Marie Payne

Q2 Short Text

Company/Organisation (if applicable)

Agri-lab Co-Products Ltd

Q3 Short Text

Contact Person (if different)

Q4 Email

Email Address

agri-lab@xtra.co.nz

Q5 Short Text

Address

9 Hatuma Road, Waipukurau

Q6 Telephone

Mobile Phone

0272496151

Q7 Telephone

Home Phone

0272496151

Q8 Select Box

3. Could you gain an advantage in trade competition through this submission (Please tick relevant box) I could

Q9 Select Box

4. Are you directly affected by an effect of the subject matter of the submission that:

I am not

Q10 Select Box

5. Do you wish to be heard in support of my submission in person (Please tick relevant box)

I wish

Q11 Select Box

6. Will you consider presenting a joint case with other submitters, who make a similar submission, at a hearing. (Please tick relevant box)

I will

Q12 Select Box

7. Do you wish to present your submission via Zoom?

No

Q13 Select Box

Do you:

Support

Q14 Long Text

What specific parts of the proposed changes does my submission relate to? (please reference the specific section or words and attach more pages if required)

Q15 Long Text

What decision are you seeking from Council? (clearly indicate whether you support of oppose the specific provisions or wish to have amendments made, giving reasons).

SOCIALPOINT BY OPEN POINT

Q16 **Please note: All submissions will be treated as public documents and will be made available on Council's website. However, you may request that your contact details (but not your name) be withheld. If you want your contact details withheld, please let us know by ticking this box**

Single Checkbox

Q17 **Upload additional documentation here**

File Upload

Q18 **Do you:**

Select Box

Support

Q19 **What specific parts of the proposed changes does my submission relate to? (please reference the specific section or words and attach more pages if required)**

Long Text

RE-P1, RE-P3, RE-P4

Submission point 09.01

I support the proposed changes and want the limit of generation for small business significantly lifted from current District Plan requirements, because Agri-lab is a high user of electricity (for heat generation (cooking in 3-phase power jacketed kettles and a reaction vessel) and refrigeration (running 3-phase power freezers and freeze driers) as well as from the ancillary equipment including mincers, bandsaws, mill, lighting, security system, computers and the like.

Our power bills are about $8,000 - $10,000 per month at peak usage. A solar field of about 140 kwh is expected to cut this bill in half, and a solar field of 200 kwh would enable us to install a battery wall in the future and utilize that extra energy in overnight refrigeration management and automated cooking functions.

Agri-lab made a decision to reduce peak usage by reducing the number of cookings we are doing (and thus reducing staff numbers) until either the price of electricity comes back down or we can install solar to offset the significant cost of running the 3 jacketed kettles and the reaction vessel.)

Before rationalising (reducing) the cooking activities, our electricity usage was about 50% daytime use and 50% nighttime use, with a $9,000 monthly bill. Now our usage is about 75% daytime use and 25% nighttime use (but a smaller bill.)

Solar panels will allow Agri-lab to manage our own electricity usage to suit production, and once more efficient and economical, will open up opportunities for more staff including a late shift being added.

However, before that happens, I guess Agri-lab would have to seek an amendment to its original consent to operate, issued by the CHB DIstrict Council, which clearly states that we are not allowed to operate after 6 pm on any night. The reasons for this were never provided by the Council, and to date, I never challenged it, because it has never been an issue in the past.
This is an early flag that it may be necessary for me to challenge that condition, and ask the Councils justification for it, in order for Agri-lab to make the most of the additional day-time electricity generation and the need for staff to be on site from 6 pm - 9 pm to unload jacketed kettles that were heating during the day (during the time of solar electricity generation.
I note that a late shift of a part time position from Monday to Thursday 6 pm - 9 pm will likely suit a lot of people in CHB, so it would be great if that opportunity was made possible.

To summarise, Agri-lab already has plans, some quotes for supply of equipment, and consultations for the construction of a solar field sufficient to generate 140kwh with the electrical installation to be completed by DMAK Electrical and the insertion of the posts for the solar panels by JK Fencing (both of CHB. Support local!)

Agri-lab has already identified a suitable location for the solar field behind the packhouse, which addresses all of the factors of concern including 1. visibility from neighbors 2. Wind damage issues. 3. Heritage concerns. 4. Sound issues. 5. Earthworks issues. 6. Stormwater issues. 7. Construction and traffic issues. 8. Visual disturbance, glint and glare issues. 9. Sustainability issues.

Below I address each issue briefly:

1. Visibility from neighbors - I am my own neighbor on two sides of the proposed solar field side, and three other more distant neighbors have hedges and trees around their properties meaning that they cant see the solar field and their houses cannot be seen from the site. If they want to remove their trees and hedges, they will be able to see the solar panels, but that is their call in the end. At the moment, they are fully obscured. My assumption is that they put the hedges and trees in to provide privacy and reduce noise and visual issues from the CHB Aerodrome which is another of the solar fields direct neighbors. The other neighbor at the back is rural land and paddocks of cows. People living in high sited houses in the township of Waipukurau who can currently see the aerodrome hangers, will be able to see the solar field, at a distance, but the solar panels will be facing north and they would be viewing the profile from the side, and it is likely that most people won't see them because the plane hangers are in the line of sight.
In addition, I have a beautiful home for sale next door and another next door to that (can't see the solar field from

either house) and have no desire to do anything that will compromise the appeal of these homes to new owners. Its in my best interest to ensure that the solar field is contained, attractive, convenient and does not hinder future subdivision in the area (I have more land behind and in front, suitable for subdivision if Waipukurau grows significantly one day, and wants to expand housing in this area, which I intend to keep very desirable.

2. Wind damage issues.
I have experienced severe winds in the area, witnessed the roof of a container hanger blowing off, and experienced wind damage to the packhouse roof freezer unit covers during storms. So I am well aware that the solar panel field needs to be over-spec'd for the possible future winds and storms that I saw in recent years that had not been seen on that scale for 100 years prior to 2023. A friend recently lost part of a small solar field in high winds in Omakere, the failure here was the ripping bolts out of the perlon straps on the posts, which I have up-spec'd in my design. We will add deeper, bigger and more bolts and perlon straps.
The Agri-lab solar field will be a ground mount, and constructed with these issues in mind. The manufacturer of the panels and the supports has many years of experience in panel design for high wind load regions.

3. Heritage concerns. The proposed solar field, behind the Agri-lab packhouse, is alongside the CHB Aerodrome and is not a culturally significant area. Over the years, various minor earthworks have taken place (the digging of septic tanks, drainage, building pads and the like) and no artifacts or bones have ever been uncovered. There is a friendly ghost in the packhouse, who has been felt / seen by many staff over the years, and he assures us its all fine too.

4. Sound issues. Expected to be negligible. It is possible that the sound of planes overhead might bounce off the panels differently to how the sound is heard at the moment, but the presence of more grass underneath the panels (due to removing cattle grazing) is expected to absorb some of the sound waves as well. The neighboring hedges and trees should also mitigate this.

5. Earthworks issues. There will be only very minor earthworks, being the digging of a cable line back to the inverter and on to the packhouse, for the underground electrical wires. The panels will be ground mounted in the traditional style, using a pile driver to insert them (no concrete required, post style uprights.) An earlier plan to build a solar carport style system for extra site under-cover storage has been abandoned due to too many regulatory headaches around the building process. The solar panel system will be traditional ground mount, less than 4m high, and the grounds underneath maintained by neighbors sheep from time to time.

6. Stormwater issues. The area has excellent drainage, being top soil on a gravel and stones and red metal base, and storm water drains quickly without runoff. Even during Cyclone Gabrielle, this area did not flood, because it is well above the peak level of the water table of the area (dictated by Lake Hatuma, I understand.) Thinking ahead, with the possible future addition of guttering, the runoff water could be captured and directed to storage or crops or gardens, although this is not in the plan at this stage.

7. Construction and traffic issues. The solar panels and equipment will be delivered in a container from China via Mainfreight. We already have container deliveries and pickups approximately 4 - 6 times per year, so one extra one-off container delivery is not going to be significant. The construction is in three parts - 1. installation of the posts (using a tractor and thumper which I imagine would be left on site from beginning to end, approx 2 - 3 days work) 2. Installation of the brackets - usual tradesmen activity up the driveway and site. 3. Electrical connections and solar connections and associated certification (DMAK Electrical - usual trade vehicles and minor noise.

8. Visual disturbance, glint and glare issues. The solar panels are designed to not provide glint and glare issues, and have been used next to airfields all over the world. They are well tested elsewhere. Visual disturbance - only significant in the immediate vicinity, and I have plans to do some plantings around the area to mitigate the view from back, in the event that I or someone else decides to build in the paddock behind one day.

9. Sustainability issues. The addition of solar electricity will improve Agri-labs financial sustainability. From a carbon foot print point of view, the posts are pole driven, no concrete is used (apart from a small pad for an electrical box) and concrete is a very high carbon user, so this project ticks a lot of sustainability boxes. Agri-lab already has a DG3 issued by Centralines to allow excess electricity to be put back into the grid, however, it is my expectation that this would only occur over the weekends, as we intend to use most of it on site during the week, and our freeze driers and refrigeration continues to run over the weekend so excesses are expected to be minimal. It is possible that the weekend excess could be an opportunity for extra charging of batteries or other electric vehicles and equipment. There is not expected to be any excess in winter.

Q20 **What decision are you seeking from Council? (clearly indicate whether you support of oppose the specific provisions or wish to have amendments made, giving reasons).**

Long Text

I wish to support the amendment of the District Plan to allow small businesses that are high users of electricity, such as Agri-lab, to install ground mounted solar systems of up to 200kwh with the intention of generating power for our own use, and thus improving profitability of the business, reducing load on Centralines grid at peak times, and making Central Hawkes Bay businesses more resilient.

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Single Checkbox

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Q22 Upload additional documentation here

File Upload

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