1st November 2012

Renewable Energy Act Amendments, Senate Inquiry October 2012

**Dear Senators** 

I support the amendments proposed because stricter controls must be placed on wind farm sound emissions.

1. What is the problem, noise, vibration or other. What is the type of noise source? How far from the nearest noise source do you live?

The health impact experienced is from wind turbines sound emissions.

From the wind turbines from the neighbouring wind facility, ear pressure problems result affecting my ears. There is an over amplification of sound. Similar to when eye drops are placed in the eye to allow the eye's iris diaphragm to dilate and the light is not minimised by the iris diaphragm because it cannot work. I suggest that the noise controlling mechanism of the ear stops working.

Our home, on our farming property is 1.6km from the nearest wind turbine; with two turbines at 2kms and the rest of the turbines on the ridge above our property under 3kms. The neighbouring property hosts 15 stretched out along the ridge. There are more turbines from further across.

2. How often do you have the problems and what is the pattern? ie what makes you think the problem is related to the noise source?

The problem occurs when the wind turbines operate when the wind is from the west, north west, north, north east and the east. I am most affected and more quickly by the northerly wind. Our home is located down from the wind turbines. Given the trees and other vegetation that were and are present, prior to the construction of the turbines, at the house most of the turbines are out of sight so it is not easy to see if the turbines are working which is also the case at night. My ears can detect when the turbines are operating by the pressure build up. If I go outside then I can hear the turbines, this is mainly when the wind is from the northwest through to the north east. Strong winds mean that I can only spend short times at the farm and at home. The longer I stay at the farm the noisier the turbines becomes which is why I call it an over amplification of sound. The wind may remain constant yet the sound becomes louder.

Strong winds means that the symptoms occur very quickly.

As our house and yards on our grazing property is very sheltered there can be little background noise. It may be calm at the house yet the turbines are working and cause ear pressure problems.

The problem is ongoing and constant, when the wind blows and the turbines switch on. There is only relief when the wind is not blowing or the turbines are not spinning. The worst place to be is in the house.

Initially the wind turbines are not loud and anyone who visited would not immediately notice a problem.

It is rare for there to be little or no wind therefore the wind farm operating has great impact. We do not know when the turbines will work therefore this is a major hazard to us. It is difficult to plan our work program.

The initial noise from turbines is less than the sound of the waves of the sea however in my experience the sea sounds are more soothing. I have camped in a tent in a camping ground next to the sea where the waves were louder. I have to leave our home and farming property when my ears experience pressure build up from wind turbines.

3. When did they first start? (eg when the noise started, or weeks months or years later).

Within a few hours of the turbines switching on in August 2011, I was studying in a quiet environment and I started to feel symptoms. I tried to reassure myself that I was just tired having returned from Melbourne the night before. I sought distraction by watching television and undertaking leisure activities however after just a few hours I felt I had to leave the property and visit a friend. Eventually I returned home and experienced an unpleasant night. My husband and I spent the next day away then when we returned the turbines were switched off. What relief and we slept soundly that night.

Another example is when I rose at 5.30amone morning to study in the office and use the internet. The office is located on the northern end of the house. The turbines were spinning with the wind from the north east. I could just hear the turbines. After two hours study in the very quiet environment and then undertook house work for two hours I proceeded to go into our township and work on the computers in the rural transaction centre not wanting to be home on a north wind day. I tried to settle at the computer in the noisy shop however the noise was overwhelming. Going outside the shop I felt I was fielding noise from everywhere. In distress I rang and visited a friend on a farm. What I call over amplification of noise finally settled after about an hour. When I first arrived there I was still fielding what I call excessive sound. Eventually after about an hour my hearing seemed to settle and after studying in a quiet environment I went home. Arriving home to pack up to spend the weekend away as strong northerly winds were forecast, I spent about three hours at the farm in the house. When I left I decided to test whether this over amplification of sound would occur so I packed a thermos and parked in a town 30 kms away and sat quietly. The fact that the over amplification of noise did reoccur confirmed to me that the wind turbines were the cause. When I removed myself from the source of the problem the symptoms eased. The more exposure the quicker the problems occur and the longer the time to recover.

My main concern is that constant exposure will cause permanent problems that will not resolve.

I do not like to see my family affected so my husband and I decided to lease a house in a town some 30kilometres away to seek relief.

There are other examples I could cite.

4. What have been the consequences? (effect on sleep, new symptoms and health problems, and any changes to pre-existing conditions eg physical and mental health)

Consequences include spending more time away from our home and business enterprise. The challenge to find a house to rest and recover in became a high priority. Given the scarcity of rented houses in the area it was stressful in finding somewhere to stay to recover. It took us five weeks for a house to become available. We even stayed two nights in a tent up the road a few kilometres from our farm in the middle of storm which was preferable to being in our home.

I sought to be anywhere other than our home and was found on some occasions in the back of the local church studying because I could not tolerate being in our house due to the turbines.

We have not upgraded or renovated our home.

5. What helps alleviate and improve the symptoms?

Leaving the farm and house when the turbines are spinning is what alleviates and resolves the symptoms. When the turbines are not spinning the relief is enormous and I can spend more time at the farm.

I can spend some time in the shearing shed which is constructed of zincalum and the door to the north is shut. The shearing shed is 200mtres closer to the turbines. Earmuffs are of limited protection.

6. What happens with ongoing exposure to the noise?

Ongoing exposure means that I am more affected more quickly and react quickly. If I stay too long the pressure build up is like tiny corkscrews in my ears which leads to a headache on the back of the head in line with my ears. I try to be proactive with my health and spend as little time as possible in our home and our farming property. My husband likens the experience to working all day in a noisy environment yet he may have spent some time in the farm house office doing bookwork and only faintly hearing the turbines.

- 7. Are the symptoms affected by the wind and weather condition? Yes the wind means that the turbines spin. If so, what wind and weather conditions are worse for you?
  - The strongest quickest impact is when the wind is from the north. As the atmosphere changes towards evening so the sound becomes louder. When in the shower the symptoms are not as noticeable.
- 8. Other effects (effect on income earning capacity, safety on farm and on the road eg near misses, effect on the family, extended family and community relationships).

Leasing a house and associated costs and commuting to the farm in various vehicles because there four people in our family is very costly. Our concern is how long we can fund this. Our farming enterprise is a sheep grazing self-replacing merino flock and it is necessary to be out and around the sheep. There are many activities that require us to be on foot. We regularly walked around the property for various inspections of fences, pastures and livestock, and check water in dams which was much more economical. We have basically lost our home, farm and our farming enterprise and our way of life. Management changes due to the impact of the wind farm.

We decided not to place separate facilities near the shearing shed to accommodate shearers or upgrade the eating and toilet facilities.

My husband purchased another vehicle for safer commuting between leased house and farm. This would not have been necessary if we lived permanently on our property.

We rent and maintain someone's home and garden thereby neglecting our own home and garden however at the same time I am appreciative of being able to rest in the rented house. We do not have the cash flow to purchase our own home to recover in. Also the time and cost to the farm business by being away from the farm is significant. The boys and myself are not able to spend considerable time on the farm therefore there are inefficiencies now in our work program.

Given the siting of the wind turbines with respect to the layout of our farming property there is no place on the farm where a house could be placed to escape the health impacts of the wind farm.

If we did decide to sell we are uncertain as to whether we can sell, for how much and where we would go. This region has reliable rainfall. Given the mining interests, blue gum plantations, and the proliferations of wind farms in this region, such is the competition of land usage much needed for food and fibre production, it would be challenging to know where to purchase next, let alone put any succession planning in place! We are passionate about our rural primary industry which we see as "green" fibre production namely wool and food production enterprise.

Please switch off the turbines and allow us to settle again in our home and not suffer the health impacts when living there full time and working full time on our property that we currently experience.

We are concerned about the health impacts of excessive noise on our domestic animals and the impacts on wildlife also.

Considerable time, energy, effort and money has been invested with respect to understanding every aspect of wind farms and the subsequent submissions to various government levels trying to alert government to the impacts has detracted from our rural business. It is our right and our duty to inform government of the health impacts from this development so that action can be taken so that others will not suffer as we do. As this inquiry is about excessive noise I shall limit my submission to the health impacts only.

9. Have you ever had to leave your home, either temporarily or permanently in order to regain your health?

Yes as above. More than 20kms away

- 10. Have you ever slept away from home because of these problems? Yes as above.
- 11. What has the developer / noise polluter done about addressing your concerns?

Extensive noise testing by the managing company of the facility was undertaken as result of our formal complaint lodged by my husband which he has detailed in his submission. Modified operation of wind farm which is only to be temporary has been undertaken. We are still impacted by the wind farm even with reduced operation.

12. Is there currently full spectrum noise monitoring 24 hours a day transmitted to the internet for everyone to access the raw data to see exactly what the noise pollution levels are?

Not that I am aware of.

- 13. If they have a complaint system, does it work? How have they addressed your reported complaints, (if you have made them)? Not initially. However they eventually came to visit us to follow up on our written complaint. It was months later.
- 14. Has the company ever organised noise monitoring at your home? Were the measurements conducted inside or outside your home, or both?

Yes. Outside testing initially post construction with the second time inside and outside tests post our complaint.

Also at the Referral stage of project testing was undertaken by the original proponent. Outside testing performed on a limited number of days tested.

15. Have you ever been given the raw data from any noise monitoring done by the company's acousticians?

Yes however not all the information my husband asked for or in a manner that he could analyse it was provided. We gave approval for the testing to be performed on the condition that the raw data be supplied to us. The managing company of the wind facility would have a copy of all the data for the senators to scrutinise or have scrutinised. The summary by itself is useless. Please contact us if you need our permission to access this information.

16. Have you ever noticed that when the noise monitoring is done that the machinery does not operate at is usual rate? If so, how is it changed?

As I am not at the farm as much I have my husband's advice that the turbine blades can be 'feathered". That is I understand they can be spun on different angles however not be under load? My husband would be happy to explain this further.

- 17. What happens when the noise monitoring audit period finishes and the noise monitors are taken away?
- 18. Have you reported problems to the Noise regulatory authorities? What have the noise regulatory authorities done?

We were lead to believe by the permit that the regulatory authority was the shire. However the shire noticed in the permit that the Victoria planning department was the authority yet no independent testing was performed. We have letter from the Victorian EPA stating that it has no role to play in monitoring the noise from wind turbines. We have received no follow up from the Department of Planning.

So the company is self-regulating with respect to noise and not monitored by an independent regulator! In November last year we were repeatedly assured that there were no problems from the turbines however with the testing on and in our home in Dec to Feb 2012 they did find a problem and now there is restricted operations. Do we trust the company? Is the information supplied to us by this company reliable and truthful? I mistrust the information supplied to us by this wind farm facility.

19. Have they conducted full spectrum acoustic monitoring? How long for?

About a month to 6weeks as one of the tests was not setup properly. We evacuated our house for that period.

20. Did they give you the raw data so an independent acoustician could check its accuracy for you?

We were given some information however the relevant time that my husband wanted to check was not available so my husband could check it. He wanted to check the information supplied before we handed on our information to be checked by a third party. The company has not communicated with us since February/March 2012and it is now November 2012. The turbines still spin and still we are impacted by the wind turbines. There is no responsible authority.

21. Have you reported the problems to the Health Authorities? What have the health authorities done?

Yes my husband handed a formal complaint to the shire and we were informed that they were not the responsible authority. We are uncertain whether this information was forwarded to the Victorian Health Department. We are unable to access a medical officer from the local shire. Surely it is the responsibility of the shire to refer on any health concerns it received in the light of the Health and Wellbeing Act for shire residents to be acted upon by local government.

My husband attended a meeting with the Victorian Health Department representatives with other affected individuals in Melbourne regarding the health impacts of wind farms. The health authority appears to have done nothing.

22. Have you told your family doctor or other health care providers? Were they able to help you?

When I discussed my health impacts with my GP said that she had stood under a turbine and that it wasn't noisy.

23. Does your family doctor know about the health problems that can result from vibration and infrasound and low frequency noise pollution?

No however I did try to explain and suggested that more research was needed. My GP did concur with this.

- 24. Have you noticed any behaviour by the companies which has resulted in a lack of trust in them?
- 25. Have you noticed any behaviour by government employees (in planning, noise regulation, health or renewable energy) which has resulted in a lack of trust in them?
- 26. How do you feel towards the company, the bureaucrats responsible, and the elected politicians, about what is happening?

People in the general public just do not want to know or else they feel helpless to do anything. It is understandable that people do not understand. The lure of highly paid short term jobs on private land on these projects is very attractive. The carrot of job creation is also a major draw card. The negative effects are not considered. Given the push by government for renewable energy targets and the assistance to major corporations for these projects to go ahead it isn't popular to speak out about the impacts or concerns. Ordinary people can be forgiven for believing the green myth of wind farms given the spin by government, major corporations and industry based organisations. Ask most people and they will say they that organisation that promotes clean energy is a government agency and are very surprised to learn that it is an industry based organisation that actively promotes its developments. Donated moneys by major corporations to communities, is in my opinion, to buy support and anyone who opposes the wind farm is knocking the organisations that support the project because donated funds are hard to come by. I have tried hard to rise above the negative comments fielded my way by the local and broader community members. I only have concern for my neighbours who host turbines. I wonder if the money received is consolation to them. It is only a matter of time unfortunately before more people are affected. Sometimes one

can only walk in another's path to understand the true impacts. So who is my neighbour? Is it the artificial structures (turbines) that appear to have more rights than an individual or the people that live in the house that hosts turbines?

I feel mistrust toward the company. I wonder what those that host wind turbines feel towards the company.

Having visited this company's Wind farm in South Australia we also visited a neighbouring farming family next to this development who had publically spoken out about noise concerns. Our son was affected by the turbines with pin pointed ear pressure encountered at both at the neighbour's property and on the wind farm. The only time our son's ears were ok was when he stood directly under the turbines or when inside the turbine. It was some kilometres away from the wind turbines when he stated that the pressure build up had resolved. The company representatives dismissed his ear pain as wind in the ears causing the problem. Then at 18 years of age and now, our son knows the difference between wind in the ears and the effects of wind turbines! We informed the company after the visit that we knew that company were having wind turbine noise problems with this south Australian wind farm development back then in 2009.

Also given our experience with the panel process for this local wind farm development it became obvious to us that the government agencies were there to ensure safe passage of approval rather than provide critical thinking as to whether the project should proceed.

It is really just ignorance by people in places of academia that seek to undermine the plight of impacted people affected by wind turbines.

27. What do you think about the proposed amendments to the Bill, which are designed to ensure that noise pollution which is harmful to health does not occur and that if it does it is detected and action is taken?

It is a good start.

There has to be recognition that there are health impacts. The permits must be reviewed to ascertain that that permits were granted in accordance with appropriate state legislation and recognition that the Victorian EPA does have a role in the monitoring of wind farm compliance. The independent scrutiny of existing wind farm raw data is essential to provide new evidenced based testing such as infrasound and low frequency and correlated to its impact on health and must be incorporated into the permits old and new to protect people from the health impacts of wind farms. The regulator must have the time money expertise, equipment and the authority to implement the shutdown of wind farms for noncompliance.

Thank you for the opportunity to comment on this Bill.

## 28. Any other comments?

The senate committee is welcome to contact me or my husband to provide additional information or clarify any point.

**Yours Sincerely** 

Helen Lyon