

The Advisory Committee
Independent Inquiry into the EPA

31st October 2015

Dear Inquiry Secretariat and Members of the Committee,

Independent Inquiry into the EPA; Re: Wind Farm Complaints

Introduction.

My family own an historical house and property at Cape Bridgewater on the South West coast of Victoria and lived there about 19yrs until October of 2014. It is located 900 metres close to the Pacific Hydro owned 29 2MW turbine wind farm at Cape Bridgewater. We are profoundly disturbed by wind farm noise and vibration and have been for 7 years.

Disturbance and nuisance is an ongoing problem with vibrations, sound and sensation impacts causing adverse health symptoms increasing with longer exposure to low frequency noise emitted from the turbines and wind farm.

Prior to approval of the Cape Bridgewater wind farm, we were assured by the wind company and the Glenelg Shire Council, there would be no noise disturbances, nothing above the sound of the refrigerator or the wind in the trees, no effects from EMR's, no shadow flicker and "definitely no vibrations because the equipment worth millions, wouldn't be allowed to move so much as a millimetre". We were assured by the company not to be concerned about any electromagnetic radiation and were unaware of any adverse health effects and blade flicker, glints, shadow, infrasound or pollution issues. Reasonable questions were met with disregard or verbal intimidation.

We were never informed of a complaints process.

The CBWF was refused approval by VCAT for many reasons including the fragile nature of the Cape. The Planning Minister overruled and granted the permit without visiting the beautiful Victorian tourist region with Bridgewater Bay once considered a jewel now a planning mess causing havoc to our once peaceful and quiet rural lives.

The wind company have given us many nonsensical responses to our years of reporting issues and complaints but I assure you, wind turbines never 'settle in' and your body never 'gets used to it'.

Intense vibrations from low frequency sound often unfelt and unheard, ripple outwards from turbines through the air and ground shuddering and drumming through vehicles, homes and beds, for hours and days and years. At our home we are exposed to un-monitored and harmful sound and noise both audible and inaudible, which wind farm proponents wrongly and I feel criminally say is not present.

Our solid historical house at Cape Bridgewater shakes unrelentingly. This is visibly evident when the level of water moves and jumps up the sides of a glass when the wind blows from the North West. Years of complaints made by residents to the wind farm owners Pacific Hydro, the Victorian Health

and Planning Departments have never been resolved and complaints only disgracefully palmed off or dismissed.

I have complained to the Victorian EPA via telephone and email regarding the noise and vibration was told that someone would bring equipment out, take measurements and undertake an investigation which I verbally agreed to.

When I followed up on this I was informed it was not the responsibility of the EPA. No-one from the EPA has investigated my complaints at Cape Bridgewater and no measurements or any kind of proactive response to my complaints has ever occurred.

Problematically there is NO independent body monitoring the noise or investigating wind farm complaints. Wind farm operators self regulate and do minimal and non-satisfactory testing prior and post construction and there is no ongoing requirement to remediate the noise and pollution they emit. They operate to the satisfaction of the Victorian Planning Minister, yet the Planning Department also fails to monitor or take measures when noise regulations are exceeded. The noise monitoring deliberately fails to measure problematic LFN.

Complaints timeline to the Victorian EPA

- 24th October 2011 called the EPA complaints hotline a staff member called the following day to discuss monitoring on-site.
- 26th October 2011 I emailed Mr ... at the EPA and received no reply.
- 8th August 2012 I emailed a noise complaint to the EPA.
- 17th February 2014 emailed complaint to EPA.
- 20th February 2014 the EPA replied to confirm an incident report had been created for further investigation and directing me to the DPCD (formerly Dtpli).
- June 2014 completed an online survey re: EPA for improved monitoring and performance purposes.
- June 2014 communicated concerns regarding the EPA's performance via email to the Research Director re: survey to people who had made a complaint to the EPA.

My complaints are still outstanding and have never been investigated further by the EPA.

The Victorian EPA

The EPA could be the responsible, independent body for monitoring wind farm emissions and acting on behalf of affected communities to ensure regulations are enacted to protect the public from harmful industrial emissions and nuisance particularly infrasound at wind farms, mining and CSG operations. To also ensure compliance to effective noise regulations to protect the rural public and wind farm or industrial workers from harm.

The EPA with adequate monitoring procedure and effective regulation could assist to prevent the cost and trauma of a growing regional health disaster occurring near wind farms and industry; and to help prevent regional migration away from wind farms.

Rural people and Shires who cannot afford the expense of acousticians and expert investigations would be better protected from physical and financial harm if the EPA undertook the independent monitoring required in industrialised rural environments to prevent excessive and intrusive sound.

A unified approach by one organisation, the EPA, to the management of national industrial broadband noise pollution would be more economical and effective than using inexperienced organisations like town Shires and Councils. The EPA has extensive experience in acoustic monitoring and investigating and policing noise and industrial pollution.

Based on personal experiences and at many and also smaller less powerful wind farms and on the evidence provided in Senate Inquiries into Wind Farms, the EPA should be concerned about the harmful emissions of airborne and ground borne noise, vibration and oil leaks and other myriad on site contaminants i.e. fibreglass from fractured blades.

Oil and additives from turbines at Cape Bridgewater has splattered 900m and out 2km to land on our roofs, walls and on the ground to possibly contaminate tank water and seep into bore water and never investigated by the Shire, the Planning Department, Pacific Hydro or the EPA.

If not the responsibility of the EPA is the EPA aware of who oversees what chemicals are stored on site, how they are stored, what are the levels of risk to the local environment and are they safe? The EPA should have a role to ensure the safety of rural communities and environments from industrial type chemical exposures, accidents and associated fire risks.

Wind farm operators in Victoria and around Australia receive thousands of complaints on a daily basis regarding excessive noise and intrusions which are kept in a communications register. Pacific Hydro following the CB acoustic study dismissed the complaints made between 2007 and 2015 and is under no obligation to remedy the problems which they say do not exist. Mr [REDACTED] extensive acoustic testing inside my home and others around Australia determines there are industrial noise problems and those problems while being ruthlessly dismissed remain.

Extract from **Windfarms not in compliance, causing harm-** BY AUTHORITY OF THE SENATE Tuesday, 10 December 2013:

'On 13th October 2010 DPCD provided a copy of the PWED report to the Environment Protection Authority for preliminary comment. Preliminary advice from the EPA indicated several concerns with the report'.

At Cape Bridgewater our concerns have been dismissed and we don't believe the wind farm has been operated in noise optimised mode and to my knowledge the EPA have never been required by the Minister has never required the EPA to order operators of wind farms to hand over documents to prove compliance to permits and no compliance notice has ever been issued by the former DPCD, the Dtpi or the EPA. Offending turbines have never been shut down or removed by the operator.

2500 more turbines are required to be built to meet the RET and there remains no policy or response measures in place to protect the safety and well being of rural communities.

The NSW and SA EPA monitor and investigate wind farms yet the Victorian EPA say it is not their responsibility and refuse to follow up complaints of noise etc from the Cape Bridgewater wind farm.

To date my experience of the Victorian EPA has not provided care nor protected the well being of communities, biodiversity and the environment negatively impacted by wind farms. The EPA has not tested the water, air or soil quality to my knowledge since the construction of the Cape Bridgewater wind farm.

The problems with Wind farms.

- Wind farms cause fracturing of small communities and within families.
- Wind energy facilities do not benefit the community i.e. property devaluation, loss of lifestyle, abandoned homes, increased rates etc.
- Wind farms cause homelessness when the noise drives people away.
- Wind developments have a negative impact on property values with homes like ours becoming virtually unsellable in close proximity to wind facilities.
- Wind energy facilities do not financially benefit the State as bulk of the profits flows interstate or overseas. Subsidies to wind farms cost the public and co-dependency on interstate interconnectors cost the State and the public in escalating market prices, infrastructure costs and to what benefit as blackouts are still predicted and the energy sellers still rely on coal fired 'back-up' electricity when the wind or faults stop turbines.
- Wind developer interpretation of and use of 'gag clauses' placed on stakeholders contracts, including recipients of community funding is concerning.
- Residents near wind farms are financially put out of pocket paying for independent noise testing, health tests and medications in attempt to understand and resolve the health and sound problems being experienced.
- Many wind farms in Australia are approved with no plans in place for decommissioning at the end of its lifespan and some are already nearing or passed their half life mark.
- Pacific Hydro employs external maintenance crews and takes no responsibility for the deteriorating condition of the turbines in its wind farms.
- Post construction impacts of wind farms on the surrounds are not independently investigated.
- Wind turbines are dangerously built too close to roads and homes. Shadow flicker on Blowholes rd at Cape Bridgewater creates hazardous driving conditions.
- Predicted environmental effects and impacts are being based on dodgy reports, by the developers, the acousticians, the DSE, [REDACTED] etc as documented in the Senate Inquiry and EES Planning Hearings.
- Impacts on the Brolga and Peregrine Falcon and other avian populations and to their natural habitat by proposed wind farm developments particularly in the South West of Victoria, often the last breeding places for birds is appalling.
- Turbines do dominate the rural landscape and the Premier of Victoria, the Planning Minister pave the way for bigger turbines and larger wind farms ignoring requests for a moratorium until independent epidemiological health studies are done humans near wind farms. Wind energy facilities do not benefit the environment.

- Wind energy facilities do not benefit the environment. With appalling practices massive amounts of rare earth minerals are sourced from China in the manufacturing process of wind turbines.
- Wind farms are not an efficient or effective use of agricultural land, studding prime land with concrete foundations, underground cables which may never be removed, making land unusable for future purposes.
- Cause damage and disruption during construction (dust, blasting, heavy vehicles, temporary poles, constant traffic day and night, road closures and power disruptions.)
- Huge taxpayer cost of repair of local roads which were never built to manage the volumes of heavy traffic over the lifetime of twenty years or so of industrial development.
- Wind turbines are inefficient producers of energy, operating at less than 40%, most of the time sitting idle and are unreliable and intermittent generators of electricity.
- Wind farms continue to operate during bushfires and on high danger days including when visually obliterated by smoke and falling ash.
- Wind farms create risk to workers, residents, traffic and buildings due to shadow, flicker and debris, chemical spills, possible rain water tank and water table contamination.
- Painting outside surfaces of turbines is a regular part of maintenance and highly potent fumes are emitted without warning to cause light-headedness and nausea 900m away.
- Wind farm health impacts affect farmers, workers and family's ability to work safely and competently.
- The Cape Bridgewater and Waubra wind farms have never been operated in noise optimised mode, fail to meet noise limits and are therefore considered to be non-compliant wind farms.
- No-one monitors shadow flicker which may exceed the limit of 30 hours per year.
- Wind developer 'hotlines' as a complaints process do not address complaints nor fix the problems of intrusive noise.
- The 'community consultation' process failed at Cape Bridgewater and did not resolve the Issues of noise, vibration or sensation attributed to the operations at the CB wind farm have never been resolved causing further community distrust.
- There is an overall systemic failure to ensure turbine noise caused by unknown factors or poor wind turbine design, manufacturing faults and poor maintenance is independently investigated and eradicated.
- The massive electricity generators, producers and regulators do not employ even one worker permanently 24/7 on-site to monitor operations.

Rural residents' rights and interests are not being protected and the EPA could take responsibility to resolve the complaints and problems and to eventually oversee the payment for the removal of and damage caused by turbines.

Acoustic noise, sound, vibration.

Constant bombardment of industrial broadband noise including low frequency noise is often also unheard but sensed. Wind farms are now structured over vast areas of land, with hundreds of turbines of a larger capacity to potentially cause further harm to communities.

You cannot block the 'noise' out; it is also conducted by bones in the skull and processed differently by the ear and brain. There are neurological differences with different and possibly harmful pathways being developed in humans trying to cope with exposure to infrasound and LFN.

Regulations recommended by the wind industry and enacted by the government are geared towards audible only noise which are regularly exceeded.

Wind farm noise is measured using one of three different sound ranges ignoring infrasound, subsonic noise levels and vibrations moving through the air and ground. Low Frequency Noise is never abated with an absence of effective regulations.

Wind farm 'noise' is being acoustically recorded up to 10km away from wind farms and sensed by impacted residents 30km or more away. Low level noise passes through ground and buildings.

Noise measurements based on the 1998 New Zealand Standard currently applied to wind farms ignore the region of sound which is known to impact on residents' health. Mr [REDACTED] has requested further independent testing of a wind turbine signature specific to Cape Bridgewater and other independently tested wind farms.

Industrial based noise is known by independent acousticians as being measured by wind developer paid acousticians using inadequate techniques with improperly calibrated equipment and over limited time frames.

Wind farm noise is monitored by the proponent for brief time periods and no requirements are in place to monitor wind farms on a real time, full spectrum noise and constant basis to ensure people are protected from unwanted emissions. This 'noise' data should be up to date and available to all as recommended by the Senate Inquiry into Wind Farms.

The sounds causing harm to health are not being monitored or abated.

Public Health.

Health is impaired near wind farms and impacts from wind turbine dose-response are being investigated around the world with mounting evidence of harm, requiring further costly investigations and remedy. GP's and Specialists are recommending patients to move away. Homes, including my own are abandoned.

Known wind farm human health impacts; disturbed sleep, hypertension, tachycardia, headaches, dizziness, vertigo, loss of concentration, nausea, ear pain, ear pressure, tinnitus, irritability, panic, fear episodes, skin rashes, menstrual problems, annoyance etc.

Local Shires & Councils.

Local rural Shires and Councils as the Responsible Authority to monitor and police wind farms may be obliged to meet the financial cost of compliance or monitoring testing and investigations into reports of wind farm noise disturbances. They have a duty of care to adversely impacted ratepayers

affected by noise producing industries which would ultimately financially impact on every ratepayer in the district. They don't have the resources, the expertise, the required technical equipment, the time or even the independence to monitor for intrusive noise at wind farms.

At Portland, Vic, the Glenelg Shire Council resolutely supports the manufacturing and development of wind farms, ignores the complaints of residents and directs ratepayers to take their complaints to Pacific Hydro the wind developer or to the State Planning Department.

When Shire Councils are also host landowners they cannot be considered as independent and non-biased in managing interactions with the developer, be it handling complaints, rates, or monitoring compliancy of the wind development.

Current awareness of what is required to protect people's health and well being near wind farms may result in Shires who approve and support wind farms while failing to protect the public being held accountable; particularly with the DtpI, other Departments and the EPA's lack of responsibility.

Development.

Wind farm development is often not harmonious with existing land uses and district characters and siting is based on highest availability of wind and proximity of the national electricity grid infrastructure.

Visual amenity and the very essence of rural regions are compromised by planning amendments geared towards promoting wind plant developments, to meet the government's Mandated Renewable Energy Target.

Renewable Energy Certificates provide incentive for continuous operation of turbines regardless of industry non-compliance with noise limits and planning permit conditions. The industry Regulator does not withhold Certificates even though complaints at wind farms are not resolved. The EPA could be policing wind farms and with up to date information on permit breeches to act as advisors to the Regulator and in turn enact consequences to non-compliant wind farm operators.

No or better turbine placement based on other broader community minded needs would assist in mitigating broader impacts such as human and animal health, bird, bat and wildlife fatalities, biodiversity impacts, visual impacts, property devaluation, etc.

Federal Senate Wind Farm Inquiry of 2015.

The Wind Turbine Select Committee report debate in the Australian Senate on 20th August 2015, Senator Madigan spoke on behalf of rural Victorians and said:

"Why is the wind industry exempt from appropriate regulatory practices that apply to other industries? In my home state of Victoria, for example, the EPA plays no role in the assessment of wind farm noise. These matters are left to paid consultants—guns for hire, really—who write the

report the wind farm operator needs to appear compliant. The wind industry is in fact regulating itself in Victoria and elsewhere, riding roughshod over country people”.

The Senate Inquiry into wind farms after thorough review recommended;

“The committee recommends that all State Governments consider shifting responsibility for monitoring wind farms in their jurisdiction from local councils to the State Environment Protection Authority”.

Conclusion.

The EPA has a role in being an independent State-wide noise policing team under National guidelines to conduct independent and correct measurements of noise pre and post industrial construction.

- To ensure wind farms and industries are correctly sited to protect life and health of all.
- To be testing the air and water quality near wind farms and monitoring on site activities and management of waste products and emissions.
- To ensure compliance to planning permits and protect the environment as specified.
- To protect the environment from the intrusion of industrial wind turbines in prime agricultural land and areas of important cultural, tourism and biodiversity assets.
- To promote less harmful ways of sustainable electricity production.

Local Councils and the Government is on notice and well aware of problems experienced at wind farms by local residents and residents; that wind farms are still being built failing to apply the knowledge from those experiences should make the EPA cautious of any prospective legal or compensatory requirements for adversely impacted residents being affected by wind farms.

A moratorium should be placed by the Government on any planning and construction of wind farms until independent combined health and acoustic testing is conducted inside people’s homes near wind farms; until Mr ██████████ suggested scientific studies recommended in the Cape Bridgewater Acoustic Study are carried out; until the Federal Government has followed the recommendations made by previous and the current Senate Inquiry into wind farms; until the NHMRC and the Health Department properly and independently investigate, then reverse their biased statement on health and wind farms; until the expectations of the EPA role in monitoring wind farms is decided.

Thank-you for reading my brief submission indicating why the EPA has an important role in protecting communities from exposure to wind farm pollution and that of other industrial noise emitters.

Please act by listening to those of us already adversely impacted by and living next to wind turbines and assist to reverse a process likely to cause increasing problems and impacts, which other Victorians and Australians like us have experienced over the past ten years or so.

It is unviable and unthinkable that further wind farm developments proceed while issues remain unresolved at other industrial wind energy facilities and while current measures used by planning

departments fail to protect residents and creatures within vicinity of turbine blade sweep paths and within projected noise perimeters. We know sounds extend further as more powerful turbines and wind farms combine across vaster distances to dominate rural landscapes and environments and have more cumulative impacts.

Suggested Reading to support my Inquiry Submission:

Many Submissions to the current Senate Inquiry into Wind Farms 2015 explain the reality of life near wind farms and have also discussed the EPA and wind farms.

http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Wind_Turbines/Wind_Turbines/Submissions

Senate Inquiry into Wind Farms 2015 Report and recommendations should be heeded by Councils, the Victorian Planning Department and the EPA.

http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Wind_Turbines/Wind_Turbines/Final_Report

In August 2014 the Waubra Foundation released a document; *'Definitive Document-Wind Turbine Noise- A simple statement of facts- The Australian experience.*

<http://waubrafoundation.org.au/resources/definitive-document-wind-turbine-noise-simple-statement-facts-august-2014/>

Links to Cape Bridgewater Acoustic Study 2014.

<http://www.pacifichydro.com.au/english/our-communities/communities/cape-bridgewater-acoustic-study-report/>

<http://waubrafoundation.org.au/resources/acoustic-engineering-investigation-at-cape-bridgewater-wind-facility/>

Review of the Acoustic Study at Cape Bridgewater.

<https://www.wind-watch.org/documents/review-of-the-cape-bridgewater-acoustic-testing-program-and-where-it-is-leading/>

Health impacts;

<http://waubrafoundation.org.au/resources/wind-turbine-noise-adverse-health-effects-june-2014/>

<http://waubrafoundation.org.au/resources/environmental-noise-sleep-deprivation-torture-september-2014/>