

26<sup>th</sup> October 2020

**Petition 169 Dardanup Waste Precinct and Landfill**

I respectfully ask the Legislative Council to carefully consider the attached petition. It has over 2600 signatures from all over the state – not bad for a population of around 370 people in Dardanup Town

Why does Western Australia have no dedicated legislation for The Planning, Location and Management of Landfill, despite select committees' recommendations in 2006 and 2012 (backed by scientific guidance) that such legislation is urgently needed? It appears WA is one of only two States (Tasmania and WA) where there is no dedicated legislation for Guidance on Planning for Landfill Sites that identify environmentally sensitive areas that are unsuitable for Landfill and Refinery waste.

The Northern Territory Guidance on Planning for Landfill Sites was introduced in 2013, and was developed on the research and publications of the NSW Department of Environment and Climate Change, the Victorian EPA, the SA EPA, the NZ Centre for Advanced Engineering and the Queensland Department of Environmental and Resource Management. This is a very good starting point for any new legislation or policy.

The current Dardanup waste site is a completely unsuitable location for landfill when -

1. The entire site is located directly on top of the major recharge point to three major aquifers of the SW Yarragadee aquifer system used by thousands for 100% of their mains water.
2. The landfill is walking distance to the Darling Fault line – the longest major fault line in Australia. It is also adjacent to the Yoganup Formation and Boyanup Scarp Fault which seems to follow a similar path as the Darling. Besides the nightmare prospect of liquification, there is a complex network of springs over the entire hill area. It has been suggested that waters flow both upwards and downwards within the hill, and the rock formations could form an expressway for toxic leaching to enter the aquifers.
3. Cleanaway's landfill construction is now higher than the scarp and likely to grow. It overshadows prime irrigated agricultural land risking food security. Currently sixty times the playing area of the MCG and expected to grow. The landfill is so visible it is used by sailors as a navigational-point ten miles out to sea, and it has been approved to around 50% taller. The constantly eroding sides are a very steep gradient possibly 1 in 3
4. The site is exposed to extreme uncontrollable weather events, exacerbated by its position on the scarp. High winds, summer temperatures and heavy rainfall events leave the site exposed to significant dust creation and off-site flooding via runoff from the steep gradients within the site.
5. The Waste Precinct is located at the entrance to a booming tourism hub, putting at risk the clean green reputation of the Ferguson Valley brand. As this landfill grows it threatens the very existence of the many tourism and boutique wine, boutique beer and restaurant businesses.
6. The landfill exposes the growing town of Dardanup and its two schools only 3km directly downwind to odour and dust, which could result in a range of health issues.
7. The landfill shares two boundaries (with no setbacks) with Dardanup Conservation Park that is showing serious signs of stress. It is home to many endangered species and the last remaining stand of the Whicher Scarp. Floods and dust events from the landfill are well documented
8. The Waste Precinct has rivers to both sides and overlooks arguably the best agricultural soils in the state. The rivers feed into the aquifer system and flow through farms where toxic dust and leaching could enter the food chain. Government efforts to promote our agriculture overseas as clean and green, with high standards for safe foods could be wasted.
9. The landfill site has had multiple tip fires which could have compromised the HDPE liners. Tip fires threaten the entire area with toxic smoke and catastrophic bush fire. These fires will continue to happen as investigations have resulted in no answers or recommendations.
10. HDPE liners are known to have a limited life. Research indicates they leak from zero to one hundred years after installation. In short – they do not work. At best, HDPE liners only minimise leachate leakage. Around and



under this landfill there is only porous clay and sand soils that form part of the recharge area to the aquifers. This site could already be leaching a toxic cocktail into the surface groundwater and aquifers. Scientific advice is simply that HDPE liners are only appropriate for more benign sites.

An explanation is also required as to why there has been little or no cost analysis on probable damage to businesses, agriculture and health, should toxic materials leach into the aquifers below or into the adjacent rivers and farmland around the Dardanup Landfill site.

Also, how can this site have been allowed to expand unabated to around sixty times the size of the MCG, four times the footprint of the town of Dardanup and taller than most buildings in Perth CBD, while it seems to fail almost all the inter-state planning criteria for landfill location?

Information is also required as to what analysis has been conducted on BOTH the Wren Oil Wastes and the Tronox Refinery wastes being disposed of at the Cleanaway Land Fill Site, what impurities and heavy metals are contained in the sludges, and whether or not this analysis confirms that the UNDILUTED sludges delivered are Class II and Class III as claimed.

It is generally accepted that the sludges from waste oil processing contaminants, including heavy metals and polychlorinated biphenyl's (PCB's), can be toxic, bio-accumulate and are suspected carcinogens. What measures are being taken to ensure they are not bio-accumulating?

While there has never been a cumulative assessment on the Dardanup Landfill site, what is the commitment to undertake a cumulative assessment of the waste precinct and further expansion to height, footprint, capacity or waste classification be refused on account of its high risk location?

There is also currently an investigation underway by DWERS Investigation, Compliance and Enforcement Branch which relates to Class 3 waste from Wren Oil being dumped by Cleanaway into general landfill at Dardanup. Until satisfactorily resolved all planning approvals should be halted.

In response to questions raised by Diane Evers MLC, the Minister for Planning indicated that Landfill planning issues rest with the local council. However, the local Council say that such planning now rests with DWER and EPA. Any objection the Council may have will likely be overruled by JDAP or the Minister for Environment, as has happened with SAT in the past. Over the last twenty years there have been around THIRTY license applications and amendments, resulting in a landfill mountain at Dardanup that bears no resemblance to the 1999 Ministerial approval.

Why did the 1999 ministerial approval and the 2005 SAT approval for Class 3 waste neglect the risks associated with a location next to the longest fault line in Australia, and the inadequacies of HDPE liner use – a practice which scientists say is not acceptable when landfill is located over aquifers in all other Australian states?

At what point is the landfill site at Dardanup at its environmental and physical limit and when does the threat of earthquake or HDPE liner failure become a hazard that outweighs corporate profit and convenience?

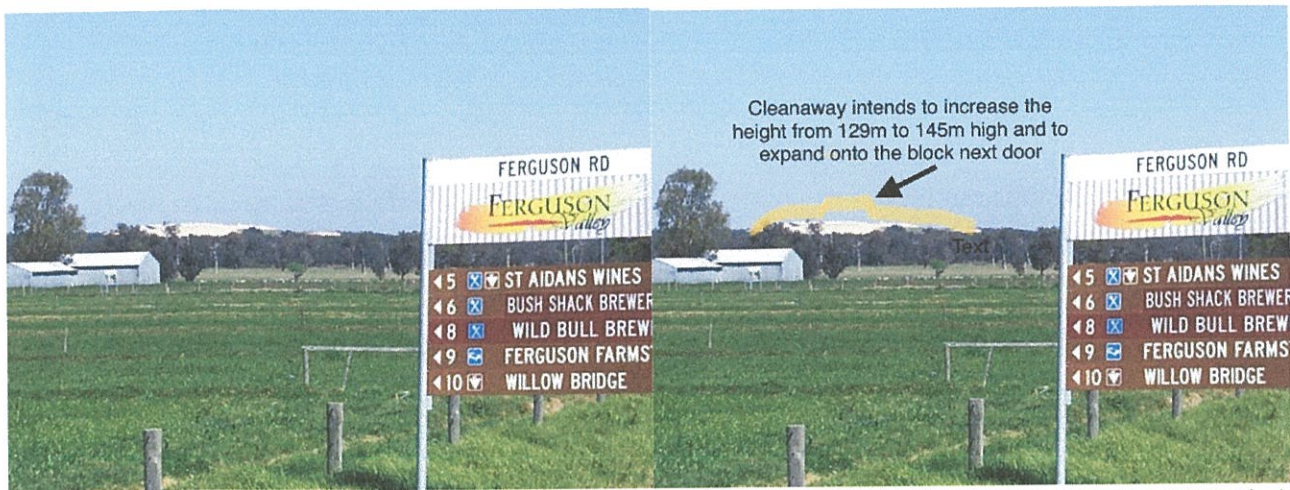
I call on the Government and responsible Ministers to;

1. Urgently introduce legislation similar to that mentioned.
2. Establish a three-year exit plan to shut down this Waste Precinct and landfill facility due to its inappropriate and highly risky location and
3. Impose a moratorium on any further expansion within the proposed Waste Precinct while that legislation is being enacted?

Your Sincerely

Fiona Moriarty





The toxic mountain currently standing over Ferguson Road tourist drive is at only 77% of Cleanaways intended final height according to information provided to their Community Reference Group. Increasing weight and mass at this site increases the risk to water security, agriculture and tourism businesses, and local health

## THE DARLING FAULT

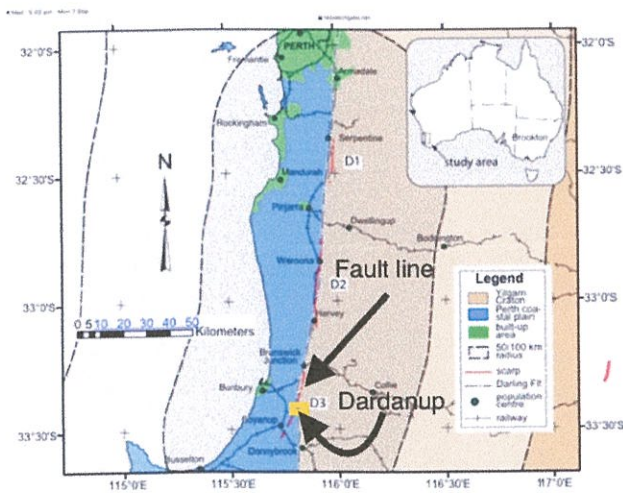


In 2009, UWA geophysics professor Michael Dentith told *PerthNow* scientists were still trying to figure out why there hadn't been a significant quake on the Darling Fault.

"It's one of the intriguing things about WA geology. We know there is this huge stress because (earthquakes) are occurring inland, but why are they not occurring on the biggest fault?"

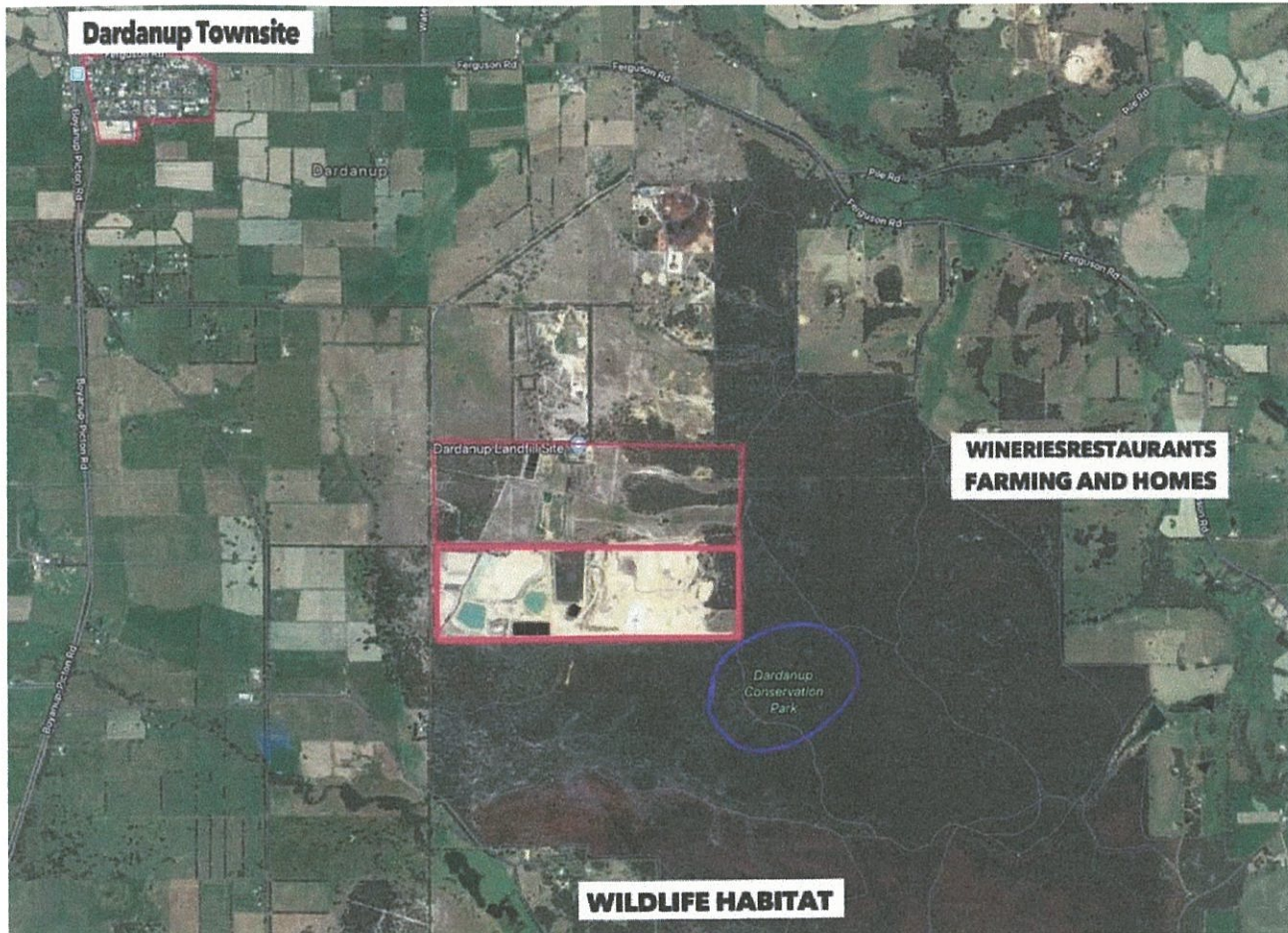
But earthquakes don't just come with a risk of damage to people and property — there's also the flow-on risk of tsunamis.

Last month, research from Geoscience Australia showed the threat of tsunamis is one Australia should be taking very seriously.



The Darling Fault line running through Dardanup Waste Precinct area, an intolerable risk.





The size of the landfills current footprint is around four times that of the town of Dardanup (3.19km away) and a spectacular sixty times the size of the MCG sports ground. Cleanaways recent application to legitimise dumping on next door lot makes incorrect claims the site is over 5km away from the site. The landfill shares two boundaries with the Conservation Park and balances over the major recharge point of the Yarragadee aquifer system. Separated from the aquifers by porous sandy clay soils and HDPE liners with their very limited lifespan , while located on one of the longest fault lines in the world, this site is now a ticking time bomb.



The gradient of the Scarp and the retaining sides of the landfill are so steep it seems impossible to be erosion free, with regular inundations to the Conservation Park, Banksia Rad and surrounding farms.