

Public submission

Section A: Contact details

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Submission date	20 September 2019		

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Rebekha Sharkie MP

Federal Member for Mayo



20 September 2019

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Submission on Terramin Australia's Application

Bird-in-Hand gold mine

Europeans settled in the Woodside region in the 1850s and began farming in the highly productive hills and valleys. The agricultural industry, including dairy, horticulture, viticulture and livestock grazing, has remained the staple industry in the area for 170 years.

The importance of farming to our local economy and heritage cannot be understated. The report by *Econsearch* into the economic contribution of the agriculture and related value-added activities in the Inverbrackie District found that agriculture was worth \$148.7 million in Gross State Product (GSP) per annum in 2015-16 and forecast to grow by 14 per cent to \$169.1 million by 2020-21. Agriculture and related industries in the region created 793 FTE jobs in 2015-16 and that was expected to increase to 885 FTE by 2020-21.

Agriculture in the Inverbrackie region relies on groundwater from a fully allocated State Government-regulated water resource. This resource exists within a fractured rock aquifer that presents many technical management challenges. The history of Terramin's Bird-in-Hand mine site and recent hydrological investigations confirms that groundwater users near the proposed mine would be affected by mining operations. In the absence of robust guarantees that this resource will not be significantly damaged or diminished in any way, the mine presents a significant risk to the existing groundwater users and therefore agricultural industry more broadly.

The predicted economy activity from the mine site is significant. The application reports that the project is expected to create 140 direct jobs in the Adelaide Hills, including the restoration of 40 jobs at the Strathalbyn processing facility. The Bird-in-Hand mine has a proposed construction phase and a five-year mine life. The project is expected to generate a total positive impact on GSP of \$227 million over eight years.

In my tenure as the Member for Mayo, many businesses and local constituents have raised concerns regarding the mine, including the risk of potential irreparable damage to the fractured rock aquifers and the potential for increased dust and traffic. There are concerns for the prospect of increased noise and disruption to the visual amenity, including 24 heavy vehicle truck movements per day to local roads between the mine site and the Angas Zinc processing facility.

Further, matters including the financial capacity of Terramin Australia should worst-case scenarios arise during mining operations and Terramin Australia's previous record of non-compliance have also been raised.

For example, Terramin Australia has a record of non-compliance with water management issues during the operation of the Angas Zinc at Strathalbyn. The State Department for Manufacturing, Innovation, Trade, Resources and Energy issued an Environmental Direction to Terramin in November 2011 as a result of the Angas Zinc tailings storage facility being non-compliant for a period of two years.

Dust complaints related to the Angas Zinc operation were also regularly raised with the Strathalbyn Community Consultative Committee with the community complainants expressing their dissatisfaction with the resolution process.

Terramin Australia promised the Strathalbyn community and it was part of its final lease conditions that its Angas Zinc plant would only process ore from the Strathalbyn mine and it would not process material from other mine sites. The condition includes the Bird-in-Hand mine site some 40km from Angas Zinc.

It is acknowledged that the Bird-in-Hand mining tenement has a reported high grade gold resource (598,000 tonnes at 12.3 grams per tonne for 237,000 ounces) making it highly attractive for mining operations. Terramin currently holds mining tenements that cover 3,750 square kilometres in the Mount Lofty region.

With regards to Bird-in-Hand site, more than 15 years' of community engagement and hydrological investigations by two different companies have failed to allay community concerns about maintaining the integrity of the regulated and fully allocated underground water resource in the Inverbrackie region.

Underground water is a precious resource in the Mount Lofty Ranges and is strictly regulated by the State Government. After a contentious moratorium that resulted in some community adjustment to regulation in this space, a Water Allocation Plan (WAP) for the

West Mount Lofty Ranges Prescribed Water Resources Area (WMLR PWRA) was adopted in 2013. Water resources are now fully allocated in the WMLR PWRA.

The WMLR PWRA is characterised by fractured rock aquifers and sedimentary aquifers that are of varying age, water quality and yield. Recharge to these aquifers occurs directly from rainfall that percolates down to the watertable through the soil profile or indirectly via throughflow from adjacent aquifers. There is legitimate concern that blasting and other mining operations will cause significant damage to the aquifer in the Inverbrackie area.

The WMLR watershed zone, which includes the Woodside and Inverbrackie areas, supplies the city of Adelaide with 60 per cent of its drinking water. It has been reported that the Terramin proposal has the potential to access more than 400 megalitres of groundwater in the watershed zone.

The Inverbrackie Creek Catchment Group engaged engineering and project management consultants Wallbridge Gilbert Aztec (WGA) to review Terramin Australia hydrogeological investigations and reports relating to the Bird-in-Hand project. WGA raised numerous concerns about the completeness and adequacy of the investigations and noted that the mine operations could impact on groundwater users between 600 metres and 2 kilometres from the site.

While the prospect of increased employment in the area during the life of the mine is important to the local economy in the short term, the Inverbrackie community remains concerned by the potential impact of mining in a highly productive farming region over both the short and long term.

The protection of underground water resources remain a critical issue for an area that is already regulated and fully allocated. The community remains deeply concerned that mining operations will irrevocably damage the local water resources and subsequently remove their ability to continue a highly profitable and sustainable agricultural industry with the resources endemic to the locality.

In the absence of robust guarantees that this resource will not be significantly damaged or diminished in any way, this mine presents a significant and unacceptable risk to the existing agricultural industry. You can mine just once. You can farm for generations.

Yours sincerely



Rebekha Sharkie MP
Federal Member for Mayo