

15 January 2021

Nick Wimbush
Fingerboards IAC Chair
1 Spring Street
Melbourne
Victoria 3000

Response emailed to: planning.panels@delwp.vic.gov.au.

Dear Nick,

Fingerboards Mineral Sands Mine EES Inquiry

Thank you for your letter dated 21 December 2020 requesting additional information to support the Inquiry and Advisory Committee as it prepares for the hearing that will commence on Monday 15 February 2021.

Southern Rural Water (SRW) has responded to each of the questions raised and we would be happy to provide further clarification if required.

Our role in the context of the Fingerboards proposal is focused on the licensing and water resource management aspects of our delegated functions, as described in Section 2 of our submission.

SRW is responsible for regulating access to groundwater and surface water, and for the management of groundwater and surface water resources, in accordance with the powers delegated by the Minister for Water, and in accordance with the Water Act (1989).

Beyond the EES process, in the context of any subsequent development of the mine these responsibilities will include:

- Assessment and determination of any applications for a licence for groundwater take and use (Section 51 of the Water Act)
- Assessment and determination of any applications for a licence for surface water take and use (Section 51 of the Water Act)
- Assessment and determination of any applications for a licence for the construction and operation of dams (Section 67 of the Water Act)
- Assessment and determination of any applications for a licence for the construction and operation of observation and production bores (Section 67 of the Water Act)

In addition to the licence determination process, SRW is also responsible for ensuring compliance with any licences that are issued, including; the volumes and rates of water

taken, the construction and management of dams and bores to the required standards, the passing of surface water flows, and the monitoring and reporting requirements specified in any licence conditions.

Our submission indicated a number of matters on which we would require further information on to assist us with assessment of any subsequent applications.

It is also important to note the role of DELWP in relation to some of the questions that you have raised, and we have indicated in our response where this is the case.

In response to your questions:

1. The current baseline used by Southern Rural Water, and Victorian water authorities in general, to inform decisions about applications for water allocation, taking into account climate change impacts and the likely impacts of any emerging Government policy reforms, if any, about sustainable water allocations.

DELWP is responsible for the water resource assessments used to inform limits on entitlements in Groundwater Management Areas (GMAs) and surface water catchments. Permissible Consumptive Volumes (PCVs) are the limits to the take and use of water set by the Minister for Water for groundwater and surface water systems. There are also some groundwater resources which are not covered by a statutory cap that are historically areas of lower demand. The surface water sub-catchments have caps set by Sustainable Diversion Limits (SDLs) which are determined by the state, based on estimates of each catchment's sustainable yield.

SRW is responsible for the sustainable allocation of water resources within this framework which includes development of formal statutory plans, informal local management rules and our assessment and determination as the regulator of licence applications.

The groundwater resources in the Fingerboards area are part of a deep aquifer system (the Lower aquifer) which runs from the Latrobe Valley, eastwards through Gippsland and out into Bass Strait. The Lower aquifer has shown a long-term decline in groundwater pressure. The significant groundwater usage from this resource is depressurisation of the Latrobe Valley coal mines, irrigation and offshore gas and oil extraction.

SRW's local management rules prohibit allocation of new groundwater entitlements in this aquifer system. The rules are consistent with the PCVs which were set by the Minister at existing entitlement levels for the majority of the Lower aquifer in order to restrict further allocation from the resource.

A proponent seeking groundwater entitlement would be required to trade from an existing licence holder to access water. The trade would require an application for determination by SRW. The proposed bore-field is in an area defined by SRW as the Lindenow Trading Zone where the local management rules allow groundwater trade from neighbouring management areas including: the Stratford GMA, the Rosedale GMA, and the Sale Water Supply Protection Area. Any application to trade would be subject to an assessment of the local impacts, in accordance with Section 40 of the Water Act (1989) which protects the rights of existing users, the environment and the sustainability of the resource, among other matters.

2. The expected consequences, if any, of the Gippsland bushfires for overall water runoff and groundwater recharge for catchments and aquifers relevant to the Fingerboards proposal.

SRW manages surface water licences through rules governed by passing flows at hydrographic stations in streams. If runoff was reduced during the regrowth period, the outcome would be more frequent and/or longer periods of restrictions being imposed on all surface water licence holders (based on the river flow restriction triggers in the Mitchell River Local Management Plan).

The Lower aquifer is capped at existing entitlements. The aquifer is monitored by a system of observation bores that stretch from the Latrobe Valley and Yarram to the Gippsland Lakes. Impacts to the aquifer that change catchment characteristics and rainfall patterns are unlikely to be observed in these bores for the next few decades. This is because most of the aquifer is overlaid by hundreds of metres of confining layers, has an enormous storage and any reduction to recharge will be relatively small, compared to the volume withdrawn from the aquifer primarily for the hydrocarbon industry since the 1960s.

3. Whether the current level of unallocated water available in the Mitchell River Catchment for allocation is still 6,000ML and if not, what the appropriate amount is.

The Minister for Water sets the legal limit on entitlements. The current Gippsland Region Sustainable Water Strategy (2011) assessed that there was up to 6,000 ML of winterfill available on the Mitchell River. Unless the Minister for Water directs otherwise, SRW has discretion to issue less than 6,000 ML or issue the allocation in stages to manage uncertainty. It does not have discretion to distribute more than 6,000 ML. The assessment process and decision to issue a licence is triggered by an application. Applicants are required to demonstrate that their take and use of water meets the requirements of the Water Act (1989), which includes impacts to other users, the environment and the sustainability of the resource. The status of the 6,000 ML volume is discussed below.

4. Whether there have been any recent or proposed allocations from the 6,000ML unallocated component since the EES process commenced.

As of 11 January 2021, there is still 6,000 ML of winterfill licences unallocated on the Mitchell River. On the 12 November 2020, the Minister for Water, Lisa Neville, announced the following intentions for this volume:

- 2,000 ML is being made available for the Gunaikurnai people, the Traditional Owners of this region. Southern Rural Water is currently assessing a section 51 application from the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) for this volume.
- 2,000 ML would be immediately available in a competitive process for those eligible to be considered for a licence at this time. The deadline for applications was Monday 21 December 2020. Southern Rural Water has received a number of initial applications for this winterfill water and is currently assessing these applications for eligibility and to determine the appropriate manner of allocation. This is likely to be through a competitive process such as an auction.
- 2,000 ML would be reserved for allocation later in 2021 via a competitive process for those eligible to be considered for a licence at that time. If the EES process has been completed, and if Kalbar Operations has been granted approval to proceed with the Fingerboards project, they would need to make an application for water, and would need to be assessed, as would all applicants, for their eligibility to participate in the competitive process. Successful completion of the EES process does not necessarily assume successful determination of an application to hold a section 51 licence. The total volume being offered in this tranche will be 2,000 ML.

5. The number of days per year since January 2014, when passing flows at the Glenaladale gauge exceeded 1,400ML per day (trigger for winter fill take to occur - Mitchell River Basin Local Management Plan January 2014).

The number of days per year since January 2014, when passing flows at Glenaladale gauge exceeded 1,400ML per day is illustrated in the table below. This assessment only considers the period 1 July to 31 October, in line with access rules for winter licences:

| Year* | No. of days passing flow >1,400ML |
|--------------|---|
| 2014 | 20 |
| 2015 | 40 |
| 2016 | 0 |
| 2017 | 43 |
| 2018 | 46 |
| 2019 | 37 |
| 2020 | 8 |

*calendar year

Typically, a winterfill licence will be stored in a dam and even in dry years there will be sufficient days of high flows to fill the storages.

6. Shorter term and longer-term trends in aquifers and other groundwater sources potentially impacted by the Kalbar proposed groundwater drawdown.

There are three recognised aquifers in the region known as the “Upper”, “Middle” and “Lower” aquifers.

The Upper aquifer is managed within the Wy Yung GMA and is utilised by some of the Lindenow Valley irrigators. Observation bores and technical studies indicate it is mostly influenced by annual rainfall and flooding from the Mitchell River. It typically rises in wet seasons and falls in dry seasons, but has no long-term trend.

The Middle aquifer is also used by some Lindenow Valley irrigators and by East Gippsland Water for its aquifer storage and recovery scheme. The aquifer has few observation bores locally but the indications from these bores and the East Gippsland Water scheme is that the long-term groundwater levels are relatively static. Locally there are seasonal rises and falls but the aquifer recovers.

The greater risk to this aquifer is its lateral connection to Middle aquifers to the south and West, which are intensively used for irrigation and for Latrobe Valley mine depressurisation. SRW set a rule prohibiting new licences from this aquifer to manage this uncertainty.

The Lower aquifer was described in points 1 and 2 (above). Observation bores in this aquifer show a long-term falling groundwater level, which - although not as significant in the Glenaladale area - is substantial further west and south where it has declined at a rate of 1m/year since measurement was established in the 1970s. As a precaution, SRW set a rule prohibiting new licences from this aquifer to manage this uncertainty.

The proposed groundwater licence will require a trade of existing entitlement and to demonstrate that local and regional impacts are acceptable. A significant issue for consideration is the connection between the three aquifers at the project site. This location is close to the edge of Gippsland’s sedimentary basin where the middle and lower aquifers rise towards ground level and the aquitards separating the aquifers are thin. The proponent will need to demonstrate impacts from its pumping will not adversely impact existing users, the environment and the sustainability of the resource.

7. Confidence levels that could be linked to a potential allocation of 3,000ML as sought by Kalbar. For example, will the Kalbar allocation have implications for other water take applications and users if the water allocation is not fully available due to seasonal or longer-term variability.

It is unknown whether the proponent will apply for surface water and/or groundwater and the volume of each.

The 6,000 ML of winter fill surface water entitlement on the Mitchell River has been assessed as being available by DELWP through the **current Gippsland Regional Sustainable Water Strategy**. The proponent will still **need to demonstrate their licence will not adversely impact the existing users, the environment or sustainability of the resource**, which include the matters SRW will consider under section 40 in its assessment of any applications the proponent may make. For surface water, this will largely be determined by comparison with the SDL if and when the volume and rate of pumping is known.

Once a licence application has been made, an assessment will still be required by SRW of matters relating to Section 40 of the Water Act 1989, including any local impacts related to the take and use of water.

No new groundwater entitlements are allowed. A trade of entitlement is required and the application will be subject to an impact assessment, and of matters relating to Section 40 of the Water Act 1989, including any local impacts related to the take and use of water. In SRW's submission to the EES, **it was identified that a more detailed impact assessment will be required in support of any licence application to SRW, whether for surface water or groundwater**.

Future applications for surface water and groundwater will need to take account of the rights associated with any licences issued, including any licences that may be issued to Kalbar Operations or anyone else.

8. How water allocation requests are settled, in a context where both surface water and groundwater sources are or appear to be close to being fully allocated. Are competing demands simply resolved through the water market or are there some protections built into the Water Act 1989 (Vic) and associated operating policies to provide any long-term confidence to existing high value water users?

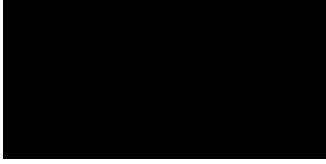
The policy for unallocated water is described in the **Western Region Sustainable Water Strategy (Action 3.15)** states:

Where unallocated water can be made available for consumptive use, within sustainable diversion limits for unregulated rivers and permissible consumptive volumes for groundwater systems, auctions and tenders will be used to ensure the price is based on the value of the resources.

2,000ML of entitlement will be allocated to local Traditional Owners. All other unallocated water distribution will conform with the abovementioned policy. Unless the Minister for Water directs otherwise, SRW has discretion to issue less than 6,000 ML or issue the allocation in stages to manage uncertainty, but it does not have discretion to distribute more than 6,000 ML. SRW may also quarantine some entitlement for special purposes such as emergency water supplies for stock and fire suppression, which are small users by comparison, important to animal welfare and public safety, but not suited to market based distribution.

If you have any questions relating to this letter, please do not hesitate to contact Elisa Hunter on [REDACTED].

Yours sincerely



Cameron FitzGerald
Managing Director