

# **Statement of Reasons**

## **Name:**

**Mr Charles Santospirito  
C/O The Dunes  
1075 Horseshoe Bend Road Torquay  
TORQUAY VIC 3228**

## **Application Date:**

8 April 2021

## **Purpose:**

Seeking approval under Section 67 of the Water Act 1989 for a licence to repair, reduce capacity and alter the spillway and compensation pipe of a dam on land described as Vol 9350, Folio 226 Lot 1 TP170892 in the Parish of Puebla. This dam is known as the “Pintail Dam” and is located at 1075 Horseshoe Bend Road Torquay. This dam requires urgent works to prevent another serious escape of water that resulted in approximately 140 residents of nearby households being evacuated for two nights in October 2020.

The application was made on behalf of the owner Mr Charles Santospirito by a Mr Mark Tomkinson.

## **Determination:**

The application is refused.

## **Background to the need to make this Application**

The Pintail private dam was constructed in or around 1987. At that time, it was surrounded by agricultural land. It was initially filled under a licence to take water from Bream Creek. It was then filled with Class C recycled water from Barwon Water’s Black Rock water reclamation plant. Over time land to the south of the dam was rezoned residential and the “Sands” housing and golf course development occurred.

The Pintail dam is not a catchment dam, but of a “turkey nest” design and is currently supplied by recycled water from the Black Rock treatment plant, along with some re-use water from the proponents Flower Farm and surrounding stormwater. The water is used on the farm and is also piped to other storages on the same farm. Historically water was also provided to the neighbouring Sands Golf Course. This harvesting of stormwater was also put in place to mitigate impacts on the Breamlea FFR and Karaaf wetlands.

The Pintail dam is approximately 260m to 300m long, 150 to 170m wide and can hold at Full Supply Level approximately 171 megalitres (ML) of water.

Historically there was also a private desalination plant that was constructed adjacent to the Pintail dam and treated water from that dam, to reduce the salinity and subsequently then pumped and used on third party properties such as the Sands Golf Course. Post 2010 the private desalination plant was decommissioned. However, a pipe (“desal pipe”) that ran through the Pintail dam wall, used to convey water to the desal plant, was not removed or adequately sealed off at that time.

Reports to Southern Rural Water (SRW) were made in 2017 that material was being dumped on the Pintail dam wall to make it higher and thereby increasing the dam capacity. SRW officers undertook an inspection of the dam and determined that there was no increase to the dam wall height or capacity of the dam. As a result of the inspection, SRW indicated the proponent should obtain an independent expert opinion in relation to the safety of the dam wall. That opinion stated the appropriate structural integrity of the dam wall at that time but did recommend that yearly technical reviews of the structure be undertaken.

On 2 October 2020 SRW was advised of a flow of water from the Pintail dam inundating adjacent residential properties in Pintail Drive. After investigation it was discovered that water was coming from the “desal pipe”. Given the quantity of water and uncertainty around source and concern about potential dam failure, adjacent residents were evacuated.

At this point SRW instructed the proponent to reduce the level of water in the dam and on 4 October 2020 with the water level reduced, residents were allowed to return to their homes.

SRW then issued a Direction under Section 80 of the Water Act 1989 (“the Act”). The direction considered a range of matters to manage safety at this site. Key directions included reduced dam operating levels to a maximum of 12m RL (Crest height of dam at lowest point is 15.5m RL), a requirement to assess the integrity of the dam wall and a requirement the proponent make application to SRW under Section 67 of the Act to carry out remedial works or cease operation of the dam.

In accordance with this direction, the proponent has operated the dam at the required water level, commissioned and completed an investigation along with applying for a licence to SRW under Section 67 of the Act to carry out remedial works.

It is therefore this application that forms the subject of this determination.

### **Matters Considered:**

When considering a Section 67 application (“the application”) of an existing licence under the Act, regard must be given to Section 68 & 40 (b) to (m).

Of relevance to this application is:

- have regard to the report of any panel appointed under Section 66 of the Act.
- have regard for referral comments from agencies under Section 67B of the Act.
- the existing and projected availability of water in the area.
- the permissible annual volume of water, if any, for the area.
- any adverse affect that the allocation of water under the entitlement would have on existing authorised uses, a waterway or an aquifer.

- the need to protect the environment.
- the conservation policy of the government.
- the proper management of the aquifer or waterway.
- the needs of other potential applicants.
- any other matter the Minister (or delegate) thinks fit to have regard to.

When determining a “construction” application I must also consider the purposes of the Act, which state inter alia:

“1. This Act has the following purposes-

...

(c) to promote the orderly, equitable and efficient use of water resources;

(d) to make sure that water resources are conserved and properly managed for sustainable use for the benefit of present and future Victorians...”

I must also consider Ministerial Policies particularly “Policies for Managing Works Licences” signed by the Minister for Water on 2 September 2016.

### **Panel Appointed Under Section 66 of the Act**

In this matter, I also needed to consider the report of a panel appointed by the delegate of the Minister for Water pursuant to Part 5, Section 66 of the Act.

The Panel was appointed to consider all submissions and report, provide comment, advise and make recommendations to the delegate of the Minister for Water in response to the requirement to give notice of the application under Section 65 of the Water Act 1989.

### **Matters Considered:**

In assessing this application, I have taken into account:

#### **1/. Section 68 of the Act**

Of the multiple aspects detailed for consideration in this matter in the *Water Act 1989*, some are less relevant or not relevant for this matter. Key considerations, however, have been:

- the Applicant material, and all other information provided on behalf of the Applicant, including before the Panel Hearing.
- all submissions received.
- internal reporting in respect of the Application.
- the report of the panel appointed under Section 66.
- the likely effects of the escape of water from the works.
- other relevant matters.

#### **2/. Applicant Material – (Application and other Information)**

The Application material, together with various other documents, reports and responses provided by the Applicant and its representatives have been considered by SRW officers internally and by myself, including through reporting to me.

In addition, the Applicant made submissions through representatives and an expert at the Panel Hearing and SRW personnel have considered that material, reported to me and I have also considered the reporting of the Panel in that respect.

### **3/. Internal Reporting**

Further below I reference internal assessments by SRW personnel under my direction. I note relevant checks were undertaken in respect of Section 68 matters and Section 40 matters which I have noted as part of my consideration.

### **4/. Submissions (including at Panel Hearing 23 and 24 August 2021)**

When advertised this application attracted 28 submissions against and 1 submission in support of the proposal. The submissions in opposition expressed concerns including the following:

- ongoing issues such as flooding;
- stress caused by the emergency evacuation;
- risks to physical safety of human life;
- financial impact, devaluation of surrounding properties;
- ongoing psychological trauma;
- lack of integrity of the private dam and its systems;
- the failure to adequately decommission the desal plant; and
- risk assessments not being undertaken.

The submission in support of the application indicated that the submitter was aware of the presence of the dam when they moved into the area and were confident it could be managed appropriately. They also noted their support for the dam remaining to support the business they see as a key employer in the area.

### **5/. Panel Report**

The Panel, after considering all written and verbal submissions reported that:

- There was insufficient information provided in the application, supporting documents and evidence for the Panel Hearing to assess whether the proposed modifications to the Private Dam would satisfy the ANCOLD Guidelines; and
- Due to its uncertain provenance and history, the Pintail dam does not (apparently) have the engineering controls to achieve a tolerable level of risk. To incorporate such engineering controls into this dam would involve considerable expense and may possibly cost as much as it would to build a new dam.

- In the absence of a defensible demonstration of dam safety, the Panel concluded the risk to life and property could be eliminated by modifying the dam such that the storage water level is not able to rise above natural ground level. The ground level at the north-west corner of the dam is RL 9.5m. Water would be stored within the storage below ground level, but the dam walls would not retain water. This means the walls of the Private Dam would not be capable of failing and releasing stored water downstream.
- The most reliable, permanent method for reducing the storage water level to RL 9.5m would be to remove a portion of the eastern dam wall (with a base width of at least 5m) down to RL 9.5m, and to provide a collection drain to convey water away from downstream properties if the storage pumps are accidentally left running.

The panel recommended that:

- the storage water level of the Private Dam be reduced to ground level (RL9.5) to eliminate the risk of dam failure to the properties and occupiers along Pintail Drive.
- to achieve the design intent above by removing a portion of the eastern dam wall (with a base width of at least 5m) down to RL9.5m, and provide a collection drain to convey water away from downstream properties if the storage pumps are accidentally left running.
- the relocation of pipework and pumps, or construction of diversion bunds, such that surface water flows from ruptured pipework or pump system does not impact on neighbouring properties.

The panel's report and recommendations were independently reviewed by SRW's Manager of Dam Safety, Joseph Matthews.

This review supported the recommendations

## **6/. Other Matters considered**

Issues were raised through the referral process around third party agreements to transfer stormwater to the dam from a nearby property development. It is the understanding of SRW that this occurred to mitigate potential impacts from increased stormwater runoff from the subdivision on the nearby Karaaf Wetlands, presenting potential environmental impacts from any decision regarding the future operation of the dam by the removal of this mitigation measure.

In addition, SRW is also aware that third parties are supplied with treated water from the Black Rock Waste-Water Treatment plant via the dam as part of what is understood to be third party agreements with the dam owner for supply of water from Barwon Water. Decisions on the future of the dam are also likely to have economic impacts on these parties.

Whilst these wetlands are environmentally significant, and there are potential economic impacts from third party agreements and water demands, it is the view of SRW that:

- any third-party agreements on the use of the dam cannot place an obligation on SRW regarding the discharge of our delegated powers for the approval or otherwise of the ongoing operation of the dam.
- Primary considerations in these matters needs to be focussed on matters of public safety, with the potential third-party impacts on other enterprises and the environment secondary considerations in this assessment.

### **Conclusions**

There is nothing material or compelling in any historic or new documentation provided to establish that this dam was constructed to ANCOLD guidelines thereby ensuring its integrity.

There has been an escape of water in 2020 that resulted in approximately 140 people being evacuated.

Dam modelling for a scenario where the dam, at its historic operating level, is assumed to fail, identifies the potential loss of life within properties immediately below the dam when I consider the requirements of Section 68 (c) of the Act with the issue of public safety.

Having regard to matters set out in these reasons, including matters detailed before the Panel recorded in the Panel Report, it is my view that this Application be refused.

There are a number of potential consequences that may follow from the refusal, some of which are decisions for the Applicant. Some, however, are matters for SRW or the Minister's delegate, necessary to ensure the continued safety, in respect of the dam operation, in the immediate locality, which are likely to require further direction and/or actions on the part of SRW or the Minister's delegate.

Accordingly, after taking account of all relevant matters to be considered including those relevant in Section 40 and 68 of the Act the application is refused.

A handwritten signature in blue ink, appearing to read 'C-FitzGerald', with a large, stylized circular flourish at the end.

**Cameron FitzGerald**  
**Manager Director**

**Date: 21/10/2021**