

IN THE MATTER OF the Panel
appointed by the delegate of the Minister
for Water pursuant to Section 66 of the
Water Act 1989 (Vic) to consider
submissions

APPLICATION: WORKS APPLICATION NO. JW1624119
TO CONSTRUCT WORKS UNDER SECTION 67 OF THE
WATER ACT ON OR TO A PRIVATE DAM LOCATED AT
1075 HORSESHOE BEND ROAD, TORQUAY

PANEL DIRECTIONS

PANEL: Mr Matthew Townsend and Dr Mark Foster

DATE MADE: 2 August 2021

ATTENDANCE: The Directions Hearing was attended by:

Matthew Townsend, Independent Panel Member & Chair

Mark Foster, Independent Panel Member

Melissa Jeal, Panel Secretariat & SRW Corporation Secretary

Andrew Sherman, Russell Kennedy, SRW Legal Counsel

Hugh Christie, SRW General Manager Service Delivery

Angus Ramsey, SRW Acting Manager Groundwater & Rivers

Phil Cadman, Barrister, representing Mark Tomkinson (Applicant)

Jessica Andrews, [REDACTED]

Sean Doherty, [REDACTED]

Vicky Muisés-Khoury, [REDACTED]

Maddison Fairthorne, [REDACTED]

THE PANEL DIRECTS AS FOLLOWS:

Panel hearing

1. The **Panel Hearing will be held on Monday 23 August 2021 commencing at 10:00 am** and may continue on to 24 August 2021 if required.
2. The following Parties have expressed a wish to appear before the Panel:

Party	Represented by:	Time Required
Southern Rural Water	Andrew Sherman, Russell Kennedy Solicitors	60 minutes
Jessica Andrews	Self	60 minutes
Vicky Muisés-Khoury	Self	20 minutes
Daniel Giblin	Self	10 minutes
Applicant	Phil Cadman of counsel	240 minutes

Expert reports and submissions

3. On or before Monday 16 August 2021 any further expert reports should be provided to the panel secretariat (Melissa Jeal SRW@srw.com.au), along with the outline of any further submission to be presented at the Merits Hearing.
4. Any further expert reports and submissions received from the parties by 16 August 2021 will be made publicly available.
5. Any Party may provide a written response to a further expert report or submission received after 16 August 2021 on before Friday 20 August 2021.

Documents to be placed before the panel

6. The Panel Secretariat is to prepare and publish an on-line portal of documents and resources of potential relevance to the panel hearing.
7. The submission of any Party who has asked that their submission not be made publicly available will not be uploaded to the hearing portal but will nonetheless be made available to the Parties.
8. Submissions uploaded to the hearing portal will have personal information redacted upon request.
9. The hearing portal will be updated as documents are tabled by the Parties or as otherwise directed by the Panel.

SITE INSPECTION

10. The **Site Inspection is to be held on Tuesday 24 August 2021.**
11. The Site Inspection will be attended by:
 - a) the Panel in person or via video link, as circumstances allow;
 - b) the Applicant and/or his representatives;
 - c) representatives of Southern Rural Water Representatives; and
 - d) other Parties as requested.
12. The purpose of the Site Inspection is for the Panel to inspect the fixtures and features of the Dam and surrounding context but is not to provide further submissions to the Panel.

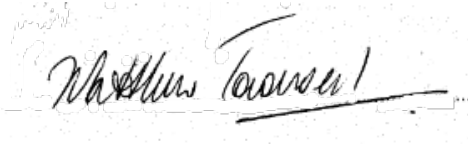
FURTHER INFORMATION REQUESTED

13. The following information is requested from the Parties either:
 - a) as soon as practical; or
 - b) as part of the Party's evidence and submissions on 16 August 2021—
as the case may be.
14. The following information is requested from Southern Rural Water:
 - a) section 80 Direction dated October 2020;
 - b) any reports related to the investigations which investigate the cause of the October pipe leak incident and associated repair works; and
 - c) reports of historical inspections of the dam conducted by SRW.
15. The following information is requested from the Applicant:
 - a) information about the dam:
 - 1) any historical drawings, reports or photographs that document the original dam construction;
 - 2) any survey showing the location of existing features of the dam (crest, toe, pipework, standpipe piezometer locations) and contour levels of the dam and surrounding land;
 - 3) measurements taken at various locations onsite of the depth of the dam below water level, including the gauge height of the storage level at the time the measurements are taken;

- 4) records of the measured groundwater levels in the standpipe piezometers since they were installed.
- b) information about the Existing Pipework:
- 1) the elevation at which the Old Treatment Plant pipe (which is now capped off) passes through the dam embankment relative to the proposed reduced operating level of EL 12 metres;
 - 2) information and/or sketches disclosing the elevation at which the “sump pipe” (AGT report, 29 January 2021, Section 2.2) passes through the dam embankment relative to the dam crest and the proposed operating storage level of EL12 metres;
 - 3) the pipe material and diameter of the “sump pipe” where it passes through the embankment fill;
 - 4) the internal condition of the “sump pipe” where it passes through the dam fill; and
 - 5) details of any other old or disused pipes that pass through the dam embankment (or pass through the foundation of the embankment).
- c) information about the Application:
- 1) reduced Storage Operating Level
 - a) the basis for selecting the reduced Full Supply Level of EL 12 metres;
 - 2) proposed Details and Method of Installation of the Spillway Pipe:
 - a) the drainage pathway for the water that is to pass through the spillway pipe;
 - b) any hydraulic calculations carried out to determine the proposed pipe diameter to maintain the reduced storage operating level of EL 12 metres if the inflow pumps continue to operate;
 - 3) details of any consideration given to potential blockage of the inlet of the spillway pipe by debris;
 - 4) details of the method of drilling proposed and the precautions proposed to be taken to mitigate potential damage to the embankment fill by the drilling process (such as the fracturing of dam fill that could occur if water or air is used to drill the hole);
 - 5) any design measures proposed to be used to mitigate the potential for seepage and internal erosion of dam material from developing around the outside of the spillway pipe once it is installed;

- d) information about the Dam Break Analysis report (ATG, 29 January 2021):
 - 1) modelling output information:
 - a) output plots for the EL 12 metres storage level case like those shown in Section 4.1 of the report for the EL 14 metres case; and
 - b) HEC-RAS model output files, if any;
 - 2) dam failure (breach modelling):
 - a) details of the outcomes of breach modelling for the EL 12 metres storage level case if the failure is assumed to occur immediately behind the properties located on Pintail Drive;
 - b) details of the sensitivity of the modelling outputs to the estimated breach parameters (breach geometry and breach development time) for the EL 12 metres storage level case;
 - c) details of the number of properties predicted to be affected by the dam break modelling for the EL 12 metres storage level case; and
 - d) details of the predicted depth and velocity of water from the dam break modelling at the location of properties along Pintail Drive for the EL12 metres storage level case;
- e) information about the Dam Safety Review report (AGT, dated 30 Jan 2021):
 - 1) assessment of the level of risk for the EL 12 metres storage level case (as provided for EL 14 metres in Section 1.1, page 8);
 - 2) information about why the historic performance method was used (Section 9.2.2, page 22-24) when the ANCOLD Guidelines on Risk Assessment (ANCOLD 2003, Commentary C7-2) indicates the historic performance method for piping is only applicable for screening and preliminary risk assessments, and in conjunction with event tree methods for detailed risk assessments;
 - 3) further details about the risk assessment (Section 9.2.2, page 25) as currently it only quantifies the risks for piping failure modes;
 - 4) the basis for the estimated potential life loss value (N) (Section 9.2.2, page 25);
 - 5) risk assessment (Section 9.2.2, page 25) based on the risk criteria in the ANCOLD Guidelines on Risk Assessment (2003) including criteria for societal risk and individual risk and consideration of risks being reduced As-Low-As-Reasonably-Practicable (**ALARP**); and

- 6) Consequence Category for the dam operating at EL 12 metres assessed under the ANCOLD Guidelines (as provided in Section 10 for EL 14 metres as 'High B').

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Matthew Townsend, Independent Panel Member & Chair

A handwritten signature in blue ink that reads "Mark Foster". The signature is written in a cursive style.

Dr Mark Foster, Independent Panel Member

2 August 2021