

October 6 2017

Wes Ford

Director, Environment Protection Authority

Department of Primary Industries, Parks, Water and Environment  
Level 7, 134 Macquarie Street  
Hobart TAS 7000

Dear Wes,

**RE: Tassal Ltd plans to dump liquid fish-farm waste near Hells Gates, Macquarie Harbour**

I am writing to express preliminary concerns regarding Tassal's recently publicised plans to discharge liquid fish waste into Kelly Channel on the inside of Hells Gates.

I refer specifically to information provided within Tassal Ltd submission #2799 (Kelly Channel Discharge, Macquarie Harbour, Tasmania) to the Commonwealth Department of Environment and Energy. Notwithstanding that this application was made to a Commonwealth Government Agency, I understand that the Tasmanian Environment Protection Authority (EPA) is currently assessing (or about to assess) Tassal's Environmental Management Plan (EMP) in accordance with the relevant provisions of the *Environmental Management and Pollution Control Act 1994* (EMPCA).

With respect to information provided by Tassal within the EPBC submission, I note the following:

1. As part of Tassal's Waste Capture System (WCS) development at Macquarie Harbour, solid emissions from salmon farming operations are currently captured from beneath the cages and pumped to the surface, stored and transported to Strahan and then treated.
2. The treatment process includes dewatering of the primary emissions that comprise about 5% solids by weight. The liquid waste component (waste liquor) is then discharged through existing land-based sewerage infrastructure managed by TasWater.
3. Whilst the current disposal arrangements for solid and liquid emissions are manageable, Tassal is considering additional options for waste disposal as additional

waste capture liners are installed across an increasing number of cages, and fish biomass increases.

4. Tassal believes that the most efficient way for capturing, treating and disposing of waste is to pump extracted waste directly to a recently purchased ex-RAN vessel (Wallaby) – the waste will then be separated into solid and liquid components using an onboard centrifuge. The waste liquor will be disinfected using chlorine dioxide and then discharged on an ebb tide within a discharge zone in Kelly Channel that lies approximately 2kms from Hell Gates.
5. Discharges of approximately 300m<sup>3</sup> in volume will occur on a weekly basis between November 2017 and May 2018.

In assessing the Tassal EMP, the Tasmanian Abalone Council (TACL) would like the EPA to note the following:

1. The coastline immediately to the west of Hell Gates is an area commonly referred to by fishers as "the Strip".
2. Adjacent to this 4km section of north facing rocky shoreline (which runs along to Cape Sorell) is a healthy and bio-diverse inshore marine ecosystem that sustains abalone, lobster, finfish and other marine fauna as well as a broad array of marine flora (micro and macro flora). It can be fished when the swell is south or sou-westerly in direction which is the predominant swell direction in this part of Tasmanian waters.
3. The "strip" is a very popular fishing area and is regularly fished by both commercial and recreational fishers.
4. There are also very significant commercial fishing grounds for lobster and abalone further south of Cape Sorell.
5. The outgoing "ebb" tide from Macquarie Harbour regularly exposes "the Strip" to a plume of estuarine water. This plume will be "mixed" and diluted with oceanic water to varying degrees dependent on a complex interplay of environmental and hydrological variables.
6. The EPBC submission from Tassal makes no mention of the inshore rocky reef ecosystem to the west of Hell Gates. Furthermore, there is no acknowledgment of any potential environmental impact on this ecosystem from any discharged salmon waste liquor plume. This is a significant omission from Tassal's report.
7. Abalone are at their most vulnerable during the early stages of their life cycles – localised anoxic conditions due to nutrient overload in the water column (whether sustained or periodic) may have a deleterious effect on abalone larval settlement and larval growth.
8. During the summer months, regular high-pressure weather systems will provide calm conditions around the entrance to Macquarie Harbour. These conditions will reduce

the degree of mixing of estuarine and oceanic waters. Poorly mixed and poorly dispersed waste liquor plumes may result.

9. Additional treatment of the liquor waste before disposal should be considered. Such treatment should focus on diluting/removing the nutrients (principally nitrogen and phosphorus) in the liquor.
10. The Tassal vessel "Wallaby" is a decommissioned Australian Naval vessel with an unladen displacement of 210 tons, a length of 38m, draft of 3.8m and beam of 9.8m. By any measure, this is a substantial vessel that would be more than capable of traversing Hells Gates in certain tide and swell conditions – it could then travel out to sea and discharge salmon farm waste several nautical miles from the coastline – this would ensure that the waste liquor is diluted and dispersed quickly and in a manner which would not impact on nearby coastal ecosystems. This method of waste disposal should be properly considered as part of any assessment of waste disposal options.

The Tasmanian Abalone Council respectfully requests that the above comments be considered during the EPA assessment of Tassal's pending Environmental Management Plan.

I would welcome an opportunity to discuss these issues with you.

I look forward to hearing from you at your earliest opportunity,

Yours sincerely,

 Chief Executive