Application for Regulation 12 Approval:

for transportation & discharge of up to 60 kL per day of aquaculture effluent via Pardoe Outfall

Section 1 – Applicant Details

The proponent for this activity is:

Tassal Group Limited
ACN 106 324 127
ABN 38 106 324 127

Tassal is a fish farming company established in Tasmania in 1986. As a publicly listed company on the Australian Stock Exchange, Tassal formally releases financial results every six months. The most recent financial results published were for the six months ended 30 June 2017 and can be obtained from the ASX web address www.asx.com.au.

Associated EPN No's:
Recently issued EPN's, which are associated with this Regulation 12 application are:

- EPN No 9702/1 for capture and collection of under pen waste from marine farming leases within Macquarie Harbour
- EPN No 9760/1 for treatment of under pen waste

ANZSIC Class Code: 0202 – Offshore caged aquaculture

Section 2 – Main Contact

The Tassal contact person for this project is:
Mark Ryan
MD and CEO

Section 3 – Communication Details

Communication should be directed to:

Sean Clauson
Project Manager
Sean.Clauson@tassal.com.au
0447 122 689

Section 4 – Addresses

Tassal' registered address is:
GPO Box 1645
HOBART TASMANIA 7000
tassal@tassal.com.au
www.tassal.com.au

Treated waste will be collected from Tassal's Macquarie Harbour operations at:
160 Smiths Cove Rd,
Strahan,
Tas, 7468

Waste will be delivered to Pardoe:
287 Brooke St,
East Devonport,
TAS 7310

Section 5 – Nature of the Waste

Waste Category Code: Other – Underpen waste, consisting of excess fish feed & faecal matter from aquaculture operations, has been previously classified as a general waste. This application is for disposal of a seawater derivative of underpen waste.

The waste is the liquid remaining after removal of the underpen waste solids.

Following collection of the raw waste from the farm, solids will be separated via a centrifuge. The remaining centrate, will then be disinfected prior to transport to Pardoe for discharge. *Refer to Section 2.3 of the attached Marine Solutions report for further details of the filtrate characteristics.* The characteristics listed are typical within an expected range with consideration of daily variations.

The estimated volumes have been summarized by month in the table below, however these volumes are dependent on the waste collected from the farm.

Month	Filtrate volumes [kL/day]	Filtrate volumes [kL/month]
Nov	45.5	1400
Dec	50.6	1500
Jan	50.6	1500
Feb	43.2	1200
	Total	**5,600**

Section 6 – Waste handling details

Following disinfection, the waste will be transported in liquid form from Strahan to Devonport using tanker trucks. Once it arrives at Pardoe, the Tassal filtrate will be combined as a minor component of the Pardoe discharge via the existing outfall. *Refer to Table 5 of the attached Marine Solutions report, for details of the combined effluent.* It is expected the Tassal filtrate will constitute less than 1% of the daily discharge volume.

It is anticipated that up to three tankers will be required each day.

Alternatives:
Several alternatives have been considered for disposal of the filtrate, with the preferred option being discharge at Hells Gates, Macquarie Harbour during an ebb tide. Whilst environmental assessment of this option is favourable, approvals are not likely to be in place by the end of Nov, which is needed due to the expiry of the existing disposal arrangement.

Monitoring:
To ensure early identification of any adverse environmental impacts resulting from the Tassal discharge, Tassal propose to adopt the monitoring regime recommendations by Marine Solutions in Section 4 of the attached report. Ie:

- Weekly monitoring of the effluent and filtrate streams to determine relative contributions.
- The weekly Tassal filtrate samples will be collected during tanker truck loading at the Strahan aquaculture hub. In addition, once a month a sample will be taken during tanker truck unloading at Pardoe.
- Plume dilution study during the initial week of combined discharge to validate dilution and changes to the plume dynamics given the salinity of the filtrate
- Bi-monthly water quality monitoring
- Quarterly biological monitoring
- Should there be a reasonable expectation that the effluent quality will vary, then the treatment and monitoring processes will be reviewed.

TasWater also have a pre-existing monthly monitoring regime for ambient conditions at the outfall, which will identify any step changes resulting from the inclusion of Tassal filtrate.

Section 7 – Waste producer

The waste producer is the applicant – refer applicant details in Section 1 above.

Section 8 – Waste discharge period

Subject to EPA approvals, discharge of Tassal filtrate at Pardoe could commence as early as Nov 2017. Discharge of filtrate would cease following completion of harvesting activities, which is planned for March 2018.

Section 9 – Declaration

In accordance with regulation 12 of the Environmental Management and Pollution Control (Waste Management) Regulations 2010, I hereby apply for an environmental approval under that regulation

SEAN CLAUSON
Project Manager,
TASSAL GROUP LIMITED

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Section 10 – Additional information

Marine Solutions have been engaged to complete an environmental assessment of the likely impacts form discharging Tassal filtrate vie the Pardoe Outfall. Revision 4 of this report is included to further support this application.