# Legislative Council Sessional Committee Government Administration A Sub-Committee Fin Fish Farming in Tasmania Inquiry

Submission from Geoffrey Swan, Lonnavale Tasmania

#### Terms of Reference:

- 1) The implementation of the Sustainable Industry Growth Plan for the Salmon Industry and its impact on commercial finfish farming operations and local communities, including:
  - a. data collection and publication
- 2) Application of the Marine Farming Planning Act 1995 relating to:
  - b. management of finfish farming operations with respect to the prevention of environmental harm

#### Dear Sir or Madam

Please find enclosed my submission to this inquiry which is specific to the operation of the Huon Aquaculture Company Hatchery situated alongside the Russell River in Lonnavale, Tasmania.

This submission is the result of some 10 plus years of research, collation of evidence and personal observations from our property some 2.2km downstream from the hatchery and along the stretch of the Russell River. Parts 2 and 3 of this submission are updated excerpts from a Dossier provided to the Hon. Premier Will Hodgman, MHA on September 15<sup>th</sup> 2017, during a 45 minute board room meeting, at which time our Premier said to me "we will fix this issue... it has been ongoing for too long and is sounding like groundhog day".

With the exception of the River Catchment study which had been mooted some 12 months earlier, nothing else has come out of that meeting to this day, now some 2+ years on.

The downstream pollution of the Russell River continues to be a direct result of the activities of the Huon Aquaculture Company, as has finally been confirmed in the River Catchment study. All other possible sources of pollution to this river to include agriculture, forestry, human activities, the nearby Rivers Edge Camping ground and any possible leaking septic systems have all be categorically discounted through the proper analysis of data which was primarily supplied by HAC themselves.

Our Premier was presented with eight actions which could assist in the ongoing pollution of the Russell River, but not one of the suggestions actions have been undertaken by our Government. I will present these actions once again in the hope our Government will at least consider what has been a very longstanding issue of environmental pollution to a once pristine mountain stream.

#### Aquaculture Hatcheries in Tasmania

As at August 2017 (H508382\_RTI028) there were 17 such hatcheries throughout Tasmania with five of those a combination of flow through and recirculation systems, and the remaining 12 being flow through only. I am only reliant on anecdotal evidence for some of the other hatcheries, but I am advised there are issues arising from waste discharges into the downstream sections of the once pristine freshwater rivers similar to that of the Lonnavale facility.

A flow through system uses fresh water diverted from the flowing river which is directed into tanks or ponds containing brood fish. This oxygen rich pristine water in turn circulates through the tanks and in so doing picks up fish faeces and any undigested feed, and is then discharged downstream of the intake point. There may be a drum filter intercepting the flow to filter the solids; however there are industry questions around the effectiveness of such filters as solids are broken into even small particles and the high nutrient still enters the waterway, causing downstream eutrophication in the form of filamentous green algae.

A recirculation aquaculture system (RAS) is a self-contained system where the water is treated (most often including ozone) and is then returned into the system. Solids are collected and often removed off site. Waste water is often stored in settlement ponds and in due course irrigated onto nearby pasture or land.

SITE	River/water Course	System Type	Status	Expiration Date
Huon Aquaculture				
2 Main Road, BRIDPORT	Hurst Creek	flow through	operational	01-January-2020
Headquarters Road, SOUTH SPRINGFIELD	Great Forester	flow through	operational	01-January-2020
584 Meadowbank Road, MEADOWBANK	River Derwent	flow through	operational	31-August-2017
Russell River Road, LONNAVALE	Russel River	flow through + recirculation	operational	31-August-2017
1560 Upper Esk Road, UPPER ESK	South Esk	flow through	operational	31-August-2025
Forest Home, JUDBURY	Huon River	recirculation	operational	10-November-2024
Tassal				
32 Lake Dobson Road, NATIONAL PARK	Tyenna River	flow through + recirculation	operational	01-January-2020
30 Rookwood, RANELAGH	Huon River	recirculation	operational	31-August-2018
1358 Gordon River Road, WESTERWAY	Tyenna River	flow through	operational	01-January-2020
Dawson Road, BROAD RIVER, CLUNY LAGOON	Broad River	flow through	non operational	03-October-2016
Petuna				
155 Burlington Road, CRESSY	Brumbys Creek	flow through + recirculation	operational	01-January-2020
Saltas				
289 Wayatinah Road, WAYATINAH	River Derwent	flow through + recirculation	operational	01-January-2020
675 Florentine Road WAYATINAH	Florentine River	flow through	operational	01-January-2020
Mountain Stream				
38036 Tasman Highway, Targa	St Patricks River	flow through	operational	31-August-2017
Snowy Range				
33662 Dennison Road, LITTLE DENISON RIVER	Little Denison River	flow through	operational	01-January-2020
41 Degrees South				
323 Montana Road, RED HILLS	Western Creek	flow through	operational	27-April-2021
Inland Fisheries Service				
17 Back River Road, NEW NORFOLK	River Derwent	recirculation	operational	
Atkinson Aquaculture				
52 Greta Road, NATONE	Ellis Creek	flow through + recirculation	in development	03-August-2025

#### Huon Aquaculture Company Hatchery, Lonnavale

This hatchery has both flow through and RAS systems in operation. In 2015 the GM of HAC Freshwater advised it would cost \$1m to convert the flow through system to a RAS system; "money we do not have" he said.

The enclosed part 2 of this submission provides an overview of the history of this facility and highlights the ongoing issue of downstream eutrophication to the Russell River which has been ongoing in excess of 12 years. The Huon Valley Council, followed by the EPA served EPN's on HAC over the years to measure the nutrient outputs from the flow through system into the river.

There are also EPN's served on HAC for the RAS system but these relate to matters of water treatment, storage and removal, and have not until recently considered the impact of possible run off from their irrigation of the RAS waste water onto the nearby clay soils and tree plantation.

As a result of an independent "Catchment Nutrient Study for the Russell River at Lonnavale", commissioned by the EPA and provided by Dr Rebecca Kelly, published in October 2018, the EPA have become aware of nutrient discharge flowing back into the river as a result of the RAS irrigation system.

This waste water has not been captured in the testing undertaken in the past 10+ years and is now a matter being explored by HAC and the EPA with a plan for June 2020.

The Kelly report (along with subsequent inspections of any possible leaking septics in the area by the Huon Valley Council), <u>has now conclusively confirmed the downstream eutrophication and impacts on the Russell River are solely from the respective waste water discharges from the HAC Hatchery.</u>

On August 28<sup>th</sup> 2019, Director Environment Protection Authority, Wes Ford wrote to me in part:

"In regard to ongoing regulation of the Lonnavale fish farm, EPA's position is that the conditions of the current Environmental Licence are appropriate to manage the environmental risks of the activity. The conditions require a revision of the Wastewater Reuse Environmental Management Plan to be submitted in June 2020. Huon Aquaculture have begun preparation of that plan."

#### a. data collection and publication

Data is collected by the industry themselves, in this case the Huon Aquaculture Company. This data is provided to the EPA as part of their EPN. There is anecdotal evidence pertaining to their hatchery in Lonnavale and their Hatchery in Ranelagh, that persons taking samples have been known to sample upstream of the discharge points.

There is evidence the EPA have on occasion provided prior notice of a planned visit when the EPA will undergo some random testing.

Director EPA, Wes Ford has advised that in order for the EPA to engage a contractor, to in turn invoice (in this case) HAC, and to subsequently provide test results to the EPA and to HAC, this would require legislative change.

There have even been concerns raised in the community about the independence of the State testing laboratories with suggestions an interstate laboratory should be engaged. This does not sound respectful for our Tasmanian Laboratories, but perhaps in the interests of complete transparency a random set of tests could be undertaken with an interstate laboratory to ease any concerns of collusion or influence.

Unfortunately this industry has done itself no favours in terms of honesty and transparency, and it is timely to put in place systems that are beyond reproach in order to gain community confidence.

# b. management of finfish farming operations with respect to the prevention of environmental harm

The bulk of this submission relates to the environmental harm being caused to the Russell River by the practices of the Huon Aquaculture Company facility in Lonnavale. There is without question simply based on the visual and photographic evidence there is environmental nuisance occurring downstream of the facility almost all year round.

During heavy rains the eutrophication is often cleared, but rapidly returns within a matter of week(s) and sometimes days. The sensitivity to nutrient levels for phosphorous in particular and nitrogen are such that a very small increase will trigger instantaneous algal growth.

There have also been suggestions made by HAC that evidence of increased macroinvertebrate activity is a sign of a healthy downstream river. This is a misnomer.

There is strong anecdotal evidence of a decreased amount of trout being evident downstream as against upstream. This is further illustrated by the higher count of macroinvertebrate species downstream. Macroinvertebrates are the food for trout

and by "hiding" within the increased algal growth they are not eaten by trout and trout simply migrate to cleaner waters where food is readily accessible.

It is my strongly considered view after 10+ years of study and engagement with our authorities that the management of this particular hatchery is seriously lacking. The agreement by former Directors EPA, IFS, Ministers and indeed the Premier that there is an ongoing issue is a very poor reflection on any action actually being taken. The amount of action taken to enforce the prevention of the ongoing pollution of the Russell River by the Huon Aquaculture Company is indeed a travesty and if there were far more people impacted it would not be as it is today.

As a lone voice, with the exception of support from Mr Richard Dax, a long time fisherman, and a long time advocate for this river, the battle has indeed been of David and Goliath proportions.

#### Prime concern with the status quo

Finally there is an understanding and an acceptance by the EPA that the source of the downstream pollution of the once pristine mountain stream is as a direct result of the activities undertaken by the Huon Aquaculture Hatchery in Lonnavale.

At first Huon Aquaculture rejected the findings of the Kelly Report and called on their own independent water scientist, Dr Lois Koehnken to review the report.

It will now be a further 18 months delay before yet another report is undertaken to explore the issue of the run off irrigation water which is deemed to be impacting the Russell River.

#### Question

Dr Rebecca Kelly has confirmed the river water upstream from the HAC facility is pristine mountain water, or as close to pristine as can be for a river. Downstream from the facility the river suffers year round eutrophication consisting of filamentous green algae, a year round slippery river bed with brown algae and has diminished trout compared to upstream.

The nutrients levels are high in phosphorous and nitrogen, and suspended solids compared with upstream, and yet the Director EPA, Wes Ford is stating the level of downstream pollution is at an acceptable level.

By what acceptable measure can any person or authority suggest there is a level of "acceptable" pollution in our waterways. A community river that serves a number of residents downstream as household water and livestock water.

How is it possible, and why is it acceptable, that one business is allowed to impact an important water source through the polluting activities of their business.

The Huon Aquaculture Company purports to be the torchbearer of quality salmon producers and the protector of the environment within which they operate.

Firstly let them now demonstrate this by the closure of their "no longer considered best practice" flow through systems and to now integrate these into their two major recirculation plants; one that is already on site in Lonnavale and their latest facility at Forest Home in Judbury.

Secondly, why is our community once again forced to wait for yet another report that is a further 18 months away in the knowledge the hatchery is the cause of the downstream pollution.

This is simply about one small mountain stream which industry has been allowed to systematically degrade with the blessing of the Authorities responsible and in the full knowledge of Peter and Frances Bender.

This is simply not acceptable but no one appears concerned.

Further reference to the plight of the Russell is available at:

http://www.tasconservation.org.au/tas-conservationist/2016/12/19/degradation-of-the-russell-river-an-anglers-opinion

# THE CREATION OF A POLITICAL AND BUREAUCRATIC MONSTER

The Huon Aquaculture Fish Farm on the Russell River, Lonnavale, TASMANIA

The enclosed documentation represents an amassing of some 10 plus years of evidence of deceit, obfuscation, and the ongoing dereliction of duty of our Tasmanian regulatory authorities to take any demonstrative action to prevent the downstream devastation of the Russell River; due to the daily polluting activities of the Huon Aquaculture Company Hatchery (HAC).

Two former Directors EPA - Jones and Schaap, current Director EPA - Ford, current Director IFS - Diggle, Acting Director EPA - Mollison, Professor Peter Davies and Minister Groom have all accepted and acknowledge that the downstream eutrophication of the Russell is substantially due to, if not wholly due to, the daily discharges of high nutrient fish farm effluent into the river from the HAC fish farm.

Despite years of unquestionable evidence, an extensive collection of monthly and annual photographs, extensive coverage in the media (ABC, Mercury, Huon News and Tasmanian Times) and years of communication and written correspondence with all possible authorities, the discharges from the Hatchery into the Russell continue unabated. When comparing downstream 2009 with downstream 2019 there is more often than not, little to no noticeable visible improvement, despite three EPN's, three scientific reports and the "pub test" fact that there has never been any visible algae recorded upstream of the Lonnavale fish farm.

The independent "Catchment Nutrient Study for the Russell River at Lonnavale", commissioned by the EPA and provided by Dr Rebecca Kelly was published in October 2018. Finally there is confirmation that the downstream eutrophication of the Russell River is due to the outputs of the Huon Aquaculture Fish Farm, with the only unaccounted for possibility being any local leaking septic systems.

The Huon Valley Council confirmed to me 26<sup>th</sup> June 2019 they have since inspected all local systems and there are no leaking septic issues.

https://epa.tas.gov.au/Documents/AssessmentOfNutrientSources\_RussellRiver\_FINAL\_HighRes\_20190102.pdf

The cause of the ongoing eutrophication and destruction of the Russell River is unequivocally a result of a Hatchery that was established without any environmental requirements, without any requirement of a Development Application and without any consideration of any other users of this once pristine community river. This is a tragedy still in progress to this day.

#### THE CREATION OF A POLITICAL AND BUREAUCRATIC MONSTER

The Huon Aquaculture Fish Farm on the Russell River, Lonnavale, TASMANIA

### ORIGIN

- Originally established in 1996 2006 as a small family Trout hatchery business using outdoor handmade clay ponds and flow though fresh water redirected through a handmade channel from the Russell River. All waste was discharged into the Russell River.
- o By all accounts taken over in 2006 by Peter and Frances Bender.
- No planning or environmental considerations were required or were put in place by the Huon Valley Council on the basis of it being existing agricultural land use.
- IFS issued a 10 year Fish Farm Licence to Huon Aquaculture
   Company (HAC) commencing September 1<sup>st</sup> 2007 August 31<sup>st</sup> 2017.
   (Renewed by IFS September 2017 for a further 12 months with no change to the conditions)
- o Immediate construction of what is today a multimillion dollar facility consisting of the original flow through fish farm clay pond system, and a new undercover recirculating aquaculture system.
- o Instead of hundreds of Trout in the flow through ponds, HAC filled the five clay ponds with 49 tonnes of Salmon and the <u>downstream</u> <u>impact</u> of this dramatic action was immediately evident.
- Recent RTI information has now revealed HAC placed in excess of 45 tonnes of Salmon into the outdoor ponds from 2005 onward. This was <u>two years prior</u> to having the necessary Fish Farm Licence.

# EARLY IMPACTS OF THE FISH FARM

o Throughout 2007 the Russell River downstream was completely covered in filamentous long green algae up to 10km and more downstream to the confluence of the Huon River.



- Local residents, Anglers Alliance Tasmania Inc. and the Tasmanian Farmers and Graziers Association all responded to the dramatically changed River situation and sought assistance from both the Huon Valley Council and the Benders themselves.
- Intense media focus at the time along with road blockades and a massive Community unrest ensued.
- o Benders remained resolute their fish farm was not the issue and suggested all sorts of obscure reasons for the downstream algae.
- However, no visible algae has ever been recorded (to this day) upstream of the fish farm discharge pipe despite claims by Benders and the Environment Protection Authority to the contrary; to include a spurious letter from the Bender's housekeeper Gay Branch. (Letter written August 10, 2010 just days before Peter Bender provided Warren Jones with Davies 2009 Report which clearly indicated the cause was the Fish Farm)

# HUON VALLEY COUNCIL ACTIONS

- Following involvement from the HVC; in December 2007 the Benders removed all but 30 – 40 brood fish from their five flow through clay ponds; however the river had perhaps irrevocably changed and still the filamentous long green algae proliferated downstream.
  - (In 2017 HAC were maintaining up to 6000 brood fish 6 tonnes in their outdoor clay ponds)
- o In March 2007 the HVC served HAC with an Environment Protection Notice EPN 2007/1; followed soon after by an Infringement Notice and a fine.
- Wrong river classification of lowland river when it is an upland stream – meaning wrong nutrient limits and the wrong understanding of the rivers capacity to accept the high nutrient effluent discharge.
- DPIPWE Water Resources advised the water flows in the Russell are insufficient to accommodate flow through – HAC permitted to take up to 90% of the total river flow.
- IFS Director Diggle expressed concern about increasing State wide complaints arising from point sources such as fish farms.
- o Resident complaints continued and ultimately got the attention and concern of DPIPWE Environment then Director Warren Jones.

#### ENTER THE ENVIRONMENT PROTECTION AGENCY

- February 2008 and DPIPWE Environment seeking to take over regulation of the facility and propose to serve a new and more appropriate EPN with revised limits.
- EPA advise Senate Estimates March 2008 that an EPN is imminent but nothing happens for 6+ years.
- Neither HVC nor the EPA take any more action until 6 years and 6 months later – internal (RTI) emails reveal neither HAC nor EPA could work out how to remedy the issue – it was all guess work.
- o EPA finally serve HAC with EPN 7667/1 in October 2014.
- Limits set in concert with HAC who supplied the EPA with the nutrient data needed to sustain a flow through hatchery, meantime still guessing on feed limits and stocking.
- Supposed <u>decreasing nutrient limits</u> over a three year period put in place in EPN 7667/2 and served in February 2015.
- EPA Technical Report January 2016 then <u>increases limits to an</u> <u>"enforceable" limit</u> which is <u>higher than previous limits</u>, therefore providing HAC with increased nutrient latitude.
- Director EPA Ford (and earlier EPA advice) advises downstream algal cover is <u>because of</u> longer daylight hours, the warmer water and low river flows.
- o In June 2017 the downstream algal cover was as bad as it was back in November 2009 a cold 10°C, shortest day of the year and the river was high flowing.

- o Director EPA Ford then advises algae can also occur in these cold water conditions, with limited sunlight and increased flow.
- Inquiries to EPA and DPIPWE Water Resources confirm HAC are permitted to take 0.3Cumecs per day (26 million litres) of water from the Russell.
- EPA confirm that at times of the year the entire flow of the Russell is 0.3Cumecs per day – therefore HAC have a licence to extract 100% of the River. (Locals recall Frances Bender boasting about this fact)
- O Water Resources are not concerned with the water take because they consider it to be "non consumptive". Actual water "quality" is of no concern to Water Resources. (Martin Read DPIPWE)
- Investigations at the water intake reveal there is no flow metering in place for water being diverted into the facility.
- The intake channel into the HAC fish farm has had inoperable gates and controls over the flow well before Benders took over.





- The flow meter at Lorkins Bridge is situated in an annual pool of water - therefore is not reliable for measuring river flow.
- All testing of the River sampling is undertaken by HAC staff with information then provided to the EPA. This <u>is not independent</u> monitoring and is open to abuse. (Anecdotal evidence confirms this)
- EPA do undertake very occasional random sampling and <u>advise</u>
   HAC when they will be testing. (Revealed in emails in RTI documents).
- Director EPA Ford advised legislation prohibits the EPA engaging an independent company to undertake sampling and then invoicing HAC for the service. (Advised in a meeting April 27, 2017).

# ACKNOWLEDGEMENT FISH FARM IS THE CAUSE

- o All four EPA Directors (Jones, Schaap, Acting Mollison and Ford) confirmed in writing that HAC are the cause of downstream eutrophication that must be resolved sooner rather than later.
- O Davies 2009 Report was commissioned and paid for by HAC and kept commercial in confidence. (Finally accessed by Swan following 4 years with RTI and eventually the Ombudsman in July 2017)
- o Report confirms HAC knew it was their problem in 2008/2009.
- O November 2009 Swan family informed by the EPA, HVC, HAC and Davies that HAC were not the cause of the prolific downstream algal growth. (November 9, 2009 on site meeting Russell River)
- O Acknowledgement that flow through is "not best practice" by Director IFS Diggle (July 2014), Minister Groom (October 2016), and Director EPA Ford (August 2017).
- Director EPA Ford states he is accepting a level of pollution impact from HAC but <u>is not seeking zero impact</u> on the Russell River (October 2015).
- Davies 2009 Report advises another River study should be undertaken in 1 – 3 years. However a follow up Report is not undertaken until 2015 some 6 years later – were the EPA asleep on their watch.
- August 28th 2017 Director EPA Ford refused to release any of the test results or macroinvertebrate studies undertaken on the Russell since 2008 – referring us yet again to the RTI process.

# FLAWS AND CONCERNS IN THE ARGUMENT

- HAC and EPA continue the rhetoric there are other nutrient inputs into the river – this is patently false. They continue to refer to how much better the River is now compared to 2007 when they had 49 tonnes of fish present in the ponds, when the complaints first surfaced. (HAC and EPA gave this exact same information to the HVC management in May 2017)
- There was never an algal issue in the Russell when Forestry and Agriculture in Lonnavale was at its peak.
- HAC suggesting duck and platypus faeces are the cause of the algae (HAC Annual Environmental Management Review March 2017) and marsupial faeces (May 2017). Why therefore is there no algae upstream?
- o Erroneous comments in Davies 2009 and 2105 Reports. Erroneous and misguided information in the HAC March 2017 Annual Environmental Management Review. Still speculation about possible extraneous inputs and causes of algae.
- o Flow meter placement issues and the locations of sample testing.
- Sampling, testing and reporting is by HAC staff it is not independent. Arm's length company structure but still an employee of HAC. (Dom O'Brien)
- O Despite all the testing, despite all the EPN's and limits, and despite the supposed changes to feed limits and stocking limits, the situation downstream has not improved since 2008. (Following the mass uplift of the 49 tonnes of fish).

# ANNECDOTAL EVIDENCE

(Hearsay advice from people who will not come forward through fear of retribution and their connection to employment and the Benders)

- HAC knowingly take water samples at the wrong locations to that required in the EPN - often upstream and at times when their impacts on the river may be reduced.
- o HAC discharge large volumes of high nutrient water from their recirculating system into the Russell when the river is in high flow and when cleaning their tanks. (Evidenced on one occasion with a large mass of white foaming water and another occasion with EPA testing confirming plasticisers were in the water, and strong chemical odours in the downstream river)
- o HAC do use antibiotics and hormones in their Fish Farms despite publicly suggesting otherwise.
- HAC are advised well in advance when the EPA is visiting and/or planning any EPA based testing.
- o Facility was closed for 4 months in 2017 and the downstream river (over summer) was the best seen in 9 years. Within 4 weeks of resumed activity the downstream algal cover returned with a Vengeance. (Also evidenced by decreased vehicle movement to the fish farm staff vehicles, feed trucks, waste trucks, tankers all having to pass Swan's property)
- The entire facility may be a factor in the downstream eutrophication with the run off from their upland irrigation also impacting the Russell together with leakage issues.
- Recreational angling catch rates are low below the hatchery whilst above the rates are similar to those prior to 2006.

# WHAT ACTIONS I ASKED OF PREMIER HODGMAN SEPTEMBER 15<sup>TH</sup> 2017 - **TO NO EFFECT**

- 1. Direct the EPA to force the Huon Aquaculture Company to close down their antiquated and no longer best practice clay flow through ponds why:
  - Because there has been 10 years of downstream eutrophication and never any observed or recorded upstream
  - Because there is an <u>ongoing environmental nuisance</u>
     <u>occurring</u>, (that should be enforced but is not) if not harm
  - Because despite all efforts since 2007 by the HVC and the EPA nothing downstream has changed
  - Because the nutrient limits are not correct for a cobbled stream and following site specific ANZECC requirements and need to be adjusted down (Director EPA Ford has advised if the limits are any less they will need to close down the flow through system)
  - o Because five Directors (EPA & IFS) have all agreed this has been ongoing for too long and it is <u>no longer best practice</u>
  - Because they have proven (Forest Home) that they can support their brood fish in a closed RAS system with apparent zero impact to the environment
  - Because Director EPA Ford said to us in April 27, 2017 "If the Huon the Aquaculture Company or the Snowy Range Hatchery (Little Denison River) were applying for a similar licence in 2017 - they would be refused"
- 2. Ensure ongoing testing continues in our freshwater rivers (HAC in their March 2017 Annual Environmental Management Review suggested it was no longer necessary to undertake testing and a waste of time and money). Director Ford has accepted that position, for now, but it must not be considered appropriate at any time going forward.

- 3. Bring about the legislative change (as advised by Director Ford) to allow the EPA to engage truly independent businesses to undertake the routine sampling and testing. These businesses to then invoice the polluters (HAC in this case) and then provide the reports to the company, the EPA and the public. (More jobs)
- 4. Instigate regular truly random testing by the independent testing businesses with <u>no prior warnings</u> to the polluters.
- 5. Move the ineffective flow meter in the Russell River (near Lorkins bridge which is 24/7 in a large pond of water) to a better real flow location. These results to be managed and recorded by DPIPWE Water Resources and not HAC staff.
- 6. If HAC are to continue being allowed to take water from the Russell then working intake control gates and flow and volume measurement systems <u>must be installed and monitored by DPIPWE</u>.
- 7. Immediately, (during the process of closing down) reduce the nutrient limits in the EPN down from enforceable to the lowest possible limit to meet <u>site specific</u> ANZECC guidelines.

There are <u>no other nutrient inputs into the 3km stretch of the Russell other than the HAC fish farm.</u> There may well be nutrient run off from their upland irrigation - but we will not know this for sure <u>until the flow through system is fully closed down.</u>

UPDATE: The Russell River Catchment Study was completed in October 2018 and published in February 2019.

The study has proven conclusively that the downstream eutrophication of the Russell River is BECAUSE of the operations at the Huon Aquaculture Hatchery in Lonnavale.

It is NOT because of local agriculture, forestry practices, the nearby Rivers Edge Camping group or any other possible inputs other than the fish farm.

Leaking septics was the only other possible impact, even though modelling and water samples proved this was/is not possible. However, at my request, the Huon Valley Council have since checked all the local septic systems and have confirmed there are no leakages or issues which would be impacting the river.

From the test results undertaken by HAC for the EPA, it has been possible to isolate the source of the downstream pollution coming from the fish farm.

The outcome is that the most probable cause is from irrigation run off water from the RAS system which is systematically irrigated up into the nearby plantation.

As at March 2019 there are new investigations underway into this polluting source with a view to assess this issue. However, the EPA is allowing HAC to review this for a further 15 months with a report due June 2020.

This 10+ year issue has been allowed to go on and on with the blessing of our environmental guardian, and with no respect for the other users of this once pristine community river.

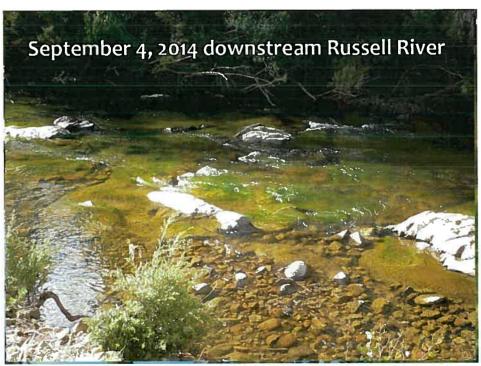






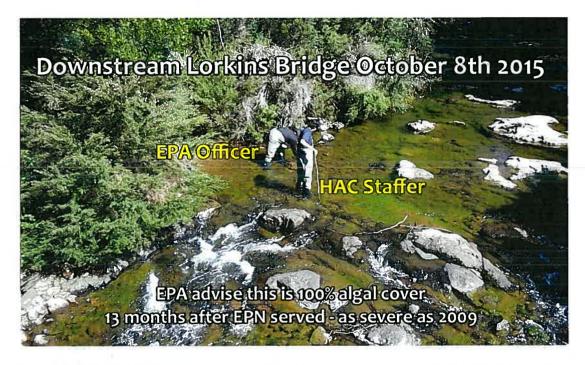










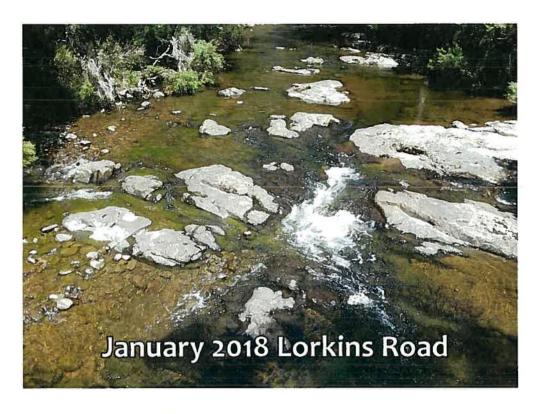




Downstream from intake January 2016

Flow reduced to a trickle after being diverted









# APPENDICES OF EVIDENCE

(A selection of evidence and correspondence compiled in date order)







RECORDS File No: 030728 Doc No: 907/11958-01

The General Manager Huon Valley Council Main Rd., Huonville TAS 7109 Concerned residents

This copy is not a complete copy of the original record

To whom it may concern,

12th November 2007

After receiving advice from solicitors (a copy of which is enclosed), and then talking to Helena Bobby on 1/11/07, we wish to write a formal complaint regarding the state of the Russel River, and to express concerns for the health and recreation of family and friends.

We, and others, on many occasions have complained to councilors in regard to the appalling state of the Russel River and have not received any satisfactory response in a time period that we believe acceptable, from council or councilors.

On approaching the Council, the advice has been to boil the water. We would like to know Council's view on whether boiling the water will reduce chemical and/or antibiotic substances which we've been led to believe are being used in the hatcheries.

In the summer of 2006/2007 the river was a disgrace in regards to algae, long strands of green weed, and brown slime covering the rocks, making it dangerous to impossible to use the river for swimming or other recreational activities. This problem remained right throughout the following winter as there was substantially reduced rainfall. It is also a major concern as the river has always been the source of drinking water

, which we are no longer able to use and are now forced

to buy drinking water :

Prior to the last 2 years we have found it a great privilege to have use of such fresh clean, natural water, to drink, bathe in and enjoy fishing, swimming, e.t.c., but unfortunately this is no longer the case.

It has also been brought to attention the Stock Vendor Declaration forms, required when stock is sold, specifically state: 1. Have any of the stock in this consignment ever in their lives been treated with a hormonal growth promotant (HGP)?

2. In the past 60 days have any of these stock been fed

by- product stock feeds?

3. In the past 6 months have any of these stock been on a property listed on the ERP database or placed under restrictions because of chemical residue?

As this is a statutory declaration we are concerned that we may be providing false information as we are uncertain if these additives are present in the fish food (pellets) which inadvertently end up in the river and are passed onto stock through drinking instead of foraging. If this were proven to be the case it could damage not only local but national meat export to certain countries where these stringent conditions apply. We to believe, through observation, that the source of contamination in the river is a consequence of the fish farm on the Russel River at Lonnavale.

On many occasions we have been to the swimming hole on the property which is directly opposite one of the effluent entry points (of which we've observed 4 or more effluent entry points) directly into the river. 2 years ago this magnificent swimming hole was

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deep, containing crystal clear water, but now is opaque, cloudy green in colour, and unusable, also dangerous for swimming and diving in, for the children, as the bottom of the river bed cannot be seen.

The closer to the fish farm you get the more abundant the green strands of slime and brown slime covering the rocks become. We have also noticed a few new plants in the river which could possibly be introduced exotic weeds and could spread and become a threat to the native vegetation. Another observation we've made comes from standing near the bridge just upstream from the fish farm. Upstream the water is crystal clear and the rocks have very little slime coverage, whereas downstream a few metres only, the slime is thick and water condition very poor. This water upstream from the bridge is in the same pristine condition as that of which we have been very privileged to have had access to, in the entire river, prior to this project gaining momentum.

We find it hard to believe at this time when clean water is such a valuable resource and there is so much controversy in the country at present about clean water, the lack of it, and water conservation and pollution control, that such a project is able to proceed without having stringent guidelines to follow which prevent it from causing harm to the environment, potential health implications or nuisance to others.

We also find this situation an hypocrisy as Council initiated, through it's own PEV's, large amounts of rate payers funds to properties on the

Russel River to fence off and prevent contamination to this precious resource by stock, to enhance the pristine condition of this river, which is a tributary to the Huon catchments and Huon drinking water supply.

This problem also has financial implications for the substantial investment we have in this region as the property has, up until this project, enjoyed a much privileged premium on real-estate resale due to the proximity to clear clean water.

We are not apposed to fish farming, but we are of a strong view that water taken out of the river should be of the same pristine condition it was originally in when it is put back into the river. If these conditions cannot be achieved we believe the farm should be closed down until they can be achieved, or relocated to an area where a nuisance to others is not an issue.

Enclosed is a list of concerned residents.

ME enclosures received ; the course to probe on the following to probe to provide

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DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT
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Fax: 6261 8051 Mobile: 0409 550546

Warren.Jones@environment.tas.gov.au

12/11/2007 11:15 AM

To John.Diggle@ifs.tas.gov.au

David.Mitcheli@environment.tas.gov.au,

CC

Stephen.Gallagher@environment.tas.gov.au

Subje Lonnavale Fish hatchery

John,

Please see the note below from one of my officers.

Its been a while since I have personally dealt with a fish hatchery - as you may be aware they are not Level 2 activities that we regulate. However, my recollection from days gone by is that hatcheries must be licensed by IFS. I am pretty sure that some of these licenses have had reference to some basic environmental management requirements.

Can you pls advise whether you licence this facility and whether there are any conditions relating to environmental management in it. Do you have any knowledge of the issues that are raised by the complainant?

I am aware that the Council has issued an EPN in relation to the hatchery and have a copy of this.

Cheers

As briefly discussed, the Division was contacted by a member of the public last week regarding the above activity and concerns over water quality in the Huon River as a result of discharges from this activity. The complaint alleged that pollution was occurring (no details provided). Advice was given to this complainant that they should contact both Inland Fisheries given that they were likely to be partly responsible for regulating this activity and that since it is a Level 1 activity under the EMPCA that they needed to also contact Council to follow up on their concerns.

I received a ph call from another member of the public today who lives in the area. He mentioned that he represents around 50 members of the community in the area.

He wished to complain about the apparent lack of action/interest by the various sections of government and that he had been effectively given the run around on this issue with no actual resolution to the problem.

U\_PARTMENT of TOURISM, ARTS and the ENVIRONMENT

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# **MEMORANDUM**

TO:

BOB KARASZKEWYCH

FROM:

H BOBBI

DATE:

12/11/2007

FILE NO:

2206918

SUBJECT:

REGULATION OF RUSSELL RIVER HATCHERY

OPERATED BY HAC PTY LTD

In accordance with the EMPCA 1994, the Council must use its best endeavours to prevent or control acts or omissions which cause or are capable of causing pollution. As such, the following points are relevant in light of the email sent from Warren Jones today, regarding the HVCs regulation of the Lonnavale Hatchery, operated by HAC.

On 29 March, 2007, the HVC served an Environmental Protection Notice (EPN-2007/1) on the Huon Aquaculture Company Pty Ltd. This action was taken as a result of the Council becoming aware that the operation and expansion of the existing Russell River Hatchery including the development of a recirculation facility was or was likely to cause environmental harm. The EPN included the requirements for

- monthly effluent and water quality monitoring,
- wastewater discharge limits and
- the preparation and implementation of a soil and water management plan.

On 18 April 2007, the Council's EHO undertook sampling of the Russell River at a number of sites both above and below the farm outflow, to check for compliance with the EPN, as sampling results from HAC had not yet been received. During sampling leakage of 'turbid' water from the site in relatively close proximity to the farm inflow was noted that was later clarifed as leakage from the recirculation channel.

On 20 April 2007, HAC were advised in writing by the HVC of their requirement to comply with the conditions of the EPN with particular emphasis placed on compliance with the set discharge limits for wastewater discharge.

On 24 April 2007, the Council's EHO undertook sampling of the Russell River at a number of sites both above and below the farm outflow, to check for compliance with the EPN.

DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT

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Warren
Jones/ENVIRONMENT/CO

To David.Mitchell@environment.tas.gov.au

RP .

13/11/2007 11:28 AM

cc bcc

Subject Fw: Lonnavale hatchery - Attention, Manager Environment and Development Services

#### Warren Jones

\*Please note that my email and postal address have changed. Please update your address book\*

General Manager - Environment & Director of Environmental Management Environment Division (6th Floor)

Department of Tourism, Arts and Environment
134 Macquarie St (Lands Building)

GPO Box 1751, Hobart, Tas. 7001

ph: (03) 6233 6336, Fax: (03) 6233 6800

email: warren.jones@environment.tas.gov.au

--- Forwarded by Warren Jones/ENVIRONMENT/CORP on 13/11/2007 11:28 AM ---



"Bob Karaszkewych" <br/>
<br/>
karaszkewych@huonvall ey.tas.gov.au> 13/11/2007 10:41 AM

To <Warren.Jones@environment.tas.gov.au>

cc "Helena Bobbi" <hbobbi@huonvalley.tas.gov.au>

Subject RE: Lonnavale hatchery - Attention, Manager Environment and Development Services

#### Warren

Please find attached Internal Memo, for your information.

#### Regards Bob

----Original Message----

From: Warren.Jones@environment.tas.gov.au [mailto:Warren.Jones@environment.tas.gov.au]
Sent: Monday, 12 November 2007 11:32 AM

To: Bob Karaszkewych

**Cc:** David.Mitchell@environment.tas.gov.au; Stephen.Gallagher@environment.tas.gov.au **Subject:** Lonnavale hatchery - Attention, Manager Environment and Development Services

#### Dear Mr Karaskewych

Please find below an e-mail from one of my officers following the receipt of a complaint from a member for the public. Council provided me with a copy of an EPN issued by Helen Bobbi earlier this year (April).

Fish hatcheries are not level 2 activities and hence are not regulated by the Environment Division. However, to enable us to respond to ENVESTIGATION of TOURISM, ARTS pend to ENVESTIGATION OF TOURISM, ARTS pend to ENVESTIGATION OF TOURISM, ARTS PEND TOURISM, A

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our Minister if the matter is raised in Parliament could you advise what action Council has or is taking to address the public complaints. In particular I would be interested in any objective monitoring data of the quality of emissions or any downstream monitoring that has been carried out.

As briefly discussed, the Division was contacted by a member of the public last week regarding the above activity and concerns over water quality in the Huon River as a result of discharges from this activity. The complaint alleged that pollution was occurring (no details provided). Advice was given to this complainant that they should contact both Inland Fisheries given that they were likely to be partly responsible for regulating this activity and that since it is a Level 1 activity under the EMPCA that they needed to also contact Council to follow up on their concerns.

I received a ph call from another member of the public today who lives in the area. He mentioned that he represents around 50 members of the community in the area.

He wished to complain about the apparent lack of action/interest by the various sections of government and that he had been effectively given the run around on this issue with no actual resolution to the problem.

He alleged that HAC are discharging pollutants with gross solids, and perhaps even growth hormones, which is making the water in the river unsuitable for both drinking water and stock water for farmers in the region.

He claimed that Council are aware of the issue but apart from issuing an EPN seem to be unwilling to enforce this or take any further action on the problem. It is apparent from a review of the EPN, that Council certainly are aware of this issue and follow up advice from Council is needed.

He noted that other government agencies had been contacted including Public Health, Water Resources Division, (and Inland Fisheries if I recall correctly). The advice he had been given was that it was a matter for this Division under the Act to deal with, given supposedly Council wouldn't.

He claimed that the pollution being discharged was of a significant level and that in trying to discuss the problem with HAC, their advice was that they were doing all they could.

Clearly he was frustrated and had therefore recently engaged a solicitor to assist them, and mentioned that the media and politicians were also likely to be notified about the problem to try to force action.

I discussed the matters with him and advised that clearly the activity is not a Level 2 activity under the Act and therefore this Division is not responsible for its regulation. I discussed with him where I felt the likely regulatory control should lay but he re-iterated that they won't deal with it.

Regards

DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT

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John.Diggle@ifs.tas.gov.au 12/11/2007 03:52 PM

- To Warren.Jones@environment.tas.gov.au
- cc David.Mitchell@environment.tas.gov.au, Stephen.Gallagher@environment.tas.gov.au, Cindy.Gillespie@ifs.tas.gov.au, Phil.Boxall@ifs.tas.gov.au

bcc

Subject Re; Lonnavale Fish hatchery

#### Warren

Yes the IFS does licence this fish farm (fish farm licence number 50, licenced to Huon Aquaculture Company, Manager Peter Bender).

The following conditions are imposed by IFS.

- The licence is issued subject to the relevant approvals, permits and licences being obtained by the licence holder from all relevant authorities, including local council, Water Resources Division (DPIW). The holder must comply with any conditions stipulated in such permits and licences.
- For discharge into inland waters, any waste water or effluent arising from the fish farm must be treated prior to discharge, in accordance with Local Council requirements. The Director of Inland Fisheries, may order in writing that the holder implement the strategies necessary to mitigate pollution and that the holder shall immediately concur with the terms and conditions of that order.
- The holder shall ensure that all ambient water quality and effluent monitoring requirements
  are undertaken in accordance with the Local Council's specified monitoring program, and
  shall ensure the recording and reporting requirements of such a monitoring program are
  strictly adhered to.

This issue was raised with IFS over 12 months ago by a Council Officer, it was agreed at the time that Council would consider the issue further and get back to IFS if additional action was required, there has been no contact since then.

I would be interested in seeing the EPN if possible, if this is developing into a significant environmental problem with insufficient attention from HAC, then a joint approach from Environment, IFS and Council may be the best action to resolve the matter.

From my understanding of the issue, the likelihood of water quality related complaints arising from point sources such as fish farms is likely to increase particularly if the trend of declining catchment yields and flows continues across the State.

Regards

DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT

John

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John Diggle
Director of Inland Fisheries
Inland Fisheries Service
17 Backriver Road New Norfolk
or
PO Box 575, New Norfolk 7140

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john.diggle@ifs.tas.gov.au

Phone: 6261 8060

29/03/2007





### **ENVIRONMENT PROTECTION NOTICE NO. 2007/1**

Issued under the Environmental Management and Pollution Control Act 1994

Issued to:

Huon Aquaculture Company Pty Ltd

PO Box 1 DOVER 7109

Activity:

Russell River Hatchery Recirulation Facility - Lonnavale

(Identification: 2206918).

I, Helena Janina Bobbi, a Council Officer, am satisfied that in accordance with Section 44(1)(a) of the *Environmental Management and Pollution Control Act* 1994 (the EMPCA) and in relation to the above-mentioned activity that environmental harm is being or is likely to be caused by the activities undertaken on the land.

### **GROUNDS**

The grounds upon which this notice is issued are that: -

- The Huon Valley Council received an Environmental Effects Report on the proposed Freshwater Finfish Re-Circulation Hatchery prepared by Aquaculture, Management & Development P/I in late 2006. The proposed activity is as shown in the drawing prepared by Peacock Darcey and Anderson P/L (drawing number J606C-3A) lying within Property ID 2206918 ('the land').
- The proposed inland fish farm will draw water out of the Russell River and discharge some wastewater back to the river after re-circulation.
- 3. As a consequence of the emission of pollutants described in the Environmental Effects report, environmental harm is considered to be occurring or likely to occur on the basis that:
  - a. there is an increased risk to human health and/or the environment due to the presence of pollutants in wastewater and run-off; and
  - b. the proposal includes an option for on site land spreading of sludge from the settling tanks which could lead to run-off; and
  - c. an environmental nuisance is likely to arise from odours from the above activities.

    \*\*DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT\*\*

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EPN Huon Aquaculture Recirculation Farm

Date of Issue: 29/03/2007



# Huon Valley Council ABN 77 602 207 026

U3 6264844W Replies addressed to General Manager

Public Office, 40 Main Street, PO Box 210, Huonville 7109

Phone: (03) 6264 8400
Fan: (03) 6264 8440
cmail: hvc8huonvalley.tas.gov.su

		Web: www.huonvalley.tas.gov.au
	PLEASE QUOT	E THIS REFERENCE ON ALL CORRESPONDENCE
1	Our Ref:	08/08
	Your Ref:	
_	Enquires to:	Geoff Cockerill
	14 Decemb	er 2007
	Mr Mark C	
	383 Lonna	
		TAS 7109
	Fax: 6266	0339
	Dear Mark	
	RUSSELL	RIVER
	With refer matters:-	ence to the above and our recent conversations, I confirm the following
	1. Bend	ers have advised me that all fish currently in the ponds of the flow-through
	hatch	ery are to be removed immediately and placed at sea.
	2. The fish.	only fish that will remain in the flow-through ponds will be 30-40 brood
	3. All o	ther fish will be retained in the re-circulatory hatchery.
	ident will	ohn Dobson from the Environmental Division investigated the site fied by the complainants, took samples and has advised Council that he provide copies of the sampling results to both Council and the lainants as well as photos of the sites.
	I trust that hatchery po the Russell	the actions by Bender in removing fish stocks from the flow-through nds will significantly reduce any potential impacts on the water system of River.
1 13 13 13	If there are	any other developments, I will be in contact.
	Yours faith	
	GENERAL	ERILL MANAGER
	GENERAL	MANAGER



"Hèlena Bobbi" <hbobbi@huonvalley.tas.gov. au> 31/01/2008 03:24 PM To <Sarah.Richards@environment.tas.gov.au>

cc "Helena Bobbi" <hbobbi@huonvalley.tas.gov.au>

bcc

Subject FW: Lonnavale Fish Hatchery

History:

P This message has been replied to.

Hi Sarah,

Our planners have advised of the following regarding the need for planning assessment of the expansion of the HAC hatchery at Lonnavale:

Under the provisions of Schedule 3 of the Huon Planning Scheme 1979, the use and activity at the site is defined as agricultural and is considered to be "P1" thus does not require planning assessment or a planning application.

Probably a good idea to contact Leigh Stevens (Senior Town Planner) if you require further explanation.

regards Helena

---Original Message---From: Dallin Hutchinson

Sent: Thursday, 31 January 2008 3:18 PM

To: Helena Bobbi

Subject: Lonnavale Fish Hatchery

DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT

Released under the Freedom of Information Act 1991

Under the provisions of Schedule 3 of the Huon Planning Scheme 1979, the use and activity at the site is defined as agricultural and is considered to be "P1" thus does not require planning assessment or a planning application.

## Dallin D. Hutchinson

Urban, Rural & Env. Planner

Huon Valley Council P.O. Box 210, 40 Main Street Huonville, Tasmania 7109



### Inland Fisheries Service

17 Back River Road, New Norfolk, TAS 7140 PO Box 575, New Norfolk, TAS 7140 Australia Ph (03) 6261 8050 Fax (03) 6261 8051 Email infish@is.tas.govau Web www.iis.tas.govau



## FISH FARM LICENCE

(Inland Fisheries Act 1995)

Licence Number:

50

Licence Holder:

Peter BENDER

Company/Business Name:

Huon Aquaculture Company Pty Ltd

Address:

(1)

PO Box 1

DOVER TAS 7117

Date Issued:

1 September 2007

**Expiry Date:** 

31 August 2017

In accordance with the *Inland Fisheries Act 1995*, this Fish Farm Licence authorises the holder to culture/farm the declared species of rainbow trout (*Oncorhynchus mykiss*) and Atlantic salmon (*Salmo salar*) only for commercial purposes, in respect of the fishery situated at Lot No 33640, Russell River Road, Lonnavale, Tasmania subject to the Conditions of Licence specified in Appendix 1.

Only those premises specified in Appendix 2 may be used in connection with the production, storage, treatment or disposal of fish from the fishery to which this licence relates.

Director of Inland Fisheries:

200

Date:

Signature of Licensee:

les 2000#

Date:

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### APPENDIX 1

### CONDITIONS OF LICENCE

Fish Farm Licence No 50 is issued in accordance with the *Inland Fisheries Act 1995*, and is subject to the following conditions:

- 1. This licence is issued for the propagation and on-growing of Atlantic salmon (Salmo salar) and rainbow trout (Oncorhynchus myklss) only and only on the premises stated in this licence.
- 2. The licensees shall not extend the rearing of fish beyond the species nor the pramises covered by this licence without the written consent of the Inland Fisheries Service (IFS).
- Fish stocks shall be obtained only from fish farms within Tasmania as licensed with the Inland Fisheries Service.
- Fish shall not be imported from interstate or overseas onto the premises to which this licence relates.
- 5. The licensees shall not sell or offer or consign for sale any fish not raised on the premises to which this licence relates. Furthermore, all interstate fish sales must comply with the requirements of the applicable authorities.
- 6. The licensees shall take all reasonable precautions to prevent the escape of any fish or the transfer of any fish disease from the fish farm to other inland waters, including flood mitigation strategies.
- 7. The licensees are to participate in the Department of Primary Industries and Water salmonid health surveillance program at a level commensurate with the financial contribution and participation prevailing from time to time by salmonid growers licensed under the Living Marine Resources Management Act 1995.
- 8. The licensees shall immediately notify the Director of Inland Fisheries and the Chief Veterinary Officer of the Department of Primary Industries and Water, of any significant fish or ova mortality within the fish farm to which this licence relates.
- 9. Where it is considered necessary to control the spread of disease, the Director of Inland Fisheries, in consultation with the Chief Veterinary Officer, may order in writing that the licensees cease to sell, offer, or consign for sale, or transfer any fish from the premises to which this licence relates and that the licensees shall immediately concur with the terms and conditions of this order. Any such order shall remain in effect until revoked in writing by the Director.
- 10. Before discharge into inland waters, any wastewater or effluent arising from the fish farm must be to the satisfaction and in accordance with Local Council. The Director, Inland Fisheries Service, may order in writing that the licensees implement strategies necessary to mitigate pollution and the licensees shall immediately concur with the terms and conditions of that order.
- 11. The licensees shall ensure that all ambient water quality and effluent monitoring requirements are undertaken in accordance with monitoring program specified by the Huon Valley Council, and shall ensure the recording and reporting requirements of such a monitoring program are strictly adhered to.
- 13. Water abstraction and associated monitoring requirements must comply with the conditions of the Water Licence to which this fish farm relates as issued by the Department of Primary Industries and Water.
- 14. Upon reasonable request, an officer of the Inland Fisheries Service shall be granted access to the premises specified in this licence, and the licensees shall cooperate by facilitating inspection of premises and fish therein and by providing any further information sought by that officer.
- 15. This licence is issued subject to the relevant approvals, permits and licences being obtained by the licencees from all relevant legislation.

- 16. The licensees are required to keep complete and accurate records of all fish brought onto, or consigned from, the licensed premises as shown on the attached proformas, with those records being kept for five years.
- 17. The licensees shall maintain complete and accurate records in accordance with Section 51 of the Inland Fisheries Act 1995 and shall make such records available to an officer of the Inland Fisheries Service upon request.
- 18. The licensees shall submit an annual return to the Inland Fisheries Service and each return shall be in accordance with the requirements of the Service.
- 19. This licence is issued in accordance with the information and particulars provided in the final application. Development and operational activities must be commensurate with the particulars of the final application. Any variation or extension must not proceed without the prior and written approval of the Inland Fisheries Service and Huon Valley Council.
- 20. This licence is subject to annual fees, with the prescribed fee payable to the Inland Fisheries Service each year while this licence is in force.

Note: Failure to comply with any condition of licence is an offence under Section 42(4) of the *Inland Fisheries Act 1995* and, under Section 48(1) can result in the licence being cancelled.

### APPENDIX 2

The following premises only may be used for activities authorised under this licence, including the production, storage, treatment or disposal of fish from the fish farm:

Lot No 33640, Russell Road, Lonnavale, Tasmania.

## Department of Tourism, Arts and the Environment

**ENVIRONMENT DIVISION** 

Level 7, 134 Macquarie Street, Hobart TAS GPO Box 1751, Hobart, TAS 7001 Australia

Enquiries:

**David Mitchell** 

Ph: Email: +61 3 6233 6504 Fax +61 3 6233 3800 David, Mitchell@environment.tas.gov.au

Web:

www.environment.tas.gov.au

Our Ref: (EEO/IS/F/P/S/HAC/HuonNov\_07) sma

19 November 2007

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DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT

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Dear I

Re: HUON AQUACULTURE COMPANY P/L FISH HATCHERY DISCHARGES

I refer to your conversation with my officer, David Mitchell, on 12 November 2007, in relation to your concerns and those of other residents in the Lonnavale region regarding Huon Aquaculture Company's (HAC) fish hatchery at Russell River, Lonnavale.

I am advised by my officer that in particular your concerns relate to the quality of discharge water from the hatchery site to the Russell River and the impact this may be having on drinking water and stock water quality, as well as problems with pump blockages. I further understand you were most concerned that, despite some actions having been taken by Council and your attempts to discuss the matters with HAC, it appeared there had been no improvement in the current situation and therefore you have sought to bring this matter to the attention of various State Government Agencies.

As discussed with you by my officer, fish hatcheries are not classified as a level 2 activity under the *Environmental Management and Pollution Control Act 1994*, but are classified as a level 1 activity and therefore regulated by Council (the Huon Valley Council, in this instance) in accordance with the provisions of the Act. It should also be noted that, in addition, HAC are required to hold a fish farm licence from the Inland Fisheries Service (IFS).

It is understood you were notified thereafter by my officer, that as a result of you bringing this matter to my attention, an undertaking was given to discuss the matter with the Director of Inland Fisheries and the Huon Valley Council (HVC) to ascertain precisely the nature of the problem and what actions the appropriate regulatory authorities had or were undertaking to ensure its resolution.

I am able to advise that as a result of my discussions, the IFS stated that the HVC had been in contact with that Agency to discuss problems with the HAC operation in terms of impacts due to effluent quality discharged to the Russell River, which in part may be due to increased operations at the site.

Advice received from Council stated that as a result of these concerns it had issued HAC with an Environment Protection Notice (EPN) on 29 March 2007, aimed at addressing a range of problems with this site, including the requirement for compliance with discharge water quality limits, regular discharge water quality and river water monitoring and reporting to Council. In addition, as a result of non-compliance with a number of requirements of the EPN, Council also issued an Environmental Infringement Notice to HAC.



On the basis of this I am satisfied that Council, as the appropriate regulatory authority for this activity, has taken an active regulatory role in managing the activity.

While Council is the appropriate authority in this instance to regulate HAC's activities and has taken active measures to limit the impacts, in view of the ongoing problem I have offered Council technical advice and assistance to help identify further actions that can or may be required.

If you require further information in respect of this matter, I would recommend that you contact Council's Environmental Health Section.

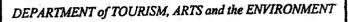
Yours sincerely

Warren Jones

DIRECTOR OF ENVIRONMENTAL MANAGEMENT

DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT

### Department of Tourism, Arts and the Environment





## Released under the Frank ERNAL WIENORANDUM

File No:

110772

TO:

Warren Jones

CC:

Floyd Browne, David Mitchell, Stephen Pratten

FROM:

Sarah Richards

**EXT: 6659** 

DATE:

31 January 2008

SUBJECT:

Regulation of Huon Aquaculture Company hatchery on Russell River,

Lonnavale.

Hi Warren,

The complaint investigation of the Huon Aquaculture Company operated hatchery at Lonnavale on 17 December 2007 found evidence that the activity was affecting water quality in the Russell River.

There is an existing flow through system and a new recirculating (90% of inflow) hatchery development on the site. The new development did not require a planning application under the Esperance Planning Scheme and therefore does not require a permit. Huon Valley Council issued an EPN in March 2007 to address issues with water quality being discharged from the flow through system. No environmental conditions have been required for the new development. The new development is already in partial operation and was still under construction on 17 December 2007.

On 29 January 2008 a meeting was held with Huon Valley Council, Water Resources, Inland Fisheries Service, Aquatic Health and the Environment Division to discuss the regulation of the site.

al

In terms of regulatory jurisdiction Water Resources are concerned with water allocation licences and maintaining environmental flows. The Inland Fisheries Service is concerned with species being stocked and production rates. Council regulates the general environmental conditions of the activity, including quality of discharges to the river. While Council have issued an EPN and an EIN HAC are still non-compliant with discharges to the river.

Water Resources report that the Russell River has had low flows for the past four years and that the current water allocation licence is no longer appropriate to maintain environmental flow. The flow in the river is not sufficient to provide dilution of pollutants discharged from the flow through system. Water Resources have required HAC to submit a study of the river ecology to demonstrate that they are not affecting the downstream habitat if they are to continue to take water from the river. HAC also are seeking approval from Council for a mixing zone for their discharge. 1

The ongoing operation of the new hatchery, the flow through system and its discharge to the river need effective regulation. I recommend that the Environment Division (myself as regulating officer with technical assistance from Greg and Stephen) regulate this activity to require sustainable management plans for both the existing flow through and the new hatchery. It is necessary to set and enforce suitable discharge limits for the water returning to the Russell River.

A site visit with Council, Water Resources and Inland Fisheries is being conducted on Tuesday 5 February 2008. I will prepare EPN after that.

Sarah Richards.

Senior Environmental Officer, Food and Textiles Unit

This copy is not a complete copy of the original record

52.



## Department of Tourism, Arts and the Environment

Level 7, 134 Macquarie Street, Hobart TAS GPO Box 1751, Hobart, TAS 7001 Australia

Enquiries:

Sarah Richards

Ph:

+61 3 6233 6659 Fax +61 3 6233 3800 Sarah Richards@environment.tas.gov.au

Email: Web:

www.environment.tas.gov.au

Our Ref:

110773: F/P/S/HAC/HVCHAChatcheryLtr300108

4 February 2008

Mr Geoff Cockerill General Manager Huon Valley Council PO Box 210 HUONVILLE TAS 7109

Dear Mr Cockerill

## ENVIRONMENTAL REGULATION OF THE HUON AQUACULTURE COMPANY HATCHERY, LONNAVALE

I refer to the hatchery operated by the Huon Aquaculture Company (HAC) on the Russell River near Lonnavale. This site has been the subject of several complaints that related to the impact of the hatchery on the water quality and protected environmental values of the Russell River.

In response to complaints made to the Environment Division regarding the hatchery, officers of my Division conducted site inspections on 8 and 17 December 2007. These inspections found that there were was an apparent detrimental change in water quality in the Russell River adjacent to and downstream of the hatchery. It was also observed that a major redevelopment of the site was being undertaken, that the new hatchery was in operation and that there was a discharge of wastewater generated by the activity to land.

In addition to problems with the operation of the existing earthen pond aquaculture system, I am concerned that the new development is a large scale activity that has the potential to cause environmental harm. I am advised that this development, under the Esperance Planning Scheme, did not require a planning application as it was considered to be an existing and permitted use. A result of this is that no formal assessment of the activity has been made and therefore no comprehensive environmental conditions have been determined for this activity.

I am advised that on 29 March 2007 Council Issued Environmental Protection Notice (EPN) 2007/1, under section 44(2)(a) of the Environmental Management and Pollution Control Ac 1994t, to HAC. This EPN required them to address environmental issues associated with both the construction of the new development and the effects of the operation of the existing hatchery. I am informed by Council that HAC is in non-compliance with this EPN with regard to emission limits for discharge to the Russell River and in the provision of information requested by Council.

On 29 January 2008 a meeting was held with Helena Bobbi and James Wood from Council, and representatives from the Water Resources Division, the Inland Fisheries Service, Animal Health and Welfare, and the Environment Division. The Water Management Branch reported their record of very low flows in the Russell River over recent years and advised that currently natural flow in Russell River is significantly less than the environmental flow triggers attached to the HAC water licence. Pollutants in the water being returned to the river after use in the hatchery create a high level of environmental risk to the river in this low flow state. These matters also impact on down stream water use of the Russell River which includes potable water, irrigation, stock watering and primary contact recreational use.

DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT





The Water Assessment Branch advised that for the purposes of applying the ANZECC guidelines in setting discharge limits, the Russell River at the site of the hatchery, is an upland river. This is on the basis that it behaves like an upland river, is short in length and has a relatively steep gradient in comparison to mainland examples.

I also advise you in relation to HAC's request to Council for approval for the use of a mixing zone to determine their discharge limits that this is a matter that may only be determined by the Board of Environmental Management and Pollution Control in accordance with the State Policy on Water Quality Management. The use of a mixing zone is not generally considered to be appropriate for a confined, low volume waterway such as the Russell River.

In summary, the following environmental issues have been identified with the hatchery:

- Seepage from the flow through system to the river;
- Discharge of pollutants to the river via the outfall;
- Volume of water diversion from the river does not allow for environmental flows;
- Impacts to downstream users of the river,
- Effluent treatment and disposal from the new hatchery;
- Waste management and disposal from the new hatchery.

Due to the potential of this activity to cause environmental harm and the complexity of the environmental issues at the site, I am proposing to assume regulation of this activity until such time as the current environmental problems are resolved and the facility is operating on a sustainable basis. However, before assuming regulatory responsibility for what is a Level 1 activity, I seek your Council's comments on, and agreement to, this approach. To regulate the activity I will be issuing an EPN under section 44(1)(a) of EMPCA in due course. When that EPN has been issued I will ask Council to revoke EPN 2007/1.

I would appreciate all assistance that can be provided by your officers in the hand over of the regulation of this site to the Environment Division.

Please contact Sarah Richards on 6233 6659 if you have any questions about the above.

Yours sincerely

Warren Jones

DIRECTOR OF ENVIRONMENTAL MANAGEMENT

Mr Martin Read, Manager, Water Assessment Branch, Water Resources, 13 St Johns CC. Ave, New Town, TAS 7008

Mr John Diggle, Director, Inland Fisheries Service, PO Box 575, New Norfolk TAS 7140

DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT





Sarah Richards/ENVIRONMENT/CO RP

18/03/2008 05:36 PM

To Warren Jones/ENVIRONMENT/CORP@CORP

cc David Mitchell/ENVIRONMENT/CORP@CORP, Darryl Cook/ENVIRONMENT/CORP@CORP

bcc

Subject Hatcheries in Huon Valley

Hi Warren,

I received the following email from HVC re hatcheries. They are willing to hand over HAC

I have been waiting for a response from Council allowing me to proceed with regulatory action. I will prepare an EPN for the hatchery to issue asap. I have just met with Dom O'Brien and David Morehead to discuss the HAC net wash and raised the issues of the hatchery as well. I feel that the working relationship with HAC is positive and that they will comply with our requirements.

Cheers,

Sarah.

Sarah Richards
Senior Environmental Officer
Food and Textiles Unit
Environmental Operations Branch
Department of Environment, Parks, Heritage and the Arts

GPO Box 1751 Hobart TAS 7001

Ph: 03 6233 6659 Fax: (03) 6233 3800

Email: Sarah.Richards@environment.tas.gov.au

Internet: www.environment.tas.gov.au

---- Forwarded by Sarah Richards/ENVIRONMENT/CORP on 18/03/2008 03:19 PM -----



"Hannah Matthews" <hmatthews@huonvalley.tas. gov.au>

To <Sarah.Richards@environment.tas.gov.au>

CC

18/03/2008 03:17 PM

Subject HAC Lonnavale Hatchery

Hi Sarah,

I have just spoken to Bob and he has informed me that a response has been prepared, is currently with

This copy is not a complete copy of the original record

DE!'ARTMENT of TOURISM, ARTS and the ENVIRONMENT





"Hannah Matthews" <hmatthews@huonvalley.tas. gov.au>

CC

bcc

18/03/2008 03:17 PM

Subject HAC Lonnavale Hatchery

To <Sarah.Richards@environment.tas.gov.au>

History:

This message has been forwarded.

Hi Sarah,

I have just spoken to Bob and he has informed me that a response has been prepared, is currently with Geoff and should be posted today. Bob said the letter basically states that Council is happy for the Environment Division to regulate the HAC Lonnavale Hatchery!..

Section U at , see , see

Regards

Hannah

This copy is not a complete copy of the original record

#### Hannah Matthews

Cadet Environmental Health Officer Huon Valley Council 40 Main Road, Huonville 7109 Ph: (03) 6264 0356

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Released under the Freedom of Information Act 1991





Sarah Richards/ENVIRONMENT/CO RP

19/03/2008 02:44 PM

To Warren Jones/ENVIRONMENT/CORP@CORP

cc David Mitchell/ENVIRONMENT/CORP@CORP

bcc

Subject Lonnavale hatchery details

Conversation with

1.55 18 March 2008

### stated:

- That the Russell River had deteriorated further and that the river was full of algae.
- Main issue is that the river is no longer good enough for drinking from or swimming in.
- On weekend had camper there who could not enjoy the river because of the poor water quality.
- Complaint against Hydro work on his property without consultation with him and an unnotified long power outage. Installation of power line to hatchery.
- He is leading a community legal action, now with lawyer seeking advice against HAC.
- Requested data from recent sampling work by Tony Port (19 Feb). If it can't be provided written statement to that effect.
- a public meeting and media coverage were in process of being arranged.
- very frustrated as they have been complaining to council about this issues for several years and have not had any real response.
- HAC lied to them in saying that they would only be using the ponds on the flow through system for 30 brood stock. knows that the ponds were relined in preparation for use.
- Angry that there was no opportunity for public comment on the hatchery development. "They just get whatever they want".

#### I said:

- Results from 19 Feb did indicate that there was an increase in nutrient levels downstream from the hatchery but that these levels did not represent acute environmental harm and that Environment would not take enforcement action at this time.
- Environment Division could not take further regulatory action until response from Council was received. At this time we will issue an EPN on the hatchery, review the environmental management practices for the site and take necessary actions to enforce the EPN.
- -There is the possibility for an environmental nuisance case but I would need to discuss that with CIS section head.
- I regard to provision of data I would need to check if we could release the data to the public and would provide a letter of explanation if that was not possible.
- Emission limits set in Council EPN were not appropriate for the site as Council used the lowland river
   ANZECC guide where Russell River at that location is considered to be an upland river.
- I advised that I would keep! informed of actions by the Environment Division to regulate the site and asked him to keep me informed of his actions in this matter.

### Other info

- The new hatchery development gets it full water supply from a bore on site and does not take water from the river. Discharge from new hatchery is held on site in wastewater dam with an irrigation disposal. Solid wastes are removed from the site.
- HAC were carrying a lot of stock in the flow through last year and destocked during summer. They will not use the ponds in the same way again, but will still have stock in the flow through.
- Water from the river is directed to the "old" hatchery the earthern pond flow through system. This includes a series of new tanks that will be used as for grow out of smaller fish, more individuals but less overall biomass.
- The tanks have a better system for solids removal from fecal and food waste and a drum filter has been installed to further screen solids prior to this water being returned to the flow through
- HAC identified remedial works to the pond system and have made a commitment to do these works (no time frame given)

DEPARTMENT of TOURISM, ARTS and the ENVIRONMENT



## ESTIMATES COMMITTEE BRIEFING BUDGET 2008-09

**DIVISION NO:** 

DEPARTMENT: PORTFOLIO:

Environment, Parks, Heritage and the Arts Environment, Parks, Heritage and the Arts

**OUTPUT GROUP:** 

Name

### ISSUE: RUSSELL RIVER

No.

Responsible Officer: Sarah Richards

- During the period from December 2007 to March 2008 the Environment Division has investigated complaints of the discharge of pollutants to the Russell River from a salmon hatchery near Lonnavale that is operated by the Huon Aquaculture Company.
- In consultation with the Huon Valley Council, the Inland
  Fisheries Service and the Water Management Branch of the
  DPIW, the Environment Division has assumed direct
  regulation of the hatchery to resolve environmental
  performance issues of the hatchery.
- An Environment Protection Notice will be issued to the company in the near future to further address the protection of water quality in the Russell River and other environmental performance requirements for the hatchery.
- To address immediate issues with discharge of pollutants from the flow through section of the hatchery the company has reduced stocking in the ponds on the flow through system and undertaken remedial works on the ponds to prevent stirring up of clay.
- The company has commissioned an ecological study of the Russell River to assess algal and invertebrate communities in the river to determine environmental flow requirements and the effects of the hatchery discharge.

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Letter from Gay Branch who lived at 1046 Lonnavale Road prior to the Swan family taking up residence. Gay Branch is known to the Swan family and at the time of this letter she was employed as a Housecleaner for Peter Bender.

Everything she reports is contradicted by the local residents including one gentleman (Max Helm) who is now in his 90's. And again no reports of any algae upstream ever in the Russell River.

13<sup>1</sup>h August 2010

To Whom It May Concern

My name is Gay Branch and whilst I now reside in Huonville I previously lived at Lonnavale adjacent to the Russell River from approximately 1974 to 1998. I lived in two houses in the area. Initially in a group house which was destroyed by fire and then a second home that I lived in with son. I lived in my second home for approximately 22 years and moved to Huonville when he was aged 10.

My only access to household water was to pump daily from the Russell River to a small header tank. I have clear recollection of there being long bright green weed in the river from when I first became a resident. It was always worse in times of less flow and was not usually visible in the winter months which coincided with consistent rain and run *off*.

When my son and I live at Lonnavale we regularly swam in the river and used to notice the weed. also observed platypus at that time.

The weed when it was more apparent was always worse in the areas had "still" ie less water movement. In the mid 1990's the weed was so bad one summer that I telephone the Department of Primary Industry to ask them if someone could come and have a look at the weed. It was choking the inlet for my household water pump.

An officer came to visit and took samples of the river and the weed. He also looked around the general area up and down the river. I do not recall his name or know exactly what department he was representing. He made comment to me that he felt that the weed was worse because of the low flow and the possibility of nutrient runoff from pasture above my home into the water course.

I know of other residents that attest to the green weed always being a feature of the Russell River for many years before the fish farm was started by Chris Hill and Sue Healy.

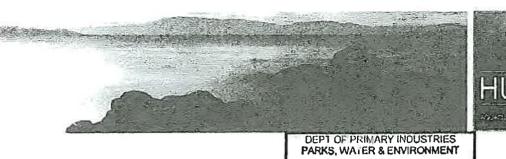
I hope this information may be useful

Yours sincerely

9- BL

Gay Branch





27th August, 2010

2 7 AUG 2010

HOBART

Warren Jones (General Manager)
EPA Division

Department of Primary Industries, Parks, Water and Environment Level 6 134 Macquarie Street Hobart TAS 7000 AUSTRALIA

### Re:Russell River

Dear Warren.

We enclose herewith report to our Company prepared by Peter Davies in December 2009 addressing water quality sampling at 8 sites on 11 occasions between May 2008 & June 2009.

We do so on the basis that it is voluntarily provided "in confidence" pursuant to Section 39 (1) of Right to Information Act 2009; Davies' addendum to the Report, which we have commissioned as a matter of urgency, is provided on like basis.

We trust that the Department will refrain from taking any "administrative" action (e.g. E.P.N) until we have had the opportunity of jointly reviewing the Report & the Supplement, given our firm belief that any growth of algae, of which recent complaint has apparently been made, cannot be ascribed only to the operation of our Flatchery at the reduced 'feed' level recommended by Davies which, as disclosed in the 'chart' now enclosed, had been voluntarily implemented [In that same context we refer to Section 33 of R.T.I in suggesting that until all relevant matters have been explored in an "objective scientific & transparent manner," release of the enclosed report under R.T.I would be premature and not in the public interest].

Yours faithfully,

P. J. Bender (Managing Director)

Hiron Aquaculture Group Pty Ltd. ABN 79 114 456 781

Richards, Sarah (En	vironment)						
From: Sent: To: Cc:	@huonaqua.com.au> Wednesday, 20 June 2012 10:59 AM Richards, Sarah (Environment); p.e.davies@utas.edu.au						
Subject:	RE: Russell river algae						
again these are all down which we discussed, this system that have the sto downstream and negligit	chery for the nitrates samples being taken for the creeks from the irrigation land, however, stream of the outflow and the tributary. In terms of sources of the ammonia at the outflow then follows a fairly obvious pattern of being higher from those parts of the flow through ck in a the time and are feeding. However, again the actual for the ammonia are low at 50m ole I would have thought for Lorkins. Also there really is no sign at present for any elevated system anywhere really. But we need to defer a little to Peter on this.						
	@huonaqua.com.au						
From: Richards, Sarah ( Sent: Wednesday, 20 Ju To: [ Cc: Subject. No. Nussen niv	@utas.edu.au						
Thanks for the update							
	ind of bloom is occurring in winter. Is it possible that nutrient inputs from the hatchery are sing picked up by the sampling?						
Has the detailed samplin	g, as discussed at our last meeting, been conducted?						
Cheers							
Sarah							
From: Sent: Wednesday, 20 Ju To: Richards, Sarah (Env Cc: Subject: Russell river alg	ironment); <u>@utas.edu.au</u>						
algae at Lorkins bridge.	increase again of algae in the Russell river and this has given rise to a thick "bloom" of green. The alerted to this during the middle of last week. I went up to the river last Friday in at algal sampling done that we discussed recently and to take a further series of nutrients.						

samples.

I found that obviously Lorkins had a thick growth of green algae and that this decreased upstream as we might have expected. However, at the outflow to the farm the green algae although not as luxuriant as at Lorkins (site 7photo) was still quite thick (site 5 photos, not great admittedly but under the turbulence similar to the trib photos) and extensive but that in the adjacent small tributary (site 5 trib) whose inflow is upstream of Huon's outflow and therefore it is unaffected by it, the growth of algae was as thick and widespread in that part of the river as the Huon outflow. Presently this suggests that obviously the growth in the river at Lorkins is not necessarily (and certainly not wholly) due to the nutrients from the Huon outflow. There were signs of green algae also at the inflow to the farm (site



### **Geoffrey Swan**

Subject:

FW: Degradation of the Russell River

From: InFish (IFS) [mailto:infish@ifs.tas.gov.au]

**Sent:** Friday, July 4, 2014 10:29 AM

To: Geoffrey Swan

Subject: RE: Degradation of the Russell River

Hello Geoffrey,

Thanks you for your thoughts on the Russell River.

The issues in the Russell River came to a head during the worst for the drought leading into 2009 and there has been focus on the fish farm operations since that time. Flow through systems are no longer considered best practice with all new large fish farms and expansions adopting recirculating systems as industry best practice, in this regard I will be looking into the issue you raise about brood stock densities. The existing flow through farm operations including the Lonnavale hatchery are being reviewed by EPA and IFS with the aim of incremental improvement in waste water treatment to reduce nutrient loadings and deliver improved environmental and water quality outcomes.

The issue of fish stocks in the Russell River may or may not be related to water quality issues in the catchment, over the past two years depletion in riverine trout populations has been reported from catchments across the State, this is thought to be due at least in part to increased cormorant populations following the breaking of the drought. The IFS has fish survey information from the past two summers available on the IFS website, basically they confirm the observations of anglers regarding reduced trout populations with the 2014 survey showing signs of recovery. The last major event of this nature was observed in the late 1970's with impacted catchments recovering within 6 years.

I am happy to discuss this further.

Regards

John

John Diggle

Director of Inland Fisheries Inland Fisheries Service 17 Back River Rd New Norfolk TAS 7140

PO Box 575 New Norfolk TAS 7140

jdiggle@ifs.tas.gov.au

03 6165 3810 - Phone 0409 550 546 - Mobile 03 6261 8051 - Fax



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Department of Primary Industries, Parks, Water and Environment



## **FILE NOTE**

Activity	Huon Aquaculture – Lonnavale Hatchery		
Date/time	8 September 2014		
File number	EN-EM-EV-DE-110772		
Document reference	H304495		
Prepared by	Sarah Richards		

The EPA Division has been regulating the HUON fish farm at Lonnavale since 2007, triggered by a period of high complaints about river condition at that time; however, an EPN has not yet been issued for the activity. Since 2007 the quality of the discharge to the Russell River has greatly improved due to reduction in stocking and feed inputs in the flow through farm and the installation of a drum filter to remove solids from a series of tanks that form part of the flow through farm. River condition has greatly improved since 2007 as a result of the consequently improved discharge water quality. Despite these improvements moderate density algal blooms are still occurring downstream of the outfall.

On 28 August 2014 sampling was conducted of the Russell River to investigate the impact of the Huon Aquaculture (HUON) fish farm discharge on river condition following notification of a high algal cover. For high algal cover to occur at this time of year (short day length and cold water temperatures) and so rapidly following a flood event (end of July) indicates that the algae is responding to a nutrient input.

The following five locations were visited. An inspection of bank condition and tributaries was also conducted.

Site	Russell Rd Bridge	Head of island	HUON Outfall	Swimming Hole Camping Ground	Lorkins Rd Bridge
Location	1 km upstream	50 m upstream		400 m downstream	3 km downstream
Measurement	X	х	x	x	x
Water sampling		х	x	х	
Benthic algal biomass		x		x	

The outcomes of the investigation, developed in consultation with the Water Specialist, were:

- Confirmation that there are no other inputs into the river between the outfall and the swimming hole and that the tributaries coming into the river between the outfall and Lorkins Rd bridge are very low volume and in good condition.
- Benthic algal biomass was more than three times higher 400 m downstream (14.9 mg/m²) of the outfall than at 50 m upstream (4 mg/m²). Fresh green algal growth was only present in the river from immediately downstream of the outfall. Upstream of the outfall there was significant cover of senescent algae, most likely persisting from last summer. The algal condition description from the Tasmanian River Condition Index is moderate for the downstream site and low for the upstream site. This change in condition is confirmed to be solely attributed to the influence of the HUON outfall. This changed condition of the river,

- from visual appearance, extended to Lorkins Bridge, 3 km downstream and also likely further downstream although the full extent is unknown as river access was limited. Other inputs to the river may also be present beyond Lorkins Bridge.
- It is noted that for this level of algal cover and biomass to be present at this time of year is unusual given the short day length, low water temperature and degree of channel shading at the downstream location (~60%), which are all factors that limit algal growth. In this case there was also a short accrual period for algal growth to develop since the last flood event which began on 31 July 2014 and remained high for several days.
- Water quality results are consistent with recent monitoring data provided by HUON. These nutrient inputs are sufficient to support the increased algal biomass downstream of the outfall. All nutrient analytes in the outfall exceed the interim water quality guideline values developed for the Russell (H292966) and largely derived from 80<sup>th</sup> percentile of the inflow monitoring data conducted by HUON. The outfall levels of ammonia and dissolved reactive Phosphorus exceed the limits proposed by Davies 2009, intended to be applied at 50 m downstream (H315209). These limits are still exceeded at double the Davies limits, which accounts for the immediate dilution achieved at the outfall location.
- This investigation provides strong evidence to support EPN requirements being imposed on HUON to reduce the nutrient inputs into the Russell River from the fish farm discharge.
- Imposing those requirements is consistent with objective 6.1 (a) of the State Policy on Water
  Quality Management 1997, which states that water quality management will be focused to
  achieve water quality objectives that will maintain or enhance water quality.

### **Actions**

- 1. Provide a copy of the sampling results to HUON.
- 2. Prepare an EPN requiring reduction in nutrients in the fish farm outfall.

From: Richards, Sarah (Environment)
To: Geoffrey Swan (gswan@activ8.net.au)

Cc: Schaap, Alex (Environment); Cook, Darryl W (Environment); Dowson, Greg P (Environment)

**Subject:** Response to your questions

Date: Wednesday, 24 September 2014 12:23:45 PM

Dear Mr Swan

Please find below my response to your questions.

1. Can we please view the results and the report of your recent water testing. Mr Schaap earlier advised me these results would be forwarded to me as soon as they were completed.

A letter has been prepared to provide this information to you and will be sent to you in due course.

2. Did you test for Dissolved Oxygen, total Algal Count/Screen, any metals or Benthic Macroinvertebrates.

DO and benthic chlorophyll-a were measured. Metals and benthic invertebrates were not measured as the investigation was focussed on determining algal response to the outfall discharge. Requirements for benthic invertebrate sampling will be included in the EPN as part of Huon Aquaculture's routine monitoring required by the EPN. Metal analysis has not been included as the fish farm activity does not pose a risk of metal toxicity.

3. As the "Authority on water testing" can you please instruct me as to what tests I should independently conduct to reassure myself of the health of our river — with the knowledge that at minimum there is a 24/7 discharge of fish faeces and undigested fish food that could contain all manner of compounds — research has revealed that chicken manure for example is a known ingredient in some Aquaculture fish food.

Please seek independent advice on your specific health concerns and the aspects of water quality that could impact this. The monitoring shows that total and dissolved forms of nitrogen and phosphorus are greatly below toxicity trigger values such as those published in the ANZECC water quality guidelines.

Monitoring conducted by the EPA and Huon Aquaculture includes total and dissolved forms of nitrogen (ammonia, nitrate, nitrite) and phosphorus, dissolved oxygen, pH, temperature, turbidity, conductivity and benthic Chl-a. This monitoring has been focussed on addressing a eutrophication issue — that is the impact of nutrients on the river ecosystem. There is no information to suggest there are other environmental risks.

As the fish are being grown for human consumption the use of harmful concentrations of substances and the presence of pathogens in the feed is strictly controlled. For further information I advise you to direct this question to Huon Aquaculture or perhaps contact Skretting - a Tasmanian fish food producer that most of the companies use. I am aware that poultry meal is a common ingredient but manure sounds very unlikely. Aquaculture feeds for finfish will be specifically formulated to meet fish health and growth requirements.

4. Are you in a position to advise me please of the total daily volume of fish faeces, poo water with fine solids and organic matter that is discharged from the flow through system at the HAC Lonnavale Hatchery.

The volume of water that passes through the farm is around 0.3 cumecs per day. I can't provide a direct mass or volume of fish faeces – this information is unknown. Huon have previously provided their water quality monitoring to you and this information shows the concentrations of nutrients in the farm discharge. Total and dissolved forms of nitrogen and phosphorus are the chemical components of the farm waste (including faeces and uneaten feed) that are environmentally relevant. Huon operate a drum filter on the main stocking area of the farm to remove solids. This is a major portion of the waste generated by the farm and is effective at reducing the nutrient loading in the discharge.

5. Are you able to advise me of any such calculation between this 24/7 discharge and the respective water volume in the Russell River at various months of the year in order to put me at ease that your one off testing was not just a "lucky" day with respect to pollution in the river.

The river has a highly seasonal flow pattern with higher flows in winter and spring, and lower flows in summer and autumn. The average summer flow is 1.5 cumecs and average winter flow is 7.5 cumecs. In rare events (less than 2% of the time) the flow can be as low as 0.3 cumecs. The monitoring results were consistent with data provided by Huon Aquaculture in their monitoring so suggests that conditions were typical on the day we sampled. The discharge limits that will be required by the EPN are conservative to address low flow conditions.

6. Mr Schaap advised me the initial water analysis did show a contrast in results from upstream of the discharge to downstream of the discharge – can you elaborate on this please, and can you advise where the tests were taken along the river.

This information will be provided to you by letter. Briefly – the monitoring showed a threefold increase in benthic algal biomass below the outfall and no other significant inputs to the river were found. The water quality monitoring is consistent with Huon's monitoring. An EPN will be issued to Huon to require a reduction in the nutrient concentration of the discharge.

7. I request once again, can I please view the report prepared by Professor Peter Davies in 2009 under instruction of the EPA. I accept he was being paid by HAC – but I also know this was a requirement laid down by the EPA and IFS in order to conform to the conditions of the Hatchery licence. If this report is so positive about the river and shows no reason for any concern then surely it is in the EPA's interest to share this with our community.

This information is the property of Huon Aquaculture and I do not have their consent to provide it to you.

8. Are you now able to advise with certainty that it is totally acceptable for the public and children alike to bath in the Russell River at any point in the river downstream of the 24/7 discharge pipe from the Hatchery.



The conditions that we observed in the river during the sampling, and as consistent with routine monitoring provided by Huon Aquaculture, did not reveal any toxic levels of nutrients or levels of algae that would pose a risk to health. I do not have information that supports the presence of risks to health.

Sarah Richards BSc(Hons) PhD

Senior Environmental Officer Industrial Operations EPA Division Department of Primary Industries, Parks, Water and Environment GPO Box 1751, Hobart TAS 7001

Ph: 03 6165 4607 Fax: (03) 6233 3800

Email: Sarah.Richards@environment.tas.gov.au

Internet: www.environment.tas.gov.au

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Level 7, 134 Macquarie Street, Hobert TAS GPO Box 1550, Hobert, TAS 7001 Australia

Engulries: Sarah Richards

Ph: +61 3 6165 4607 Fax: +61 3 6233 3800 Email: Sarah.Richards@environment.tas.gov.au

Web: www.epa.tas.gov.au

Our Ref: EN-EM-EV-DE-110772 | H309524



H	
Dear Mr	

### **RESULTS FROM RUSSELL RIVER SAMPLING**

I am writing to inform you of the results of a recent investigation of water quality and algal condition in the Russell River in relation to the discharge from Huon Aquaculture's fish farm at Lonnavale. This investigation was prompted by your report of unseasonal algal growth in the Russell River on 18 August 2014. The results of samples and measurements collected on 28 August 2014 are presented in the table below.

The water quality sampling results show values that are consistent with monitoring that is routinely conducted by Huon Aquaculture. The nutrients in the outfall are present at low concentrations that do not pose toxicity hazards. However, they are likely to be sufficient to increase algal biomass. The nutrient levels are consistent with the threefold increase in benthic Chlorophyll-a, a standard measure of algal biomass, observed at a point 400m downstream of the outfall in comparison to a sample from 50m upstream of the outfall. This evidence is suggestive of eutrophication of the river resulting from the discharge. The investigation did not uncover any other significant nutrient inputs into the river that would influence river condition at that downstream location.

Russell River Sampling Results - 8 September 2014.

Analyte	1 km Upstream of Outfall Russell Rd	50 m Upstream of Outfall	Outfall	400 m Downstream of Outfall	3 km Downstream of Outfall Lorkins Rd
Time Sampled	1020	1200	1215	1105	1415
pH	6.8	7.39	6,99	7.12	7.1
Temperature (°C)	6.64	7.39	7.13	6.82	8.05
DO (mg/L and %)	12.85	12.25	12.6	12.93	12.55
4	104.8	102.3	104.5	106	106.2
Conductivity (mS/cm)	0.063	0.063	0.064	0.063	0.065
Turbidity (NTU)	7.3	5.4	12	6.6	6
Ammonia (mg/L)	u <sup>b</sup>	<0.005	0.032	0.013	-
Nilrate (mg/L)		0.009	0.012	0.009	-
Nitrate and Nitrite (mg/L)		0.010	0.014	0.011	- 7
Nitrite (mg/L)	-	<0.002	<0.002	<0.002	-
Total Nilrogen (mg/L)	•	<0.10	0.12	<0.10	
Total Kjeldahl Nitrogen (mg/L)	-	<0.10	0.11	<0.10	-
Dissolved Reactive	•	0.007	0.017	0.011	-
Phosphorous (mg/L)					
Total Phosphorus (mg/L)	-	<0.01	0.01	<0.01	-
Benthic Chlorophyll-a (mg/m²)	-	4 "	-	14.9	

<sup>\* -</sup> No sample collected.

This is not a complete copy of the original record

As you are aware, there has been a substantial reduction in stocking of the fish farm, together with other environmental management measures, since concerns about the Russell River were first raised with the EPA some years ago.

Notwithstanding the above, the increased algal biomass detected recently, together with your anecdotal evidence from river observations, indicates that the water quality of the fish farm outfall is influencing river condition for a significant distance downstream and most likely as far as Lorkins Road. The extent of this impact is not acceptable. An Environment Protection Notice which requires a staged reduction in nutrients discharged to the Russell River has been issued to Huon Aquaculture.

Please contact Sarah Richards as per the details at the head of this correspondence if you have any enquiries.

Yours sincerely

John Mollison

Delegate for the Director, Environment Protection Authority

			ē.

Level 7, 134 Macquarie Street, Hobart TAS GPO Box 1550, Hobart, TAS 7001 Australia

Enquiries: Sarah Richards

Ph:

+61 3 6165 4607

Fax: +61 3 6233 3800 Sarah Richards@environment.tas.gov.au

Email: Web:

www.epa.tas.gov.au

Our Ref:

(EN-EM-EV-DE-110772 | H318707) sma

22 October 2014

Mr Geoffrey Swan



Dear Mr Swan

## **COPY OF ENVIRONMENT PROTECTION NOTICE 7677/1**

**ENVIRONMENT PROTECTION AUTHORITY** 

I refer to your request to receive a copy of the Environment Protection Notice (EPN) No. 7677/1 that was issued to the Huon Aquaculture Company Pty Ltd in relation to the fish farm activity at The EPN formalises environmental management requirements for the activity, including the management of water quality of the discharge from the flow through farm to the Russell River. The EPN also requires submission of various management plans primarily relating to wastewater irrigation and sludge disposal, which are the waste streams from the recirculation facility at the site.

This office recently conducted an investigation of algae in the Russell River in the vicinity of the flow through farm outfall, the results of which have been previously provided to you. The farm discharge was found to be causing an increase in algal biomass for several kilometres downstream of the outfall. This change in algal biomass was not found to constitute serious or material environmental harm, however the extent of the impact is not considered acceptable in the long term.

Huon Aquaculture is required to develop a nutrient reduction plan, to provide detailed ecological monitoring of the Russell River and to comply with water quality limits for the flow through farm discharge to the Russell River. The EPN requires nutrients in the discharge to be reduced over a period of three years to allow implementation of nutrient reduction measures by Huon Aquaculture.

Please contact Sarah Richards as per the details at the head of this correspondence if you have any enquiries.

Yours sincerely

Delegate for the Director, Environment Protection Authority

CC:

igallichan@huonaqua.com.au

Encl.

Copy of EPN 7677/1



Level 7, 134 Macquarle Street, Hobert TAS. GPO Box 1850; Hobarl, TAS 7001 Australia

Sarah Richards

+61 3 6165 4607 Eniall:

Fax: +61 3 6233 3800 Sarah.Richards@environment.fas.gov.au

Wab: www.epa.tas.gov.au

Our Ref: (EN-EM-EV-DE-110772 | H304432) sma



# 26 September 2014

Mr Peter Bender Managing Director Huon Aquaculture Company Pty Ltd 961 Esperance Coast Road DOVER TAS 7117

Dear Mr Bender

## **ENVIRONMENT PROTECTION NOTICE 7677/1** HUON AQUACULTURE COMPANY, LONNAVALE FISH FARM

Please find attached to this correspondence, Environment Protection Notice (EPN) No. 7677/1, issued to the Huon Aquaculture Company Pty Ltd in accordance with Section 44(1)(a) and (c) of the Environmental Management and Pollution Control Act 1994 (EMPCA). The grounds upon which the EPN is issued are set out in the EPN. The EPN takes effect on the day on which it is served.

In accordance with section 44(3) of the EMPCA, you are required to comply with the conditions contained in Schedule 2 of this EPN.

I understand that draft versions of the EPN were discussed with your representatives and that changes were made as a result of their comments.

This EPN requires a reduction in nutrients being discharged to the Russell River from the flow through fish farm at Lonnavale in order to minimise the impact of the discharge upon river condition. The EPN also formalises other environmental requirements for the above activity. particularly the management of waste streams generated by both the flow through farm and the recirculation hatchery and grow out facility.

A fee of \$3,182.00 is payable for the preparation of the enclosed EPN. An invoice is enclosed. Please also be advised that Section 44(3A) of the EMPCA allows for reasonable costs associated with ensuring compliance with an EPN to be recovered.

You may appeal to the Resource Management and Planning Appeal Tribunal against the EPN, or against any requirement contained in the EPN, within fourteen days from the date on which the EPN is served, by writing to:

> The Chairperson Resource Management and Planning Appeal Tribunal **GPO Box 2036** HOBART TAS 7001

Lodgement of an appeal may be subject to the payment of a fee. It is suggested that you contact the Tribunal on (03) 6165 6794 to ascertain the requirements for making an appeal.



Assessed by the Department of Primary Industries, Parks, Water and Environment under the Right to Information Act 2009

If you have any queries regarding this correspondence, please contact the officer named at the head of this correspondence.

Yours sincerely

Alex Schaap DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

End:

EPN 7677/1

Invoice



# **Geoffrey Swan**

**Subject:** FW: Russel River Lonnavale

From: Schaap, Alex (Environment) [mailto:Alex.Schaap@environment.tas.gov.au]

Sent: Monday, 10 November 2014 4:08 PM

To: Richard Dax

**Cc:** Gay, Michael (Environment) **Subject:** RE: Russel River Lonnavale

#### Dear Mr Dax.

I agree that we have taken far too long to resolve the issues in the Russel River but there are many reasons for that (including that the EPA did not have regulatory jurisdiction over the operations of the hatchery). It is not true however that the degradation continues unabated. The water quality of discharges from the hatchery has improved dramatically over that period. What is evident from recent observations (including Mr Swann's reports) is that nutrient levels in the river are sometimes still at high enough levels to induce excessive algal growth. This is an unacceptable impact for a river which had otherwise experienced very little issue with algal growth and I have assured Mr Swann that this will not be allowed to continue. It is perhaps worth noting however that other indicators of river health remain very favourable and there are no public health concerns at current discharge levels.

I have now issued an Environmental Protection Notice upon the hatchery, effectively taking over regulatory jurisdiction from the Council. That EPN puts the hatchery on a pathway of improving discharge water quality. The contaminant limits will be further reviewed in the context of updated environmental impact information over the coming months. It may well be the case that further reductions in effluent limits may be necessary and if that is the case then those limits will be reduced. That decision will then have the evidentiary basis to be sustained against appeal.

Finally, I will observe that I and others within the agency have considerable sympathy for Mr Swann and understand his frustrations but the approach to regulation of this issue will not change from that previously explained unless new information warrants it.

#### Alex Schaap

Director Environment Protection Authority

CORPE

General Manager - EPA Division
Department of Primary Industries, Parks, Water and Environment
134 Macquarie St (Lands Building)
GPO Box 1550, Hobart, Tas, 7001
Ph. (03) 6165 4523 Fax (03) 6233 3800
email: alex schaap@environment.tas.gov.au

From: Richard Dax [mailto:daxfish1@bigpond.com]

Sent: Monday, 10 November 2014 2:14 PM

**To:** Schaap, Alex (Environment) **Subject:** Russel River Lonnavale

Dear Mr. Schaap,

I refer to recent correspondence between your agency and Geoffrey Swann, a most concerned resident beside the Russel River Lonnavale.



Geoffrey has sought my advice on the matters he raises on the basis that I was responsible for first bringing the degradation of this mountain river to the attention of the bureaucratic bodies variously responsible in 2006-- yes eight years ago!

It is clear from his research and collation of the significant complaints made to your Department that little has changed in seven or eight years and that degradation to this once pristine waterway continues unabated. I entirely agree with Geoffrey that it is beyond the bounds of reason that the people of Lonnavale continue to suffer at the hands of a now publicly owned entity Huon Agriculture.

The present situation is blatantly contrary to both the past promises of Huon Aquaculture and actions that should have been taken by your department some years ago and Geoffrey is patently correct in his insistence that demonstrative action is taken immediately.

I understand that your officers find it difficult to either absorb or answer the legitimate questions Geoffrey raises and that the collateral that he provides is somewhat lengthy. However, I think it should be clearly understood that Geoffrey is driven not only by passion but by the ongoing inability of your Department to address his complaints or indeed my own all those years ago and as yet not satisfactorily answered.

In essence I believe then that the necessity to fully document the matters in question to the present time is a direct result of the inactions of the EPA and it is this alone that has resulted in such lengthy documentation.

I also believe that the below extract from correspondence sent by you to Geoffrey is reprehensible and unbefitting your position as a senior public servant, given his genuine concerns and the unmet responsibilities of your Department.

It is however also unhelpful to continue to harangue Sarah with this constant email barrage, please just let her get on with her job. She will provide you with the information we have but she will not be directed by you in determining our sampling regime or the analyses or calculations we undertake in managing the impact of this hatchery. Please also desist with perpetuating the notion that she is being unreasonably defensive of the hatchery operator, she is not, she is simply trying to present you with a balanced view. Please also be very clear that it makes not a jot of difference to me how many politicians or lobbyists you circulate these emails to and who is interested, I will deal with the issues entirely on their merit, regardless of who is interested and what lobbying may be occurring.

I shall be further assisting Geoffrey if and when required and hope to see a much improved and sympathetic approach to him from the EPA. It is an indictment that this issue continues unabated without serious action to overcome the inequities involved.

Richard C Dax
334 Sugarloaf Rd
Carlton River Tasmania 7173
E: daxfish1@bigpond.com
M: 0417 591 289
P: 61 3 6265 8557

#### CONFIDENTIALITY NOTICE AND DISCLAIMER

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Level 6, 134 Macquarie Street, Hobart TAS GPO Box 1550, Hobart, TAS 7001 Australia

Enquiries: Alex Schaap Ph: +61 3 6165 4523 Fax +61 3 6233 3800

Email: Alex.Schaap@environment.tas.gov.au

Web: www.epa.tas.gov.au

Our Ref: H327616

19 November 2014

Mr Geoffrey Swan

Dear Mr Swan.

I refer to your letter of 8 November regarding concerns about Hatchery discharges to the Russel River.

I believe that my previous email correspondence with you deals with the issues raised. I will however endeavour to explain in more detail the rationale for the approach being taken.

As previously advised, I agree with you that excessive algal growth in the Russel River is unsatisfactory from both an ecological and an environmental amenity basis. I am also satisfied that the nutrient rich discharge from the hatchery is a significant driver for that algal growth. While huge improvement has already been made, I also agree that this situation should have been remedied some years ago and I remain committed to appropriately remedying the issue.

The remedy must however be implemented in accordance with proper regulatory process. The company would quite rightly object and probably appeal in law if proper process was not followed. Of particular importance in that regard is to ensure that there is adequate evidentiary basis upon which to found regulatory measures and that appropriate opportunity is provided for the company to implement whatever further improvement is necessary.

As I have previously indicated, I think that discharge levels for nutrients in the hatchery effluent will probably need to come down further in order to adequately address the issue but it is reasonable that such a move would occur with a sound evidentiary basis, have due regard to both the environmental risk and the impact of those measures upon the company. In this case I do not believe that there is a substantial risk of serious or sustained harm to the river requiring immediate resolution, indeed the ecological health of the river appears to be in very good shape despite the excessive algal growth of recent years.

I inspected the river today and while I noted that there was somewhat greater benthic algal growth downstream of the hatchery, that growth did not in my view represent evidence of environmental harm requiring any urgent remedy. As someone with over thirty years of experience on this river, I was pleasantly surprised that there was so much less algal cover than we saw prior to the corrective measures taken by the hatchery operator in recent years.

Having said that, the risks to the longer term ecological health of the river through nutrient enrichment must be addressed and, in any event, there has clearly been a substantial impact on environmental amenity during warmer low flow periods which warrants resolution sooner rather than later.

It is my judgement that the EPN recently issued will do this in a reasonable and defensible manner. The initial discharge limits are, as you have observed, not a great immediate imposition on the operator. They are set at the 80<sup>th</sup> percentile of recent discharge monitoring data and are intended to ensure that the discharge is immediately capped and also to ensure that there is a real



compliance standard in place to deal with any episodic discharges which might otherwise be in excess of the levels observed in previous monitoring data.

The EPN then imposes lower discharge limits at time intervals intended to give the operator the opportunity to take the necessary action to achieve those limits. Those time intervals are necessary because the operator will need to take some difficult decisions and perhaps employ costly measures to achieve the lower discharge levels. The EPN also provides that a further review must be undertaken and reported by May next year and the EPN makes clear that further reductions in discharge levels may be imposed if the review demonstrates that this is warranted.

I do hope that you will gain a better appreciation of the approach we are taking when you sit down with Darryl and Sarah to work through the details of the rationale behind the EPN and our regulatory approach. That conversation will also provide you with the opportunity to explore the range of questions you have raised. I am hopeful that the discussion will demonstrate to you why we think the approach being taken offers the best prospect for the most timely long term solution.

I do not propose to correspond with you again until that discussion has taken place.

Yours sincerely

Alex Schaap

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

From:

Richards, Sarah (Environment)

To:

Subject:

Geoffrey Swan
RE: Follow up regards Water Quality in Russell River

Friday, November 21, 2014 4:04:56 PM

Dear Mr Swan

Both the flow data and the monitoring data are the property of Huon Aquaculture and I am unable to provide them to you. The farm flow data of 0.3 cumecs is an average. In times of very low flow in the river the farm would take less water. The flow data was taken from a gauge board at Lorkins Bridge that was established and monitored by Huon Aquaculture.

The calculation of the EPN data included monitoring values for June and July.

I have sent you an meeting invitation for 3 December to go through your further questions with Darryl and myself.

Sarah

From: Geoffrey Swan [mailto:gswan@activ8.net.au]

Sent: Thursday, 20 November 2014 3:50 PM To: Richards, Sarah (Environment)

Subject: FW: Follow up regards Water Quality in Russell River

Dear Dr Richards - I had misplaced this email.. this is in fact what I was following up with my email to your earlier today, I do hope you can assist me soon on this please.

And Mr Schaap sent me a letter yesterday referring to the EPN showing the 80<sup>th</sup> percentile – I have the results of your testing 8<sup>th</sup> September, and results of HAC testing 2010 – up to 7<sup>th</sup> May 2014 – are there further test results taken by EPA or HAC since May 2014 that were included in calculating your EPN numbers that I am not aware of? If so I would really appreciate a copy please.

Thank you and regards

Geoffrey Swan

From: Geoffrey Swan [mailto:gswan@activ8.net.au]
Sent: Friday, 14 November 2014 5:07 PM

To: Sarah Richards

Cc: Liz Smith (smiliztas@gmail.com); rosaliewoodruff@gmail.com; Rebecca Hubbard (marine@et.org.au); alex.schaap@environment.tas.gov.au;

<u>John.Whittington@dpipwe.tas.gov.au</u> **Subject:** FW: Follow up regards Water Quality in Russell River

Dear Dr Richards

I have earlier copied you in on an email I sent to DPIPWE, and again I have copied you in today in an email I have just sent to Acting Director

I have not heard from you with respect to some questions I raised – so I have sent this again. I know you are busy however I am not able to move forward on this since DPIPWE advise me it has nothing to do with them – and I am still preparing for a meeting with Mr Bender and I need factual information.

This is getting to difficult for me to understand given DPIPWE are responsible for Rural and Urban Water and as I earlier pointed out: \*DPIPWE is responsible for managing and sustainably developing the Tasmania's fresh water resources, It is also responsible for developing and implementing policy and legislation to support urban water and sewerage reform". You will appreciate why I am confused?

- 1. Where have you obtained flow rates of the Russell which have determined what is acceptable for HAC to discharge?
- 2. How do you know that HAC discharge 0.3 cumecs, 24 million litres per day into the Russell River?
- 3. And how regular do you monitor flow specifically, do you have data 2008 2014 please? Locals tell me the river flows have decreased markedly over the years and I am interested to put some science behind this rather than rely on anecdotal evidence.

Thank you and regards

Geoffrey Swan

From: Geoffrey Swan [mailto:gswan@activ8.net.au]
Sent: Friday, 14 November 2014 4:55 PM
To: 'Read, Martin (DPIPWE)'

Cc: Richards, Sarah (Environment)'; 'Murray, Jodie (DPIPWE)'; 'Chamberlain, Jeffrey (DPIPWE)'; Farrell, Tim (IFS) (Tim.Farrell@ifs.tas.gov.au'); alex.schaap@environment.tas.gov.au'; 'John.Whittington@dpipwe.tas.gov.au'

Subject: RE: Follow up regards Water Quality in Russell River

Dear Mr Read

I am still in pursuit of more information regarding flow data for the Russell River and I am hoping to gain a better understanding as to how it

Mr Swan's consolidated questions to Darryl Cook regarding the Russell River, Lonnavale dated 24 November 2014.	Response
1. Given the daily discharge from the HAC fish farm is 26,000 kilolitres which is substantially more than the 100 kilolitres as is detailed under Schedule 2, 3 (a) in EMPCA 1994 – under this clause why does the EPA therefore not formerly recognize this as a Level 2?	The intention of the "wastewater treatment works" activity definition was to capture facilities designed for the treatment of sewage and/or industrial process wastewater. Schedule 2, 3(a) has been utilised for this purpose since the introduction of the <i>Environmental Management and Pollution Control Act</i> in 1994. Inland fish farms have never been captured under Schedule during that period.  The term 'Sewage' is defined in Tasmania's Plumbing Regulations to mean "water-borne waste of human origin comprising faecal matter, greywater, urine or liquid household waste". The term is also typically taken to refer to material which flows in sewers. The Lonnavale fish farm is not a sewage treatment facility nor does it emit sewage.  Notwithstanding the above, the Environment Protection Authority has elected to regulate the Lonnavale fish farm as if it were a level 2 activity. An EPN has been
	issued to restrict the outputs from the fish farm over time. Furthermore a review of the environmental performance of all large scale fish farm activities across the state is underway and will include a review of the regulation of these activities.
2. I refer to section 15 of the State Policy on Water Quality Management 1997:	This Section of the State Policy on Water Quality Management 1997 commences with the words 'A Regulatory authority must not authorise'. It is therefore dealing with the approval or authorisation of discharges. As far as the EPA is concerned discharge from the Lonnavale fish farm was a pre-existing discharge at the time the EPA commenced regulation of the facility. Presumably the commencement of the discharge was authorised in some other manner in the years prior to EPA's involvement.  When the State Policy on Water Quality Management 1997 came into being there were numerous pre-existing discharges in place, for example approximately 90 sewage treatment plants. Unfortunately the costs of recycling or irrigation of effluent tend to be prohibitive, particularly in wetter areas and areas that have insufficient agricultural or plantation land in the vicinity.
Why is the EPA agreeing to a discharge of 26,000 litres per day, 365 days of the year of raw untreated effluent into our river?	As mentioned previously, the EPA was not involved in the commencement of the Lonnavale fish farm. Having now become involved in regulation of the fish farm, the EPA must adopt a reasonable approach that is proportionate to the degree of environmental impact.  Following a period of seeking improved environmental outcomes via such measures as reduced stocking of the flow through fish farm and installation of treatment equipment (see below), an EPN has been issued to further restrict

Level 7, 134 Macquarie Street, Hobart TAS GPO Box 1550, Hobart, TAS 7001 Australia



Ph: +61 3 6165 4607 Fax: +61 3 6233 3800 Email: Sarah Richards@environment.tas.gov.au

Web: www

www.epa.tas.gov.au

Our Ref: (EN-EM-PE-245231 | H340639) sma

22 December 2014

Mr Geoffrey Swan

Dear Mr Swan

#### FOLLOW UP FROM MEETING RE LONNAVALE FISH FARM

**ENVIRONMENT PROTECTION AUTHORITY** 

Thank you for attending the meeting on Thursday 11 December 2014 during which my staff explained the rationale behind Environment Protection Notice (EPN) No. 7677/1, which was issued to Huon Aquaculture Company Pty Ltd on 26 September 2014.

I understand that you remain dissatisfied with the limits imposed upon the Lonnavale fish farm by the above EPN and the timeframe over which those limits will become increasingly restrictive upon the operation of the fish farm.

On the basis of water quality and algal biomass data collected independently by EPA Division officers, and data routinely collected and reported by Huon Aquaculture Company Pty Ltd, I am satisfied that the environmental impacts caused by the discharge from the Lonnavale fish farm do not warrant stronger action at this point in time. Data and observations by EPA Division staff during 2014 indicate that the growth of algae has not reached the high levels observed during previous years, nonetheless, the data do indicate that algal biomass is elevated for some kilometres downstream of the discharge and that the fish farm is the major contributor of nutrients to this stretch of the river. Should future data on water quality, algal abundance or invertebrate diversity indicate greater impacts than those described above, this office will take appropriate action.

I am aware that during the above meeting concerns were raised by one attendee of seepage from the river bank in the vicinity of the fish farm discharge. I understand that Dr Sarah Richards is making arrangements to investigate the alleged seepage. Residents have also raised allegations of unauthorised discharges during high flow events. Within reason, I am prepared to allocate officer time to investigate credible observations of such discharges.

As previously advised, I accept that the BOD limit set in the above EPN is higher than necessary and I intend to amend the EPN to reduce the BOD limit after I have received sufficient data upon which to base a decision. There is no evidence to suggest that oxygen draw down is a current issue in the river.

I note that the email archive in relation to this matter is extensive to an unprecedented level. Please understand that EPA Division staff will not always be able to service this level of email correspondence. I have asked relevant staff to prioritise any credible new allegations of actual serious or material environmental harm.

Yours sincerely

John Mollison

Delegate for the Director, Environment Protection Authority

## **BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY**

Level 6, 134 Macquarie Street, Hobart TAS GPO Box 1550, Hobart, TAS 7001 Australia

Enquiries:

Michael Gay

Ph:

+61 3 6165 4507

Fax

+61 3 6233 3800 Michael Gay@environment.tas.gov.au

Email: Web:

www.epa.tas.gov.au

Our Ref:

0.3 MAR 2015

Mr Geoffrey Swan

Dear Mr Swan

Thank you for your email congratulating me, and other measurement of the EPA Board on our appointment. Thank you also for bringing to the Board's attention, your concerns about the impacts of the Huon Aquaculture fish farm on the Russell River at Lonnavale.

**ENVIRONMENT PROTECTION AUTHORITY** 

The Environment Protection Authority comprises the EPA Board and the EPA Director. The Board's statutory roles primarily relate to the assessment of environmental impacts from proposed developments. The Director is responsible for day to day regulation against the requirements of the Environmental Management and Pollution Control Act 1994.

I understand the EPA Director issued an Environment Protection Notice to Huon Aquaculture in September 2014. I further understand that since sending the email to me, you have participated in a meeting with Darryl Cook and Dr Sarah Richards from the EPA Division and have received further written correspondence from the EPA Director, which addresses a number of your queries about the emission limits set in the EPN. I trust that you now have a better understanding of those matters.

I have every confidence that the Director will continue to monitor environmental performance of the fish farm, and ensure compliance with the requirements of the EPN.

Yours sincerely,

Warren Jones Chairperson

**BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY** 

Minister for State Growth
Minister for Energy
Minister for Environment, Parks and Heritage

Tasmanian Government

Level 10 15 Murray Street HOBART TAS 7000 Australia GPO Box 123 HOBART TAS 7001 Australia Ph: +61 3 6165 7739

Email Minister. Groom@dpactas.gov.au

Web www.stategrowth.tas.gov.au www.dp.pwe.tas.gov.au www.skills.tas.gov.au www.cg.tas.gov.au

RECEIVED

1 8 AUG 2015

Scott Bacon MP 353 Main Road GLENORCHY TAS 7010

O AUG ZUIS

1 4 AUG 2015

Dear Mr Bacon Suff

Thank you for your enquiry about the impacts of salmon farming on the Russell and Little Denison Rivers, particularly impacts on recreational fishing, raised by you following representations from constituents.

The Government recognises the value and importance of recreational fishing resources. Both the Russell and Little Denison Rivers have fish farm activities that take water and return water to those rivers after it has passed through the fish farm. It is recognised that the nutrient inputs in the fish farm effluent may cause some level of change to background river conditions.

To address environmental concerns about impacts on these rivers the Director, EPA has issued an Environment Protection Notice to Huon Aquaculture for their activity on the Russell River and is in consultation regarding a soon to be issued notice for Snowy Range Aquaculture on the Little Dennison River. The notices require management of the quality of discharged water to manage impacts on river condition and to ensure that these activities operate within appropriate environmental performance standards.

In regard to the impacts of these activities on recreational fishing resources, the Inland Fisheries Service (IFS) has advised that it has conducted electrofishing surveys in the Russell River downstream of the Lonnavale fish farm over the past three summers. The surveys have shown a broad size range in the brown trout population, indicating successful natural recruitment. The data also showed a trend of increasing numbers of fish over 220 mm in the population, possibly indicating recovery from heavy cormorant predation, which was noted in trout fisheries across the state in 2011-12 and 2012-13.

Whilst comparative surveys were not undertaken in the Little Dennison River, the IFS has advised that a similar result would be expected.

It should also be noted that the lower sections of these rivers are subject to variable seasonal recreational fishing effort, which can also lead to localised depletion of trout over the minimum legal length of 220 mm. Please contact Minister Rockliff if you require further information about the management of recreational fisheries.

Should you require further information on the details of regulatory action taken for the fish farm activities on the Russell and Little Denison Rivers, I would be pleased to facilitate a briefing for you with the Director, EPA. Please contact my advisor, Mr Simon Willcox on 0458 395 601 or <a href="mailto:simon.willcox@dpac.tas.gov.au">simon.willcox@dpac.tas.gov.au</a> if you wish to pursue this.

Yours sincerely

Matthew Groom MP

Minister for Environment, Parks and Heritage

# **Geoffrey Swan**

Subject:

FW: Can I hear from you please

From: Simone Watson [mailto:swatson@huonvalley.tas.gov.au]

Sent: Friday, December 4, 2015 4:50 PM

To: Geoffrey Swan

Subject: RE: Can I hear from you please

# **Dear Geoffrey**

Thank you for following up in relation to my email to you of 28 October 2015. The Council has undertaken investigations including with site inspections and there was no evidence of failing septics from properties in Lorkins Road.

Kind regards

# **Simone Watson General Manager**

Phone 03 6264 0319 | Fax 03 6264 0399 Address 40 Main Street, Huonville Email swatson@huonvalley.tas.gov.au | Web www.huonvalley.tas.gov.au



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