



Your reference:

Our reference:

Contact

DOC12/44177, FIL11/9404

Kyle Finlay; 0249086827

Chris Ritchie
Mining and Industry Projects
NSW Planning and Infrastructure
PO Box 39
SYDNEY NSW 2001

Dear Mr Ritchie

**ENVIRONMENTAL IMPACT STATEMENT
MARINE AQUACULTURE RESEARCH LEASE
PROVIDENCE BAY, PORT STEPHENS NSW**

Reference is made to your letter, dated 22 October 2012, to the Environment Protection Authority (EPA) seeking EPA's comments on the Environmental Impact Statement prepared by NSW Department of Primary Industries titled '*Marine Aquaculture Research Lease Providence Bay, Port Stephens NSW: Environmental Impact Statement*' (EIS).

The proposal consists of floating aquaculture sea cages within a 20 hectare aquaculture research lease 4km off Hawks Nest, NSW, for a period of five years.

A review of the EIS has been completed and EPA provides comments and suggested conditions of approval as shown in Attachment 1 of this letter.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.

If you require any further information regarding this matter please contact Kyle Finlay on telephone (02) 4908 6827.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'P. Jamieson', followed by the date '30-11-12' written in blue ink.

PETER JAMIESON

**Head Regional Operations Unit – Hunter
Environment Protection Authority**

ATTACHMENT 1

ENVIRONMENT PROTECTION AUTHORITY COMMENTS AND RECOMMENDED CONDITIONS OF APPROVAL MARINE AQUACULTURE RESEARCH LEASE PROVIDENCE BAY, PORT STEPHENS NSW

Water

The Environment Protection Authority (EPA) points out calculation errors (or typographical errors) in estimations of nutrient release from the sea cages to oceanic waters (pp150-151). Whereas the Environmental Impact Statement (EIS) predicted 1.87 g/L of nitrogen and 0.6 g/L of phosphorous, based on the calculations the actual results should be in micrograms per litre (ug/L). Hence the calculated environmental impact is significantly less than that estimated in the EIS calculations. The text to the EIS suggests the authors correctly identified the results as being in ug/L and not g/L.

EPA supports the need for detailed monitoring to assess the impacts of the experimental lease. EPA could not find any commitment to sampling frequency. EPA proposes the following conditions to address water quality issues and associated monitoring:

1. The proponent must implement a monitoring program at/near the lease to assess any environmental impacts of the proposed aquaculture operation. This program must consist of at least quarterly monitoring, commence at least one year prior to stocking of the lease, and be broadly consistent with Appendix 2 of the EIS, "Draft Environmental Management Plan". The monitoring program must include:
 - water quality sampling;
 - benthic sediment and biological assessments; and
 - sampling to assess the development of bacterial resistance to control chemicals due to the accumulation of antibiotic or other residues in sediments near the sea cages.
2. The proponent must prepare and submit to the Director-General annually a report providing the results of the environmental monitoring program. This report must provide all results of the monitoring program and provide expert commentary on any effects of the aquaculture lease compared to relevant guidelines, pre-lease sampling or control sites.

A summary within the report must also be provided that clearly identifies the lowest, highest and average concentration per water quality parameter and assessed against recommended trigger values in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* as published by the Australian and New Zealand Environment Conservation Council.

3. At the conclusion of the five year experimental period, or at the conclusion of the operation if it is less than five years, the proponent must prepare and submit to the Director-General and Environment Protection Authority a report providing the results of the environmental monitoring program. This report must provide all results of the monitoring program and provide expert commentary on any effects of the aquaculture lease compared to relevant guidelines, pre-lease sampling or control sites.
4. To prevent environmental impacts, feeding techniques should be efficient and controlled to ensure that no additional food is wasted.

5. Chemicals must be administered in accordance with *Australian Pesticides and Veterinary Medicines Authority* and be used to treat fish on a sparing basis to prevent resistance and accumulation of antibiotic residues in sediments around the sea cages

Noise

EPA acknowledges that the EIS adequately assess the impacts of noise and provides the following suggested conditions.

Construction

1. All works and activities occurring during construction activities must be carried out in a manner that will minimise the emission of noise.

Operational

2. During operations of the Aquaculture Lease, the proponent must implement all feasible and reasonable noise mitigation measures with the aim of keeping noise to a minimum.

**Environment Protection Authority
November 2012**