Notice

Environmental Protection Act 1994

Notice to conduct or commission an environmental investigation

This notice to conduct or commission an environmental investigation is issued by the administering authority pursuant to section 326B of the Environmental Protection Act 1994.

Sealord King Reef Pty Ltd (ACN 105 576 609)
Suite 3, Level 1, 19 Harris Street
PYRMONT NSW 2009

Your reference: EPPR00390913

Our reference: C-CPLPO-100488474; STAT-E-100488476

~~Tuesday, 26 September 2023~~ Monday, 18 March 2024

Attention: Rob McKendrick

Take notice: that under the *Environmental Protection Act 1994* (the Act) a notice to conduct or commission an environmental investigation is issued to Sealord King Reef Pty Ltd (ACN 105 576 609) (you) by the administering authority. The administering authority is the Chief Executive of the Department of Environment, Science and Innovation (the department).

The notice to conduct or commission an environmental investigation is issued in respect of the activities of Sealord King Reef Pty Ltd on land described as Lot 1 NR5347, Lot 2 CP886368, Lot 295 RP814124 and Lot 1 RP721954 (the premises).

A. Grounds

The notice to conduct or commission an environmental investigation is issued on the following grounds:

- An activity or proposed activity is causing, or is likely to cause environmental harm.

The facts and circumstances forming the basis for these grounds are:

1. You own and operate a barramundi farm facility at the premises which is run in conjunction with a barramundi nursery facility nearby on the Bruce Highway, Mourilyan, Qld.

2. You are the holder of environmental authority EPPR00390913 (the EA) issued 17 January 2023 which authorises environmentally relevant activity (ERA) 1 – Aquaculture.

3. The location of the premises is within the Johnstone River Basin, adjacent to both Cowley and Liverpool Creeks and up-gradient of their confluence.

4. The EA authorises releases in the form of “aquaculture wastewater” to the receiving waters of Cowley Creek and Liverpool Creek and prescribes release limits for multiple water quality characteristics. The limits have been assessed and approved by the administering authority.

Queensland Government

5. Release of contaminants is authorised via three release points, W1 and W2 via drainage line into Cowley Creek and W3 via drainage line into Liverpool Creek system (which you are not currently utilising).

6. On 3 March 2021, the department issued you a Notice to conduct or commission an environmental evaluation (STAT-E-100068167) as a result of continuous exceedances between July 2019 and September 2020 of contaminant release limits set by condition C5, Part 2 of the EA for both total nitrogen and total phosphorus at W1 and W2.

7. During the same period, you also had a number of exceedances of limits set by condition C5 Part 2 of the EA for Chlorophyll 'α' and dissolved oxygen.

8. These exceedances coincided with a significant number of exceedances of condition C4, Part 2 of the EA for wastewater discharge volume across this period indicating a likely increase in nutrient loadings in the receiving environment.

9. In response to the Notice STAT-E-100068167, you have conducted an environmental investigation (EE report) into potential environmental harm in accordance with the requirements of the Notice STAT-E-100068167.

10. The environmental investigation included 17 months (September 2021 to February 2023) of water quality monitoring at the release points, W1 and W2, and the receiving environment of Cowley Creek.

11. On 13 June 2023, you have submitted a Report titled *"Final Environmental Evaluation Report Sealord King Reef Pty Ltd Cowley Creek farm operation June 2023"* (EE Report June 2023) prepared by Nautilus Collaboration and Aquenal Pty Ltd.

12. The EE Report June 2023 provided the following environmental investigation outcomes:

    a) The 80th percentile-limit for both total nitrogen and total phosphorus were exceeded at the release point W1 on all occasions. Maximum limits were exceeded on all occasions for total phosphorus and on most occasions for total nitrogen. Dissolved oxygen was variable, but under the minimum EA limit, on several occasions. Chlorophyll α concentrations at W1 showed several high spikes between December 2021 and June 2022 that exceeded maximum discharge limits, but then decreased to levels below the maximum limits thereafter.

    b) Total nitrogen at the release point W2 was consistently over the permitted EA limit up to April 2022. The maximum limit has only been exceeded once since then, and the concentrations are hovering around the 80th percentile-limit. For total phosphorous no improvement was evident, when comparing concentrations against the maximum limit. However, for the 80th percentile-limit for total phosphorous, there appears to be an improvement more recently. Dissolved oxygen was variable, but under the minimum EA limit, on several occasions. Chlorophyll α concentrations at W2 appear to have improved in recent times, meeting or approaching the EA limit.

    c) The discharge volumes released from both W1 and W2 were frequently over the maximum daily release limits. This appears to be the case even during low or no daily rainfall, signifying an exceedance of the EA release limits.

    d) When comparing monitoring results between the background (upstream) sites and impact (downstream) sites, there is potentially a significant reduction (or improvement) in contaminant concentrations in the 2022/23 results compared to 2021/22. Total suspended solids and turbidity comply with the water quality objectives, which could be attributed to the improved management and treatment of waters onsite.

13. Review of the EE Report June 2023 by the administering authority has indicated you have made a substantial effort to improve water quality management on site, which shows measurable improvement in the receiving environment of Cowley Creek in 2022/23.

14) The EE Report June 2023 recommends ongoing management improvements and recommendations to manage water quality and quantity, which include reinstating release point W3 which releases to Liverpool Creek by late 2025. Reinstating W3 is expected to significantly reduce wastewater releases to Cowley Creek and potentially improve water quality of Cowley Creek, however the proposed timeframe for implementation means potential improvements associated with this action will not be realised for an extended period.

15) On 9 August 2023, the administering authority issued a Notice of decision to accept the EE Report June 2023 on the grounds that you have reasonably addressed the requirements of the Notice STAT-E-100068167.

16) Following acceptance of the EE Report June 2023, you were advised that the administering authority may take additional steps under section 326H of the Act.

17) Continuous monitoring from March to July 2023 at the release points, W1 and W2, indicated that levels of nutrients (total nitrogen and total phosphorus) remained elevated, exceeding the EA contaminant limits.

18) The discharge volumes at both release points, W1 and W2, remained over the maximum daily release limits specified in the EA during most of the daily monitoring periods from March to July 2023.

19) The EE Report June 2023, as well as the results of continuous monitoring undertaken from March to July 2023, has indicated that the farm operation is causing environmental harm and is likely to continue causing environmental harm.

20) Results for downstream monitoring location CC-2 (downstream of release point W1), reported in the Receiving Environment Monitoring Program (REMP) report dated August 2023, show an increasing trend in numerous contaminants including ammonia, Reactive Phosphorus and Total Nitrogen from March to July 2023.

21) The REMP report dated August 2023 has indicated that the default water quality objectives for certain parameters (total phosphorus, reactive phosphorus, total nitrogen, ammonia, oxidised nitrogen, chlorophyll α and dissolved oxygen) were not met downstream of release points W1 and W2 during the monitoring period.

22) The administering authority is satisfied on reasonable grounds that an environmental investigation is appropriate to require further investigation on the recommended management measures, and associated timeframes for implementation, to prevent further environmental harm.

B. Requirements

The report on the environmental investigation must address the following relevant matters:

1. By 31 October 2023, you must engage an appropriately qualified person to investigate options to reduce contaminant inputs to Cowley Creek from the premises, including but not limited to an assessment of:

    a) sludge management;

    b) feed management;

    c) stock density management;

d) pond water quality and water exchange management;

e) recirculation and/or reduction of wastewater releases to waters;

f) reinstatement of Release Point W3 to Liverpool Creek, including details of release point location and details of actual or proposed release volumes to Cowley and Liverpool Creeks; and

g) treatment pond management.

2. By ~~28 June 2024~~ 30 September 2024, the appropriately qualified person must provide an interim report which includes:

a) A desktop assessment of the potential efficacy of each option identified in requirement 1 in:

i. reducing contaminant releases to the receiving environment;

ii. achieving EA water quality and quantity limits; and

iii. improving water quality of the receiving environment.

b) results of any water quality monitoring undertaken as a result of the implementation of any items listed in requirement 1 a), b), c), d) and g) above, and results of water quality monitoring undertaken at the release points and the receiving environment of Cowley Creek and Liverpool Creek;

c) the steps required to implement each option;

d) a timetable for the implementation of each option and justification for the timeframes in the context of ongoing exceedance of EA release limits and the need to achieve compliance as soon as practicable; and

e) monitoring conducted, or to be conducted, to assess the effectiveness of each option implemented, or to be implemented.

3. By ~~31 October 2024~~ 31 March 2025, you must submit an Environmental Report about the environmental investigation that:

a. is prepared by the appropriately qualified person engaged under requirement 1;

b. addresses each of the items listed in requirements 1 and 2;

c. sets out any proposed locally derived water quality objectives for the farm operation;

d. includes collation and interpretation of all monitoring data obtained under this environmental investigation; and

e. includes proposed changes to your Receiving Environment Monitoring Program required under your EA Part 2 condition H9, to include monitoring in Liverpool Creek and includes consideration of potential reinstatement of release point W3.

Take notice:

1. The requirements of this notice to conduct or commission an environmental investigation take effect immediately upon service of this notice.

2. This notice remains in force until further notice from the department.

3. You are responsible for meeting the costs of conducting or commissioning the environmental investigation, preparing the report, and providing any further information as requested by the department.

Environmental Report submission requirements

- As the **recipient** of this notice, you are required to provide a declaration to accompany the environmental report submitted to the department.

  The recipient declaration template and the information required to complete the declaration is available at Compliance guidelines | Environment | Department of Environment and Science, Queensland (des.qld.gov.au)

DEFINITIONS

Appropriately qualified person means a person or persons who has professional qualifications, training, skills and experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis of performance in relation to the subject matter using the relevant protocols, standards, methods or literature.

C. Reviews and appeals

The provisions regarding reviews of decisions and appeals are found in sections 519 to 539 of the Act.

A person who is dissatisfied with an original decision made by the Department of Environment and Science (the department) may apply to have that decision internally reviewed.

Information about initiating an appeal in relation to this notice is contained within the Internal Reviews and Appeals Information Sheet (available at www.qld.gov.au using the publication number ESR/2015/1742 as a search term).

A request for review or appeal is to be made using the approved form 'Application for review of original decision' (available at www.qld.gov.au using the publication number ESR/2015/1573 as a search term).

Applications for reviews are to be sent to Permit and Licence Management, Department of Environment and Science: via email at palm@des.qld.gov.au, or by mail to the following address: GPO. Box 2454, Brisbane, QLD, 4001.

Where an application has been made for a decision to be reviewed, the applicant may also apply to the relevant court for a stay of the decision to secure the effectiveness of the review.

Once the original decision has been reviewed, a person who is dissatisfied with the review decision may be able to appeal against that decision to the relevant court within 22 business days after receiving notice of the review decision.

A person whose interests are or would be adversely affected by a decision of the department may be able to request a statement of reasons for a decision or a statutory order review under the *Judicial Review Act 1991*.

You may have other legal rights or obligations and should seek your own legal advice.

D. Public Register

Pursuant to section 540 of the EP Act, the Department is required to maintain a register of certain documents and information authorised under the EP Act. A copy of this document will be kept on the public register. The register is available for inspection by members of the public who are able take extracts, or copies of the documents from the register. Documents that are required to be kept on the register are published in their entirety, unless alteration is required by the EP Act. There is no general discretion allowing the department to withhold documents or information required to be kept on the public register. For more information on the department's public register, search 'public register' at www.qld.gov.au. For queries about privacy matters please email privacy@des.qld.gov.au or telephone 13 74 68.

E. Penalty

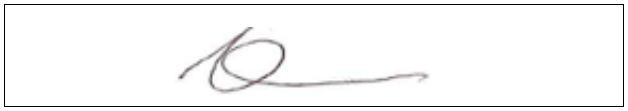
It is important that you know the impact to you personally as an individual or as a corporation for not meeting your obligations.

Under section 326D of the Act, failure to comply with a notice to conduct or commission an environmental investigation is an offence.

- The maximum penalty for failing to comply with a notice to conduct or commission an environmental investigation is 300 penalty units, totalling $ 46,440 for an individual or $232,200 for a corporation.

Section 3 of the *Penalties and Sentences Regulation 2015* prescribes the monetary value of a penalty unit.

Should you have any queries in relation to this notice, please contact Alex Apostol of the department on telephone number 07 4222 5316.



Signature

18/03/2024

Date

Mark Watson
A / Manager Compliance
Department of Environment, Science & Innovation
Delegate of the Chief Executive
Environmental Protection Act 1994

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