

ASSESSMENT REPORT

Section 75W Modification

Australian Bay Lobsters (DA 282-11-2004 MOD 2)

1. BACKGROUND

In December 2005, the then Minister for Infrastructure and Planning approved a development application from Australian Bay Lobster Producers Pty Ltd (ABLP) to construct and operate a commercial bay lobster aquaculture facility at Cudgen, in the Tweed local government area.

Once fully developed, the facility would occupy an area of around 45 hectares (ha) of a 150 ha rural property (refer to Figure 1).

The property is located on the floodplain of the Tweed River, and has direct access to the Pacific Highway to the west. The closest resident is the owner of the Melaleuca Station Crematorium, which is located around 500 metres to the west. Land use activities surrounding the site are predominantly used for the cultivation of sugar cane and *Melaleuca* trees.



Figure 1: Site location and regional context

Wastewater pipeline Seawater intake pipeline

The approved aquaculture facilities include:

 <u>three Farms</u> to be constructed and operated over three independent Stages, each on around 15 hectares (ha);

- hatchery and grow-out facilities at each Farm, as well as car parking, and seawater and freshwater storage tanks;
- ancillary facilities such as processing building, workshop facilities, administration building and site access upgrade at the main development site;
- an underground pumping station at Dreamtime Beach and sub-sand <u>seawater intake</u> <u>pipeline</u> from the pumping station to the main site; and
- <u>a wastewater pipeline</u> from the main development site to the Kingscliff Wastewater Treatment Plant (Kingscliff STP).

It should be noted that in December 2008, a separate Ministerial approval was issued in relation to the Project under Part 3A of the *Environmental Planning and Assessment Act 1979* (the Act) to approve an alternative route for approximately 2 kilometres of the 5.5 kilometre wastewater pipeline route. The change in route was approved in order to minimise disruption to local roads during construction, and to facilitate the extraction of sand along the approved pipeline route. The approval was undertaken as part of a separate application due to some legal uncertainties in relation to modifying the original development consent.

In 2012, ABLP commenced construction of Stage 1 of the project with the importation of fill material to provide flood-protection for the operation via an elevated platform. Since this time, ABLP has now completed additional components of Stage 1 (Farm 1, as depicted in Figure 2) including:

- bulk earthworks,
- access road upgrade and car parking;
- workshop facilities and administration building;
- seawater and freshwater storage tanks;
- the main processing building a large 'glasshouse' style structure for processing (of dimensions around 30m by 43m and 11m in height); and
- the remainder of the Stage 1 buildings i.e. 'greenhouse' style structures including hatchery and growout facilities.

Stages 2 and 3 (Farms 2 and 3) have not yet been constructed, but will have a similar layout to Stage 1. An indicative layout of the Stage 1 Farm is provided below.



Figure 2: Stage 1 (Farm 1) layout

ABLP has recently obtained a small amount of seawater directly from the Tweed River to flush out the new aquaculture system (constructed as part of Stage 1) and there are currently several broodstock animals in the tanks which are being managed by a filtered flow system. This has created some wastewater which is currently being stored on the site.

Construction of the Stage 1 pipelines has been hampered by financial issues and physical delays (specifically of the wastewater pipeline) due to heavy rainfall in the vicinity of the site. Notwithstanding, construction of the wastewater pipeline did commence on 26 August 2013, and it is expected to be completed by 21 October 2013. Construction of the seawater intake pipeline has not commenced, and it is not expected to be completed until 2017 (at the earliest).

ABLP has now determined that the Stage 1 farm could commence operating with temporary seawater supply and wastewater arrangements in place. Under these arrangements, ABLP would initially operate within one third of the existing building, slowly increasing production as funds become available. These proposed amendments are discussed further in Section 2 below.

ABLP has confirmed it would not house any additional animals until such time as these new arrangements are approved.

2. PROPOSED MODIFICATION

On 26 August 2013, ABLP submitted an application to modify the development approval (DA 282-11-2004) under Section 75W of the *Environmental Planning and Assessment Act, 1979* (EP&A Act). A copy of application is included in **Appendix A**.

The application generally seeks to facilitate the partial operation of Stage 1, through the supply of seawater from the Tugun Desalination Plant approximately 25km away (until around 2017), instead of via the approved pipeline (from Dreamtime Beach at Kingscliff). It also seeks to temporarily dispose of wastewater to a site on the Tweed River until the wastewater pipeline is completed (in October 2013).

In order to facilitate these temporary arrangements, ABLP has proposed to amend Stage 1 through the creation of Stages 1a and 1b. Details of the proposed measures to supply seawater and dispose of wastewater during Stages 1a and 1b are described below:

- <u>Stage 1a</u>
 - i. Two truckloads of <u>seawater</u> (a maximum of 40,000 litres) would be transported daily to the ABLP site from the Tugun Desalination Plant (see Figure 4).
 - ii. Up to two truckloads of <u>wastewater</u> (a maximum of 40,000 litres) would be temporarily (until 14 October 2013) taken to a site on the Tweed River at Chinderah for discharge (see Figures 3 and 4).
- Stage 1b
 - i. Up to eight truckloads of <u>seawater</u> (160,000 litres) delivered to the site daily from the Tugun Desalination Plant; and
 - ii. <u>wastewater</u> would be disposed of via the completed pipeline (see Figure 1), as per the original approval, to the STP for treatment and discharge.

The amendments to the seawater supply and wastewater discharge arrangements are described in Table 1 below. The truck routes from the site to Tugun and the temporary wastewater discharge site at Chinderah are depicted in Figure 3.

Table 1: Proposed staging of the seawater supply and wastewater	disposal.
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Water type	Stage 1a	Stage 1b	Stage 2	Stage 3
Seawater supply	Supply of seawater from the Tugun Desalination Plant (Figure 4), two tankers per day carrying 20,000 litres of seawater per trip.	As per Stage 1a, however the amount would be slowly increased to up to eight tankers per day.	Construction and operation of the seawater pump and pipeline between Kingscliff and the site as approved.	Seawater drawn from Kingscliff as approved.
Wastewater discharge	Discharge of wastewater to a site on the Tweed River (Figure 3). Up to two tankers (4 trips) per day carrying up to 20,000 litres per trip.	Completion and operation of the wastewater pipeline from the site to the Kingscliff sewage treatment plant (STP) as approved.	Use of the wastewater pipeline as approved.	Use of the wastewater pipeline as approved.
Timing	Commencing on the approval of this modification application	14 October, 2013	Around 2017	Around 2019



Figure 3: Sea water and wastewater truck routes, stages 1a and 1b

During all stages of the development, seawater (both treated and clean) would be stored in poly tanks (see Figure 2), prior to use or disposal.

Onsite treatment of wastewater would be undertaken in accordance with the original approval, including for new Stages 1a and 1b.

As discussed above, whilst the wastewater pipeline is being completed during Stage 1a, wastewater would be trucked from the ABLP site to a drainage channel of the Tweed River. The channel is accessed via private property at Wommin Bay Road, Chinderah, just south of the intersection of Chinderah Bay Drive (See Figures 3 and 4). Trucks would reach the channel via a gravel sealed access track from Wommin Bay Road.

The wastewater would meet the effluent discharge limits set out in the Kingscliff STP's Environment Protection Licence (EPL), and discharge from each tanker truck would take 30 minutes to release 20,000 litres (twice a day).



Figure 4: Location of the temporary wastewater discharge in a drainage channel near the main channel of the Tweed River.

3. STATUTORY CONTEXT

Modification

In 2005, the ABLP project was approved by the then Minister as a State Significant Development application under the then Section 80 of the *Environmental Planning and Assessment Act 1979* (the Act). At this time, any aquaculture projects that employed more than 20 people were deemed to be a State Significant Development by virtue of a specific Order made on 3 August 1999 under Section 76A of the Act.

This application proposes to modify DA 282-11-2004 granted by the then Minister under Part 4 of the *Environmental Planning and Assessment Act 1979* (the Act).

Under clause 8J (8) of the *Environmental Planning and Assessment Regulation 2000*, this consent is taken to be an approval under Part 3A of the Act and can be modified by the Minister under section 75W of the Act.

Section 75W of the Act as in force immediately before its repeal on 1 October 2011, and as modified by Schedule 6A, continues to apply to this development consent in accordance with Clause 12 of Schedule 6A of the Act.

Approval Authority

The Minister for Planning and Infrastructure is the approval authority for the proposed modification. However, under the Minister's delegation of 14 September 2011, the Director of Industry, Social Projects and Key Sites can determine the application, as Council did not object to the modification application, there were no public submissions objecting to the proposal, and there has also been no political disclosure statement made for this application or for any previous related applications.

4. CONSULTATION

The EA for the modification was made publicly available on the Department's website. The Department sought submissions from the Environment Protection Authority (EPA) and Tweed Shire Council (Council). Consultation with other government agencies and neighbouring sites was considered to be unnecessary as the environmental impacts of the proposal would be short term and minimal.

The **EPA** raised no concerns with the modification but recommended a number of conditions relating to the monitoring and discharge of wastewater. These requirements have been incorporated within the recommended conditions of approval and EPL for the site.

Council did not object to the modified development, but did raise concerns about community consultation, s.94 contributions and water quality impacts. In addition, ABLP undertook extensive consultation with Council to determine a suitable temporary wastewater discharge site. Council's issues have been addressed through the proposed amendments to conditions (and new conditions) as discussed further in Section 5. Council provided land owners consent to access the drainage channel at Chinderah for wastewater disposal, and final road contribution requirements on 7 September 2013.

Copies of these submissions and land owners consent is in Appendix B.

ABLP has provided responses to Council and EPA's submissions and has accepted the proposed new and amended conditions.

5. ASSESSMENT

The Department has assessed the application on its merits, and considers the key issues of the modification to be water quality, community consultation and road contributions.

5.1 Wastewater quality during Stage 1a

Wastewater from the operation of the facility is required to meet stringent water quality limits (particularly relating to nitrogen and phosphorus).

Under the 2005 approval, wastewater would be treated onsite, then conveyed to the Kingscliff STP, where it would be combined with the STP's own wastewater prior to final release at the existing outfall at Jenner's corner on the Tweed River.

During the proposed Stage 1a, rather than being discharged directly to the STP via pipeline, ABLP is proposing to transport up to 40,000 litres of treated wastewater by tanker (two trips per day) to be pumped out directly to the nominated Tweed River discharge point (just south of the Chinderah Bay Drive and Wommin Bay Road intersection) as discussed in Section 2.

The Department notes that the entire development (i.e. all three Stages) is predicted to contribute less than 1% of the total phosphorus and nitrogen load in the Tweed River. The Department is satisfied that the nutrient load would not change with the proposed modification as treatment would be undertaken in accordance with the original approval prior to discharge from the site.

For Stage 1a, ABLP are committed to ensuring that wastewater is compliant with the discharge limits imposed on the Kingscliff WTP prior to discharge. Any wastewater that does not meet these water quality requirements would be retained on site and further treated prior to discharge.

The EPA recommended that during Stage 1a, water quality sampling/testing should be undertaken twice weekly, both prior to loading into tanker and also at the point of discharge. These requirements (and concentration limits) would be included in the EPL for the site.

To further minimise potential water quality impacts at the temporary discharge site, the EPA and Council have recommended the following additional conditions:

- that discharge into the drainage channel should only occur on the outgoing tide (to ensure nutrients are quickly dispersed),
- discharge should be undertaken in a manner that would not mobilise sediments; and
- no riparian vegetation is permitted to be removed from the drainage reserve to allow truck access, as it is considered to have high ecological value.

The Department has included both the EPA and Council's recommendations in the draft conditions of approval, and is satisfied that the recommended conditions would impose measures to ensure that any temporary water quality impacts from Stage 1a are adequately managed and monitored, and discharge into the drainage channel would not impact on sediments or vegetation at the point of discharge.

A summary of the Department's consideration of all other issues is provided in Table 2 below, along with recommendations for new and amended conditions.

Issue	Consideration	Recommendation
Seawater supply	 During the proposed Stages 1a and 1b, ABLP is proposing to obtain seawater from the Tugun Desalination plant. Initially, ABLP would require two tankers of seawater per day (40,000 litres). As production increases, up to 8 tankers of seawater would be required (160,000 litres). The proposed modifications to Stage 1 would generate an additional maximum of 16 truck (tanker) trips per day between the site and the Tugun Desalination Plant, until the commencement of Stage 2 (in 2017), when the seawater supply pipe is operational. The Department notes that the ABLP site has direct access to the Pacific Highway and sea water supply trucks would not travel on local roads (see Figure 3). As such, the Department considers that the traffic/amenity impact from the amended seawater supply would be negligible. Notwithstanding, the Department has recommended a condition to ensure that the seawater intake pipeline and pump house is operating prior to the commencement of Stage 2. 	Recommended conditions require the Applicant to ensure the seawater supply pipeline is operational prior to the commencement of Stage 2.

 Table 2: – Consideration of other issues and proposed conditions

Issue	Consideration	Recommendation
Amenity impacts and community consultation	 Council requested community consultation prior to any wastewater discharge undertaken as part of Stage 1a. The Department considers that any short-term amenity impacts would be minimal, however, it is noted that noise could be an issue during the pump out operations (of wastewater). The Department also notes Council's concerns regarding the active community interest in the ABLP activities in general. To minimise potential noise impacts during the pumping out of wastewater should only be discharged during standard construction hours. The Department also considers that community relations could be enhanced by through the notification of residents within 1 kilometre of the temporary discharge site at Chinderah, and signage at the site containing the contact details for an environmental representative. The Department has recommended new conditions to ensure appropriate signage is in place at the discharge site and notification to residents occurs prior to the commencement of Stage 1a. Council is satisfied that these arrangements are satisfactory and ABLP have accepted the draft conditions. 	 Recommended conditions for Stage 1a would require the applicant to: ensure residents are notified within 1km of the discharge site, through the implementation of a Community Consultation Plan; install signage at the access point to the temporary wastewater discharge site; and only pump out wastewater during standard construction hours.
Local road contributions	 Council requested that s.94 contributions be paid in accordance with the <i>Tweed Road Contributions Plan January 2009</i> for the additional traffic being generated along local roads during Stage 1a for the temporary disposal of wastewater by tanker. During Stage 1a there would be two tankers per day (4 trips) which generates \$4,704 in s.94 fees. ABLP has agreed to pay the required funds to Council (within a timeframe that is acceptable to Council). 	 Recommended conditions would require the Applicant to: pay \$4,704 in contributions in accordance with the <i>Tweed Road</i> <i>Contributions Plan</i> dated January 2009.

6. CONCLUSION

The Department has assessed the application in accordance with the relevant requirements of the EP&A Act.

This assessment has found that:

- rigorous treatment and testing would ensure that wastewater meets the discharge limits that would be detailed in the EPL for the site;
- the disposal of wastewater to a drainage channel near the Tweed River would be temporary in nature and any environmental impacts would be mitigated and managed through the recommended conditions;
- additional conditions would ensure that community consultation prior to the temporary discharge of wastewater is appropriate;
- amenity/traffic impacts from the supply of seawater from the Tugan Desalination Plant until around 2017 would be negligible; and
- the revised staging plan would enable ABLP to commence operating immediately.

Consequently, the Department considers that the modification application should be approved subject to some amendments and additions to the existing conditions of consent.

7. RECOMMENDATION

It is RECOMMENDED that the Director:

- **consider** the findings and recommendations of this report;
- **approve** the application subject to the amendments to the conditions of consent in Schedule 2 of the Instrument of Approval; and
- **sign** the attached notice of modification (Appendix C).

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