

3 April 2019

Att: Richard Hook
Development Assessments
Environment Protection Authority
GPO Box 4395, Melbourne VIC 3001

Sent via email: Richard.hook@epa.vic.gov.au

Dear Richard,

I am writing to you with a formal response and right of reply to recent stakeholder submissions received by the Environment Protection Authority (EPA) and Glenelg Shire Council (Council) that relate to concerns regarding Port of Portland's existing and future activities. These submissions have been received between 20 December 2018 and 26 March 2019 in response to a works approval application (WA1003316) and planning permit application for the proposed development of an abalone farm at Lots 1 and 8, 315 Dutton Way Bolwarra, Victoria.

Yumbah Nyamat will comply with Victorian legislative and statutory policy requirements. The abalone farm has been designed to achieve best practice in abalone farming. The Yumbah Nyamat site does not compromise the existing nor future activities of Port of Portland (POPL). Yumbah has continued to confirm that the existing activities of sand bypassing will not have any detrimental impact to the abalone farm.

There are a number of issues that have been raised in submissions that relate to POPL. These can largely be separated into:

1. Sand bypassing
2. Maintenance dredging activities
3. Potential future capital projects
4. Planned use and development of the proposed site

Please find our response to recent submissions received by your office that refer to Yumbah causing cessation of the important sand bypassing activity conducted by POPL and compromising the yet to be corroborated capital POPL projects POPL that will form part of future growth. We welcome this opportunity to provide further context and highlight some of the misguided information presented to Council and EPA regarding the sand bypassing, maintenance dredging activity and associated CMA consent (now MACA), as Yumbah is aware at this point in time. Council is considering the land use as part of the planning permit application. The issues raised about land use compatibility and zones are not discussed in this letter.

1. Sand bypassing

Yumbah's existing Narrawong farm and the Yumbah Nyamat farm will exist in Portland Bay and be exposed to the same coastal hydrodynamic influences that are characteristic of Portland Bay. Yumbah Narrawong has operated at its existing site for 19 years. The conditions of Portland Bay provide an ideal environment for abalone farming.

1.1 Our Assessment

Yumbah Nyamat will be approximately 5km from POPL and the activity of sand bypassing has negligible impact to abalone farming. The nature of sand bypassing is relocating coarse sand which has been trapped on the south side of the Port's southern breakwater. Material bypassed is expected to be natural unconsolidated sediment that is generally larger uncontaminated particles that effectively settle close to the area of placement. This is dissimilar to sediment disturbed during capital dredging which usually requires removal of deeper consolidated material that is comprised of finer, silty and sometimes contaminated sediment. Further information relating to capital projects and dredging are discussed in section 3 of this letter.

Following requests from Council and EPA, Yumbah has completed further technical assessment, to the maximum extent possible, in relation to the concerns raised by POPL regarding its sand bypassing activities and potential impact to Yumbah's operations.

On 12 February 2019, Yumbah formally wrote to POPL requesting information relevant to the sand bypassing that would assist Yumbah to confirm our assertion that sand bypassing will have a negligible impact on Yumbah Nyamat, in the same way that there is no impact at Yumbah Narrawong.

Yumbah received a formal response from POPL and limited information submitted by POPL includes:

- Sand By-passing and Smelter Obligations Deed dated 6 March 1996
- Channel Operating Agreement dated 6 March 1996
- Coastal Management Act Consent for use and development of Coastal Crown Land, Maintenance Dredging, Port of Portland dated 17 September 2012

These have all been reviewed by Yumbah to assist with validating Yumbah's position that the existing sand bypassing activities will not have an adverse impact to its abalone farms

1.2 Advice received to support Yumbah's position

To support the planning and environmental approvals required from Council, EPA and Department of Environment, Land, Water and Planning (DELWP) Yumbah has sought advice from Coastal Engineer Dr Peter Riedel on several occasions. There is no other Coastal Engineer that understands the coastal process of Portland Bay better than Dr. Riedel. For this reason, Yumbah, POPL, the Victorian state government and the Glenelg Shire have all relied on Dr Riedel's advice over the past two decades.

Dr. Peter Riedel could not be any clearer when he states:

Sand bypassing at POPL will not have any effect on the suspended sediment at intake pipelines proposed as part of Yumbah Nyamat.

For reference, I have again included the advice from Dr Riedel below, specific to the POPL sand bypassing and impacts to Yumbah Nyamat:

- *Sand bypassing at POPL will not have any effect on the suspended sediment at intake pipelines proposed as part of Yumbah Nyamat.*

- *The sand that POPL by-passes to Anderson Point moves quickly into the beach/embayment area to the north of Anderson Point because the sediment transport capacity in this region by longshore transport is approximately three times that along the Dutton Way/ Henty Bay & the shoreline eastward to Surrey River.*
- *Suspended sediment will be generated over the whole sandy floor of Portland Bay by storm waves regardless of the by-passing activity of POPL.*
- *Water extracted from Portland Bay often contains large quantities of sand particularly during and following weather events. This sand makes its way through Yumbah Narrawong's tank and drain network.*
- *The sand moving along Portland Bay moves predominantly in the nearshore area by wave action and the rate of movement at the new farm will be almost identical to that at Yumbah Narrawong.*
- *Similar concentrations of sand are expected to enter Yumbah Nyamat and a large proportion of this will be discharged through the system back into Portland Bay.*
- *The quantity of sand moving along the foreshore and past the seagrass meadows by natural processes is of the order of 50,000 m³ per year. Most of this movement occurs when there is moderate to strong swell wave action which effectively lifts the fine sand (typically 0.18mm) into suspension and moves it from west to east.*

Given Dr Riedel's knowledge and credentials in coastal processes particularly in Portland Bay, we see no reason to doubt his advice provided to Yumbah.

1.2 POPL Sand Bypassing Environmental Management Plan (EMP)

To further assist with the investigation and assessment of all the information presented by POPL, Yumbah reviewed the *POPL Sand Bypass Project Environmental Management Plan* dated 24 January 2014 (the Sand Bypassing EMP) available from the POPL website¹. The POPL EMP is a document approved by DELWP, formally Department of Environment and Primary Industries (DPI).

Condition 1 of the POPL Sand Bypassing CMA consent states:

Prior to any dredging, sweeping or land reclamation works beginning, an Environmental Risk Register must be prepared and approved by the Director Major Projects and Environmental Approvals, Department of Sustainability and Environment (the Director). The register must detail-

- *Activities associated with the proposed works.*
- *Potential hazards associated with the proposed works.*
- *Probability and consequences of risks associated with activities for the proposed works.*
- *Control measures to deal with the probability and consequences of risks associated with activities for the proposed works.*

POPL presents a risk assessment in the Sand Bypassing EMP. POPL provides their comprehensive review of the risks associated with the sand bypassing operations including the impacts of the sediment placement at Andersons Point and beaches in the south west corner of the bay. This is 2.5kms from the proposed Yumbah Nyamat abalone farm site.

¹ http://www.portofportland.com.au/images/stories/environment/Dredging/Sand_Bypassing_EMP.pdf

As stated in POPL's EMP, *the risk assessment completed by POPL is conservative (i.e. where uncertainty exists, it errs on the side of caution) and it is therefore more likely to overestimate risk than underestimate it. This approach is protective of the environmental values identified and therefore consistent with POPL's policy of pursuing environmental objectives.*

The EMP also includes advice from Coastal Engineering Solutions (2007) (Dr Peter Reidel) that indicates approximately 500,000 cubic metres could be stored in the north-west corner of Portland Bay without impacting on the Portland Bay Special Management Area (adjacent to Dutton Way), and that sand could be by-passed at a rate of up to 150,000 m³/yr, of which approximately 50,000 m³/yr would be naturally transported eastward **without affecting environmentally sensitive areas.**

The POPL EMP has not relied on modelling to support the outcomes of its risk assessment. It relies almost entirely on the reports and advice provided by Dr. Riedel (formerly Coastal Engineering Solutions). The POPL EMP has been approved by the Victorian government, and the responsible regulators (DELWP) have confidence that the sand bypassing creates low risk to Portland Bay, **without affecting environmentally sensitive areas.**

It is of concern and without merit that POPL demand Yumbah conduct further expensive modelling (using necessary data that has not been forthcoming from POPL) when they themselves have not undertaken this approach to inform their own EMP, which was deemed acceptable by DELWP and received full endorsement by the State government and approval in 2014.

Table 1 outlines a selection of stressors and associated impacts of the sand bypassing that are included in the POPL Sand bypassing EMP. These stressors and effects identified by POPL clearly indicate through their assessment that the risks to the immediate environment where sand bypassing occurs, and to adjacent areas are **LOW**. This is consistent with Yumbah's assertion and Dr Peter Reidel's continued advice that sand bypassing will not have a detrimental or adverse impact to Yumbah Nyamat's operation. As emphasised on numerous occasions, the impacts at Yumbah Nyamat will be consistent with the impacts at Yumbah Narrawong. Sand will enter and exit both farms.

Table 1 Extracts from POPL Sand Bypassing Risk Assessment (EMP, 2014)

Stressor	Effect	Impact and Supporting Evidence	Risk
Release of nutrients	Increased primary productivity and algal blooms	<p>The sand to be extracted is clean oceanic sand. Sand extracted from the same area in previous sand bypassing campaigns contained very little organic material. However, organic material (bull kelp) is known to arrive in the project area following storms. This is a natural nutrient input and would be transferred along shore anyway by normal coastal processes.</p> <p>Area is of high wave energy and therefore any nutrients released will be quickly dispersed. There have been no known previous algal blooms within the area.</p>	Low
Slurry spills/leaks or pipeline rupture	Disturbance to coastal and marine biota	The sand to be transported in the pipeline is clean oceanic sand, free of contaminant. There are no sensitive habitat or threatened species in the vicinity of the project (DSEWPaC, 2012c) that would be detrimentally affected by sand or seawater along the pipeline route.	Low
Sediment placement at Andersons Point	Disturbance to reef habitat and biota	The area of sediment placement is the same as previous sand bypassing. The area has experienced sand placement over previous decades and any biota is likely to quickly recover from recruits and juveniles present in nearby similar habitats. It is not expected that the effects will be detrimental on a local or regional scale.	Low
	Suspended sediment effects on filter feeding fauna	The high energy environment naturally suspends fine sand present in the area. Sediment in the extraction area was classified as fine sand in a recent soil/aggregate classification test report conducted by Southern Testing Laboratories Pty Ltd and less than 2% of sediment was silt (STL 2012). Works will be of short duration and fish and marine invertebrates would already experience such disturbance and are expected to recover rapidly.	Low
	Suspended sediment causing reduced light affecting seagrass health	Any increase in turbidity above background levels will be highly localised within the near shore, high energy environment that naturally suspends fine sand present in the area. Works will be of short duration (approximately 2 to 4 weeks) which is unlikely to impact seagrass in the long term. Two species of seagrass are known to be present near Andersons Point, <i>Amphibolis antarctica</i> and <i>Heterozostera tasmanica</i> (Koopman et al. 2011). Studies have shown that <i>A. antarctica</i> are	Low

Stressor	Effect	Impact and Supporting Evidence	Risk
		<p>not impacted upon a short-term extreme light deprivation events (Bryars et al. 2008) and can readily re-establish in bare substrate (Westphalen et al. 2005). <i>H. tasmanica</i> also has a minimal light requirement however does not tend to fare well with the combination of low light and high sediment deposition (Westphalen et al. 2005).</p> <p>Due to the common occurrence of nearby similar habitats, it is not expected that the effects will be detrimental on a local or regional scale</p>	
	<p>Release of nutrients Increasing primary Productivity and algal blooms</p>	<p>Sediment in the extraction area was classified as fine sand in a recent soil/aggregate classification test report conducted by Southern Testing Laboratories Pty Ltd (STL 2012) and organic matter only arrives due to storms. The Placement area is of high wave energy and therefore any nutrients released will be quickly dispersed. There have been no known previous algal blooms within the area.</p>	Low
	<p>Alteration of the coastal profile</p>	<p>Due to a smaller sediment movement potential east along the coast adjacent to Dutton Way compared to that along the western coast of Portland Bay, it is anticipated that sediment will accumulate over a period of years in the north-western corner of Portland Bay (refer Annexure 1, Coastal Engineering Solutions, 2007). This will lead to accretion (build up) of the beach and seaward movement of the shoreline. 500,000 cubic metres of sand could accumulate in this area without negatively impacting the adjacent Portland Bay Special Management Area (CES 2007). Less than 400,000 cubic metres of sand expected to accumulate due to the planned sand by-passing. The coast in the north-western corner of Portland Bay has suffered significant erosion and is now protected by seawalls with only narrow and intermittent beaches present. Sand accumulation will increase the volume of the beaches in this area and reduce the risk of damage to the seawall and further erosion.</p>	Low

2. Maintenance dredging activities

Yumbah has reviewed the *Port of Portland Maintenance Dredging Program 2012-2022 – Environmental Management Plan* completed by Worley Parsons (2013 Rev 1) (Maintenance Dredge EMP). Below are several sections in this Maintenance Dredge EMP that specifically relate to any future maintenance dredge campaign that are proposed by POPL.

The Maintenance Dredge EMP affirms the following:

- Coastal Management Act consent was granted on 17 September 2012 for a period of ten years. The EPA requires an Environment Improvement Plan (EIP) for formal approval of proposals for the management of dredge material. Section 16 and 17 of the State Environment Protection Policy (Prevention and Management of Contamination of Land) allows for disposal of chemical substances or waste to land via an approved Environmental Improvement Plan (EIP) that demonstrates best practice. The POPL EMP includes the information requirements of an EIP.
- The approval of the EMP and the Environmental Risk Register by the Director, Major Projects and Environmental Approvals Department of Sustainability and Environment (DSE) prior to any dredging and sweeping activities is a condition of consent issued under the Coastal Management Act 1995 for maintenance dredging works. EPA approval is required for disposal to land of dredged material that is classified as contaminated soil
- POPL has approval to dredge a maximum of 3000m³ of material alongside berths and within Portland Harbour that are less than specified depths.
- Should any future campaign (within the existing 10 yr consent period) require removal of more than 3000 m³, (plus 20% overdredging allowance) approval will be sought to vary this EMP in accordance with POPL Change Management arrangements
- Substantive changes to the EMP must be approved by the Director, Major Projects and Environmental Approvals, ², before works commence. Substantive changes include changes to a Project Delivery Standards (PDS), monitoring program, reporting requirement, program schedule, dredging activities, or dredging methodology.
- Dredged material will be placed on the wharf deck, banded and allowed to dewater. When the sediment is sufficiently spadeable, it is to be trucked to POPL's Cape Grant Quarry where it will be placed and capped.
- An assessment of sediment quality must be undertaken prior to dredging for each campaign and approval from the EPA must be received for the management of the dredged material prior to dredging.
- Each campaign will require review of legal requirements and environmental aspects associated with the campaign i.e. noise and odour associated with different dredging methods, material and vessels. Because campaigns may be 3-5 years apart, and contamination levels in sediments may differ between campaigns, sediments will need to be tested and EPA approval will be required for disposal of contaminated soil to land for each campaign.

² Now formerly Department of Environment, Land, Water and Planning (DELWP)

- Based on sampling in 2012, the EPA advised that the dredged material should be classified as category C waste and would be suitable for disposal at the Cape Grant quarry. Sampling of the dewatered dredged material is required prior to the disposal of the waste.

These statements above are highlighted in the POPL Maintenance Dredge EMP. The Maintenance Dredge EMP clearly outlines that any future maintenance dredge activities within the 10 year CMA (now *Marine and Coastal Act* Consent (MACA) consent period (2012-2022) will require consultation with EPA as a minimum, with likely communication with DELWP. The EMP also indicates that dredge spoil is not appropriate for disposal to sea, particularly the potential Dredge Material Ground (DMG) (spoil ground) in Portland Bay.

Logically in assessing any future dredging activities, EPA and DELWP will assess the environmental performance of proposed activities and hold POPL to the same stringent standards that Yumbah and other Portland Bay users are required to meet.

3. Potential future capital projects

Capital projects that impact the seabed usually require significant dredging. This requires removal of deeper consolidated materials that is usually comprised of finer, silty and sometimes contaminated sediment. Capital dredging usually involves the removal of sediments which have not been previously dredged, and the level of contamination is dependent on the proximity to industrial or urban locations. The existing CMA consent (now MACA) issued by DELWP is only relevant for *Maintenance Dredging* and it is expected that a new MACA consent would be required particularly where capital dredging is required.

Clause 6.3 of the POPL *Channel Operating Agreement 1996* states.

Products of Dredging

The Channel Operation shall at all times dispose, move or place any Dredged Material as required by any Law, including within limitations any guidelines, protocols, (including any draft of such a protocol) or other standards published by any Authority in relation to dredging from time to time.

It is Yumbah's understanding that any potential capital projects involving changes to the seabed and Crown Land is likely to require a new MACA consent, which will need supporting information on the extent of environmental impacts associated with any proposed works to the seabed. These will include (but not be limited to) hydrodynamic modelling of the marine environment to understand the extent of any sediment plumes from dredging, impacts to the wider marine environment, impact to migratory species including southern right and humpback whales, sediment characterisation and disposal options. These in themselves will require detailed assessments to verify the impact of any capital works.

Once again, any future capital works within the port environs is unlikely to be compromised by the position or activities of Yumbah Nyamat which is proposed to be greater than 4km from POPL. Any activity undertaken by POPL that has the potential to threaten Yumbah's existing or future abalone farms in the vicinity of POPL will also threaten Portland Bay and the broader marine environment.

4. Planned use and development of the proposed site

As Yumbah Nyamat will be greater than 4km from the Port of Portland environs, it is not plausible that its establishment will be deemed a sensitive and incompatible land use encroaching in the port environs. The activities of maintenance dredging appear to be confined to immediate port environs

and the management of the dredge activities (as outlined in the Maintenance Dredge EMP) appears to confine any potential impact to localised areas in the port zone. Impacts are not expected to extend anywhere near Yumbah Nyamat located over 4km from port environs.

5. Conclusion

We trust this provides further evidence that the existing activities of Port of Portland specific to their sand bypassing and maintenance dredge activities, both approved by DELWP will not impact Yumbah abalone farms in Portland Bay. **Yumbah has requested specific information from Port of Portland that will assist to validate that impact of POPL's existing activities will be of no detriment to Yumbah. This information, requested on numerous occasions, has not been forthcoming.**

There have not been any future projects or potential expansions announced by POPL. Future development and capital projects at POPL are speculative, such as the Alcoa LNG tanker proposal, and are not likely to be included in the Victorian Ports Strategy, which we understand is due to be released soon. As such, Yumbah cannot forecast, hypothesise or assume the potential impact to the port environs and the wider Portland Bay associated with any speculative capital projects and capital dredging. Yumbah is not aware of any approval yet to be provided by state and federal regulators that will allow POPL to dispose dredge spoil to the existing dredge material ground (DMG) in Portland Bay, adjacent to Whalers Bluff. Any impact of Port of Portland's future projects to Yumbah will also have an impact on the wider social, economic and environmental values of Portland and Portland Bay.

Like Yumbah, all activities performed by POPL must meet the requirements as specified under the various State Environmental Protection Policy's (SEPP) and other relevant regulatory requirements. As long as POPL complies with these, Yumbah and indeed the broader marine environment is protected.

We would like to work in partnership with POPL as both Yumbah and POPL are significant and strategic contributors to the economic and social prosperity of Portland and the wider region.

Do not hesitate to contact me on 0419 899 696 if you would like to discuss this further

Regards

Tim Rudge

General Manager Narrawong

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