

3<sup>rd</sup> November 2020

Office of the Independent Planning Commission NSW  
Level 3, 201 Elizabeth Street  
SYDNEY NSW 2000

Dear Commissioners,

Thank you for the opportunity to meet with you and to outline our concerns regarding the proposal, for the Dunmore Lakes Project Modification 2.

As discussed, our key concerns remain, as outlined in previous submissions to the Department. Whilst the proponent and the Planning Officer have suggested mitigation measures and subsequent approval of the project, Council continues to maintain that the proposal cannot be supported, in its current form.

Our key concerns include:

- The unknown potential impact of a 27m deep hole (Area 5B) so close to the Minnamurra River and salt marsh
- The potential impact of extraction and backfilling with material of different porosity (Area 5A) on the groundwater hydrology of the sensitive riparian environment
- The loss of the Bangalay Sand Forest EEC
- The loss of high value aboriginal artefacts
- The ongoing condition and maintenance burden that the activity will have on Riverside Drive

Whilst we acknowledge that the proponent seeks to provide economic benefit, such benefit will not be delivered to the local community and does not outweigh the significant environmental damage that would result. The impact would be borne by future generations and in this case the precautionary principle, should be applied.

Council requests that the application be refused based on the following matters of environmental concern:

### 1. Planning Pathway

Council understands that the test for whether the proposal is able to be assessed and determined under of the old section 75W of the Environmental Planning and assessment Act is quite open. While some elements of the proposal are consistent with the previous approval (e.g. mining methods, operational hours, annual production limits) the impacts of extending into Areas 5A and 5B are not comparable with the previous approval and are far more significant.

The areas proposed in Modification 2 are physically separated from those considered in the original approval and have a far greater likelihood of causing environmental impact. Areas 5A and 5B are both located in very close proximity to the Minnamurra River, and unlike the existing extraction areas, have the potential to impact on ecologically important ecosystems such as Coastal Wetlands and Bangalay Sand Forest, in addition to impacts on tourism and the scenic amenity that is of very high value to the Kiama community.

Stage 5 was never identified as a future stage in the original approvals. Therefore the implications of the current proposal were not considered in that assessment process and conditions of consent are not tailored to mitigate the impacts from Stage 5.

The original consent required separate applications to be submitted for subsequent stages 2 to 4 of the identified Dunmore sand resource area (which does not include the Stage 5A or 5B areas). The assessment of this current proposal as a modification of the original consent is therefore inconsistent with the previous approvals processes.

Council is of the view that the current assessment process should be terminated and that the proposal should be required to submit a new proposal for the assessment of Areas 5A and 5B. This would enable the proposal to be assessed against contemporary environmental policy settings including the Coastal Management Act 2016.

Our assessment of the proposal is that it appears to be inconsistent with the Objectives in Part 2 Section 6 of the Coastal Management Act 2016 (and the former SEPP 71) which are:

- (a) *to protect coastal wetlands and littoral rainforests in their natural state, including their biological diversity and ecosystem integrity,*
- (b) *to promote the rehabilitation and restoration of degraded coastal wetlands and littoral rainforests,*
- (c) *to improve the resilience of coastal wetlands and littoral rainforests to the impacts of climate change, including opportunities for migration,*
- (d) *to support the social and cultural values of coastal wetlands and littoral rainforests,*
- (e) *to promote the objectives of State policies and programs for wetlands or littoral rainforest management.*

## **2. No strategic alignment**

The Illawarra Shoalhaven Regional Plan was developed to provide strategic policy, planning and decision making framework to guide the region to sustainable growth over the next 20 years. While it is specifically designed to guide plan making processes, it is considered relevant to have regard to its strategic context for the purpose of the development assessment process.

Whilst there is recognition within the Regional Plan of the need to consider expansion of extractive industries into adjacent areas, the importance of areas of high biodiversity value are also mapped and addressed within the plan. Shellharbour's LEP has areas of the proposed 5B extraction area mapped as E3 Environmental Management, and the Regional Plan has parts of this area mapped as High Environmental Value. These areas are not mapped as a Mineral Resource area in the Illawarra Shoalhaven's Resources map within the plan. So currently there is no conflict over mapped resources in the environmental mapped areas, however the proposal to open resource extraction in the environmental zonings appears to conflict with the intent and zoning of the environmental classifications.

### **3. Groundwater Hydrology and Acid Sulfate Soils**

The potential change in the groundwater hydrology and its impact upon the groundwater movement in the vicinity of the Minnamurra Waste and Recycling Depot is likely to have an effect on the water quality in Rocklow Creek and Minnamurra River Estuary. This is an issue that needs further investigation.

If this issue is not investigated and managed properly, there may be the potential that the leachate contaminated groundwater under the landfill could move towards the dredging site or the adjoining Minnamurra River estuary ecosystem in an unexpected way, either accelerating movement or changing the movement of the leachate contaminated groundwater. Council has undertaken a number of rehabilitation works for the former landfill site at Minnamurra, and is currently implementing a leachate remediation program at the site. The potential effect of the proposed 5A extraction area on the local groundwater has not been sufficiently investigated or interpreted, to satisfy Council that there will not be any adverse impact to the local wetlands and waterways.

The porosity and permeability of the imported soil that will be used to backfill the proposed dredge pond in the Stage 5A has the potential to result in significant changes to the hydrology of the catchment area and impacts associated with increased acid sulfate soils generation.

The Environmental Assessment report does not contain details or requirements relating to the porosity and permeability by standards to be achieved by the imported soil to be used to backfill the proposed dredged pond at Stage 5A this will need to be adequately dealt with in the assessment and conditioning of the proposal should it be approved.

To prevent any significant changes in the groundwater hydrology in the catchment area including in the vicinity of the Minnamurra Waste and Recycling Facility, it is important that the soil used for backfilling be of a similar porosity and permeability currently located on the Stage 5A site. The backfill soil to be used must also be tested and certified that it meets this requirement.

In Stage 5A one of the major risks associated with acid sulfate soils is likely to be as a result of the oxidation of natural in-situ or imported reduced sulphides within any imported Virgin Excavated Natural Material (VENM) used for site rehabilitation works.

Stage 5B has identified extraction of sand to a depth of 27m. Given the close proximity to the Minnamurra River, Coastal Wetlands and other Endangered Ecological Communities the environmental assessment is not sufficiently comprehensive to determine the potential effects of the excavated dredge pond on local hydrology, particularly the interaction between groundwater, the dredge pond and the vegetation communities. This is particularly relevant given the potential impacts of sea level rise and areas for these vegetation communities to migrate. In many areas of the lower Minnamurra River catchment there are barriers to estuarine and other vegetation communities for migration as sea levels rise, however this site provides areas for this migration to occur with no current barriers to their migration. This has not been adequately addressed by the environmental assessment.

#### **4. Flooding Impacts**

The Environment Assessment indicates that the Stage 5A extraction area lies within flood prone land associated with the Rocklow Creek catchment, while the Stage 5B extraction area lies within the floodplain of Minnamurra River.

The proposed modification would result in ground disturbance which has the potential to expose ground surfaces to erosion and result in sedimentation of local watercourses and ultimately Rocklow Creek and Minnamurra River, and associated coastal wetland.

Area 5B is very low-lying and council is concerned that the extraction will impact on natural groundwater and surface water (flood) flows with resultant impacts on the adjoining coastal wetland ecosystems.

#### **5. Road Maintenance Riverside Drive**

Dunmore Sand & Soil proposes to import up to 325,000 tonnes per annum of virgin excavated natural material (VENM) by road to the Stage 5 extraction area.

From the information provided the proposed haulage route to and from the site is via the Princes Highway and then using the entry and exist onto and off Riverside Drive. The vehicles will enter and exit the site via Fig Hill Lane which is located opposite to the Minnamurra Waste and Recycling depot.

There are safety concerns associated with the proposed road access to the site which will need to be upgraded. A concept road entrance plan has been prepared however, Kiama Municipal Council has not had input into in the proposed road entry and exit access road upgrade.

This section of Riverside Drive is under the care and control of both the Kiama and Shellharbour Councils and they share the road maintenance costs. The large number of vehicles entering and leaving this site will result in the deterioration of the road pavement of Riverside Drive over a period of time.

As yet a road pavement dilapidation report has not been undertaken. Such a report should be completed prior to commencement of any site works and again after the Stage 5A rehabilitation works are completed.

If the proposal proceeds, all road maintenance costs of this section of Riverside Road should be funded by Dunmore Sand and Soil Pty Ltd including a complete road reseal if required.

In addition to road maintenance and intersection safety concerns, the implications of the additional heavy traffic on the primary northern access road to the suburbs of Minnamurra, Kiama Downs and Gainsborough and has not been adequately addressed.

## **6. Environmental Operational Impacts**

The proposed modification will have a number of environmental operational impacts from the new sites where sand extraction and site rehabilitation works occur. These impacts include noise, dust and surface water runoff which have the potential to impact on the environment and affect the amenity of nearby residents. It is noted that Minnamurra Village is located within 500 metres of Area 5A.

## **7. Aboriginal cultural heritage**

Forty-five test pits were excavated in the modification site to characterise the subsurface archaeology and test predictions and the survey results. Three Aboriginal sites were identified within the modification site, in which a total of 1,292 artefacts were discovered.

Most of the artefacts were flakes or broken flakes, with some stone tools also discovered. All the Aboriginal sites in the modification site will be lost due to creation of the dredge ponds and associated sand extraction.

## **8. Biodiversity Impacts on Flora and Fauna**

There are potential biodiversity impacts resulting from the clearing occurring as part of Stage 5 Modification 2 with Stage 5B creating the most impact. Area 5B is surrounded on three sides by the Minnamurra River and coastal wetland containing mangrove forests and salt marsh and 56% of is made up of Bangalay Sand Forest vegetation that is classified to be in either moderate or good condition.

Also, the ongoing operation of the sand extraction process could have further potential biodiversity impacts unless properly managed. The potential impact on Flora and Fauna is likely to be significant and has not been evaluated sufficiently. As identified in the NSW Scientific Committee – final determination, in relation to the Bangalay Sand Forest of the Sydney Basin and South East corner bioregion vegetation community, 'North of Gerroa, only small fragments of the community persist, for example on Minnamurra Spit (Mills 2000), around Primbee and Windang (NPWS 2002).

Given the regional significance of the Bangalay Sand Forest EEC in the Illawarra area, and the ongoing pressures associated with fragmentation and deterioration of condition, far greater weight should be placed on the value of this vegetation community and its retainment, rehabilitation and restoration. Destruction of vegetation communities which will provide ecosystem services long beyond the estimated 5-7 years of proposed resource extraction should be carefully weighed up in determining this modification application. Areas where moderate and good conditions Bangalay Sand Forest EEC are located should be excluded from the extraction area if the modification is approved.

Details contained in the Environment Assessment indicated that the following direct impacts would result from the proposed modification:

- clearing of native vegetation and associated habitat, conservatively estimated to be 7.5 ha, including 4.53 ha of Bangalay - Old-man Banksia open forest on coastal sands, Sydney Basin Bioregion and South East Corner Bioregion TEC;
- clearing of approximately 4.04 ha of exotic grassland vegetation;
- clearing of associated species credit fauna habitat, including hollow bearing trees and logs;
- a total of 12 Bangalay trees containing hollows will require removal for the proposed modification.
- Potential impacts on fauna such as the Barking Owl and the Masked Owl and the Southern Myotis a species of bat.

The existing Dunmore Sand and Soil Quarry Flora and Fauna Management Plan (Arcadis, 2017) (FFMP) does not include management of the proposed Stage 5 extraction areas to minimise potential adverse impacts on biodiversity whilst the sand mining operations are occurring. While it is proposed to update this plan, concern about the following are raised:

- Vegetation outside the modification site require protection
- Hollows that host threatened species are at risk of being cleared – this is a particular concern during breeding season. Installation of nest boxes south of the Stage 5B site cannot fully compensate for the loss of hollows that will be removed.
- Weed infestation of the site and surrounding properties are likely to occur if not appropriately managed.
- Vehicles have the potential to impact on vegetation
- Erosion and sedimentation will occur if regular maintenance of erosion and sediment controls are not adequate during construction and until exposed surfaces areas are stabilised.
- There is strong anecdotal evidence that the White-bellied Sea Eagle observed to frequent the area adjacent to the site, does nest in the vegetation directly adjacent to the proposed 5B extraction area. This has not been identified through the current assessment, nor adequately dealt with in terms of the potential impact of the operation on the nesting site.

## **9. Visual Impacts**

Although an earth flood mound is to be constructed as part Stage 5A which will provide some screening along Riverside Drive Dunmore, machinery including the dredge will still be visible to users of this road. Unless screen planting is provided, this will create a negative visual impact as viewed by visitors and users of this northern access road leading into the Kiama Municipality.

## **10. Monitoring of operational compliance Community Consultative Committee**

As a condition of initial development consent the Boral owned Dunmore Sand Mining Project must operate a Community Consultative Committee (CCC). The CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Dept. of Planning 2007).

In accordance with these guidelines, the committee should be comprised of an independent chair and appropriate representation from the applicant, Council and the local community.

To date stages 1 to 4 of the sand mining operation have been overseen by the CCC currently consisting of representatives from Boral, the local community and members of Shellharbour City Council's planning division. Kiama Council has not been a part of that Committee for many years which is not acceptable.

I thank you for the opportunity to make a submission to the Dunmore Lakes Sand Extraction Project Modification 2. Should you wish to discuss any matter raised in this submission please contact me on 4232 0444.

Kind regards,



Jessica Rippon  
**Director Environmental Services**