



Office of  
Environment  
& Heritage

Your reference: MP10\_0057 MOD2  
Our reference: DOC11/46643  
Contact: Jennifer Sage  
9995 6856

Mr Mark Brown  
Metropolitan and Regional Projects South  
NSW Department of Planning and Infrastructure  
GPO Box 39  
Sydney NSW 2001

Dear Mr Brown

**MP10\_0057 MOD2 132 – 138 Killeaton Street St Ives**

I refer to your email of 11 October 2011 requesting comments from the Office of Environment and Heritage (OEH) on the revised document titled 'Management Plan for Post-Construction Permanent Basement Pump Out' for the residential development at 132 – 138 Killeaton Street St Ives.

OEH has reviewed the information provided and notes that the proponent still intends to permanently dewater at the site through the interception and collection of groundwater seepage into the basement carpark rather than build a water-proof 'tanked' basement structure as is currently approved. OEH has provided comments on two previous occasions stating our position on this application and that position has not changed. We do not support the proposed amendment on the basis that –

- continual discharges from the basement to the Council stormwater system represent a greater risk of pollution of waters than the current requirements for a fully tanked structure; and
- the proponent has not provided any justification as to why the current conditions for a waterproof retention system cannot be met.

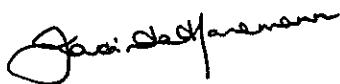
I have attached our most recent letter on this matter (Ref: DOC11/40537 dated 6 September 2011) as our detailed comments still apply to the proposed amendment, since they have not been addressed by the revised Management Plan.

I note that the revised Plan includes a number of minor changes, the most notable being an extension of the proposed monitoring program from 3-6 to 6-12 months. While the Plan would provide an opportunity to collect and identify poor quality water collecting in the basement and enable decisions to be made on discharges to the environment, it does not remove the risk of water pollution occurring from an automated discharge system. On the other hand, the currently approved tanked structure would totally eliminate these risks.

OEH is concerned that the proponent has failed to provide any justification for the need for the amendment on any basis (eg. economic, structural or environmental) and that approving this application would set a precedent for dewatering and discharge to waters at similar developments without adequate justification, when there is an alternative that removes the risk of water pollution altogether.

Should you wish to discuss this matter further, please contact Jennifer Sage on 9995 6856.

Yours sincerely

 26.10.2011

**JACINTA HANEMANN**  
**A/Manager Metropolitan Infrastructure and Biodiversity**  
**Environment Protection and Regulation**  
**Office of Environment and Heritage**  
**Department of Premier and Cabinet**

Attachment: DOC11/40537 Letter from OEH to DP&I dated 9 September 2011.



**Environment,  
Climate Change  
& Water**



Mr Mark Brown  
Senior Planner, Metropolitan & Regional Projects South  
NSW Department of Planning & Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Dear Mr Brown,

**MP10\_0057 132-138 Killeaton Street St Ives - MOD2 Modification to Condition C35 (a) and (b)**

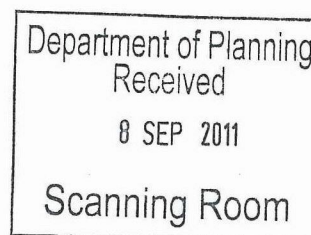
I refer to your email of 26 August 2011 forwarding a copy of the modification application and accompanying information for the above project, including a hydrogeological assessment report by Jeffery and Katauskas Pty Ltd (Ref: 23765Z2rpt) and a water management plan by Hayes Environmental Consulting (Report No. MP135 AD).

The Office of Environment and Heritage (OEH) has reviewed the application and accompanying reports and notes that the proponent, Meriton Apartments Pty Ltd, has applied to modify the conditions of approval for the project to allow permanent dewatering of groundwater. Our comments are provided in Attachment A.

Should you wish to discuss this matter further, please contact Jennifer Sage on 9995 6856.

Yours sincerely,

**FRANK GAROFALOW**  
**Manager Metropolitan Infrastructure and Biodiversity**  
**Environment Protection and Regulation**  
**Office of Environment and Heritage**  
**Department of Premier and Cabinet**



The Department of Environment, Climate Change and Water is now known as the Office of Environment and Heritage, Department of Premier and Cabinet

**Attachment A****MP10\_0057 132-138 Killeaton Street St Ives - MOD2 Modification to Condition C35 (a) and (b)**

The existing conditions C35 (a) and (b) require that the project precludes the need for permanent dewatering through the design and construction of a waterproof retention system, i.e. a fully tanked structure.

**C35 Groundwater**

- (a) *The design and construction of the structure must preclude the need for permanent dewatering.*
- (b) *The design and construction of the structure that may be impacted by any watertable must include a water proof retention system (i.e. a fully tanked structure) with adequate provision for future fluctuations of water table levels. (It is recommended that a minimum allowance for a water table variation of at least +/-1.0 metre beyond any expected fluctuation be provided). The actual water table fluctuation and fluctuation safety margin must be determined by a suitably qualified professional.*

Meriton has applied to amend the conditions to allow dewatering of groundwater at the site through interception and collection of groundwater seepage into the basement carpark. This would result in both groundwater and stormwater flows into the carpark being managed and discharged to Ku-ring-gai Council's stormwater system via a system of collection sumps and pumps.

**Proposed Condition C35 (a) and (b)**

- (a) *The design and construction of the structure may permit permanent dewatering, post construction.*
- (b) *A pump system is to be installed that will collect additional run off from vehicles and seepage through the basement structure. The collected water will then be pumped out of the basement via an oil separator before being released into the Council stormwater system.*

Our key concerns with the proposed amendment are the protection of –

- water quality, ensuring only clean water is discharged to receiving waters; and
- groundwater dependent ecosystems.

**Water quality**

The proponent is required to comply with the requirements of the *Protection of the Environment Operations Act 1997*, including section 120 which makes it an offence to pollute waters. OEH does not support the proposed changes to the conditions on the basis that continual discharges from the basement carpark to Council's stormwater system represent a greater risk for pollution of waters than the current requirements for a waterproof retention system.

OEH has made the point in previous correspondence to the Department of Planning and Infrastructure (DP&I) relating to Meriton's development at Warriewood (letter dated 14 July 2011; DOC11/29421) that the requirement to prevent groundwater dewatering is not unusual or new in the NSW coastal zone. Many below-ground developments now require tanked basement areas, enabling groundwater to move around the structure so it is not brought to the surface, minimising the need for ongoing management, treatment and discharge to waters.

I note that the hydrogeological assessment report states that the effects of waterproofing the perimeter upper basement walls reduces the total inflow only marginally, however it has not provided any evidence or examples of where full basement tanking has been ineffective. The current requirement is to build a fully tanked structure, not just to waterproof the walls. Given that tanking is required on other similar developments, the proponent should clarify whether it is suggesting that full tanking is ineffective before the modification is further considered.

OEH has concerns about the proposed water quality monitoring program described in the Water Pump Out Management Plan. In order to modify the conditions, the proposed water quality monitoring program would need to be improved. The monitoring program should be designed to characterise the quality of the water likely to be produced from the dewatering system during the life of the building. Meriton has proposed only a short period of sampling and laboratory analysis (i.e. three to six months) to be initiated immediately after the system has been installed and prior to the building being occupied.

The timing and duration of this sampling program will not capture water representative of that likely to collect in the basement during the life of the building, as it will not capture stormwater run off from vehicles or the operating road and driveways. The quality of water that will collect in the basement is likely to be worst when the building is occupied, with vehicle movements contributing pollutants such as petroleum hydrocarbons and heavy metals to the dewatering system. If the Condition is modified, OEH recommends that a monthly sampling program should be undertaken as soon as the dewatering system becomes operational and for a further period of 12 months after the building is occupied, to be reviewed at that time.

Under the *Protection of the Environment Operations Act 1997*, Ku-ring-gai Council is the appropriate regulatory authority for pollution matters arising from this project. Given that OEH will not have an ongoing role in the environmental regulation of the development, I suggest that DP&I consult with Council on the proposed modification and its environmental concerns associated with the modification.

### **Groundwater dependent ecosystems**

The development site is situated in close proximity to Garigal National Park and groundwater flows from the north-west across the site to the south east and feeds Middle Harbour Creek. The proposed basement intersects this groundwater.

The hydrogeological assessment estimates that the groundwater inflow rate into the proposed basement will be approximately 2,500 – 4,000L per day. The report suggests that the flow rate may decrease once the excavation has drained the local area, as there is limited catchment over which surface water can feed the groundwater, as the site is located on the crest of a hill. However, the report does not consider the possibility of spring fed groundwater.

In order to amend conditions as proposed, the proponent should further investigate the nature of groundwater flows at the site and whether dewatering the above volume of groundwater would impact on groundwater dependent ecosystems located in Garigal National Park or elsewhere downstream of the development site.

Furthermore, OEH considers that any requirements of the NSW Office of Water for the protection of the groundwater resource in this aquifer should be met.

- - -