



ENVIRONMENT PROTECTION AUTHORITY

Your reference: MP10_0025 Mod 1 & MP10_0023 Mod 3
Our reference: DOC11/50751
Our contact: Bob Marr

Ms Heather Warton
Director Metropolitan & Regional Projects North
Department of Planning
23-33 Bridge St
SYDNEY NSW 2001

Dear Ms Warton

The Environment Protection Authority (EPA) refers to your undated letter (received at this office on 4 November 2011) seeking comments on applications by Lend Lease (Millers Point) Pty Ltd to modify its Project Approvals under Section 75W of the Environmental Planning and Assessment Act for the projects below:

- Bulk Excavation & Basement Car Park - Barangaroo (MP10_0023 Mod 3); and
- Commercial Building C4 - Barangaroo (MP10_0025 Mod 1)

The EPA refers also to the CDs appended to your letter which included reports prepared by JBA Urban Planning Consultants detailing the Approval Modification proposals.

As you are aware the Department of Planning and Infrastructure DoP&I sought and received submissions from the Office of Environment and Heritage on the Preferred Project Reports for both of these projects and those comments were largely adopted in the Project Approvals. Furthermore, you will be aware that the environmental aspects of activities across the entire Barangaroo site are regulated by conditions attached to Environment Protection Licence number 13336 which is held by the Barangaroo Delivery Authority (BDA).

Notwithstanding the above, EPA has reviewed the Modification requests and considers that proposed changes will pose no new or significant environmental impacts. However, EPA's review has revealed a number of areas where Environmental Management Plans for example may need to be adjusted to mitigate certain impacts. Details of EPA's specific comments are appended in **Attachment 1** but in summary EPA has no objections on environmental grounds to DoP&I approving these Modifications should it decide to do so.

If you have any queries regarding these matters please contact Bob Marr on 9995 6825.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Greg Sheehy', followed by the date '5/12/11'.

GREG SHEEHY
Manager Sydney Industry
Environment Protection Authority

Attachment 1
EPA's Review of Project Approval Modifications for:
Bulk Excavation & Basement Car Park - Barangaroo (MP10_0023 Mod 3); and
Commercial Building C4 - Barangaroo (MP10_0025 Mod 1)

Air

General Comments

The proposed project works are the result of further design development informed by the 1 August 2011 report on the General Review of the Barangaroo development. Key changes to the proposal consist of modifications to the building design. However, the project modification also includes an increase in plant and equipment powered by diesel, including a threefold increase in cement trucks (to a total of six) and a doubling of concrete pumps (to a total of two).

The original air assessment (Air Quality Impact Assessment Barangaroo C4 Commercial Building (AECOM, October 2010)) assessed the impacts of project emissions of particles and nitrogen dioxide. The original air assessment predicted maximum incremental impacts, for all pollutants and averaging periods, at each sensitive receptor well below impact assessment criteria.

The original air assessment predicted cumulative impacts, for all pollutants and averaging periods, dominated by background pollutant concentrations. Cumulative impacts were predicted to be up to 93% of the project criteria for 24hour PM10.

The review document states that additional air quality assessment undertaken to determine the impact of changes to building works indicates that the proposal is unlikely to have any adverse effect of the local air quality surrounding the site. However supporting data supporting is not provided in the Environmental Assessment, and verification of the review document's conclusion consequently is not possible.

EPA has estimated project related (incremental) emissions based on the proposed equipment modifications outlined in the review document. Project emissions for both particles and nitrogen dioxide are estimated to increase by approximately 50 percent. In the case of particles, cumulative impacts are likely to approach the project criteria. The Revised Statement of Commitments for the project outlined in Section 4.0 of the Environmental Assessment includes a condition (number 35) to conduct construction and site management relate to the project "generally" in accordance with the Environmental, Construction and Site Management Plan (ECSMS) prepared by Cardno & Bovis Lend Lease within the EA dated November 2010 including the original air assessment and the review document.

Recommendation

Based on the air assessment results, as well as the type and scale of the proposed project, it is likely that the project can be managed to prevent adverse air quality impacts.

To minimise the risk of adverse air quality impacts EPA recommends that the proponent develops and implements a refined air quality management plan for the project prior to construction activities commencing. As a minimum, the air quality

management plan must include all mitigation measures included in the original assessment: Air Quality Impact Assessment Barangaroo C4 Commercial Building (AECOM, October 2010). Specifically the mitigation measures must include the air pollution control measures assumed in the original air assessment under Section 3.2 Potential Emission Sources and consider the control measures outlined under Section 8.0 Mitigation Measures (both listed below).

Air Pollution Controls (as outlined in original AQIA)

AQIA Section 3.2 Potential Emission Sources

- Paved roads were assumed to be maintained, swept and free of dust, with watering undertaken where required such that wheel-generated dust would be minimised.
- Concrete would be delivered in trucks to the top of the excavation area (i.e. no concrete batching plant would be required, and there would be no wheel-generated dust from concrete trucks travelling to the plant).
- Trucks delivering construction materials were assumed to drive on sealed hard stand areas or on watered roads.

AQIA Section 8.0 Mitigation Measures

8.1 Construction

- Control of access via sealed roadways;
- Vehicle speed limits on site;
- Monitoring of wind speed and direction to manage dust-generating activities during undesirable conditions;
- Construction equipment idling time minimisation and appropriate engine tuning and servicing to minimise exhaust emissions;
- Procedures to address any complaints received; and
- Development of contingency measures for identified potential air quality impact.

8.2 General

- Turn engines off whilst parked onsite;
- Vehicular access confined to designated access roads;
- Equipment, plant and machinery regularly tuned, modified or maintained to minimise visible smoke and emissions;
- Site speed limits implemented;
- Minimising haul road lengths;
- Covering exposed surfaces at the end of each shift and during dry / windy conditions;
- Erection of windbreak barriers on the Site boundary;
- Control roadway use i.e. defined road access to minimise dust;
- Regular clean up of spills;
- Implement a complaints management system;
- Adjust work practices (as required) based on wind observations;
- Adjust work practices (as required) based on real time dust monitoring results; and
- Conduct instantaneous dust monitoring at the boundary.

Noise and vibration

The Environmental Assessment (EA) for the proposed modification to the Bulk Excavation and Basement Car Park states that the excavation work will still be undertaken in accordance with the construction noise impact assessment undertaken by Wilkinson Murray for the proposed works. No additional noise impact associated with the modifications is anticipated.

The EA for the proposed modification to Commercial Building C4 states: "An addendum to the approved Construction Noise and Vibration Assessment has been prepared to accompany the Modification Application (see Appendix P). The addendum considers the NSW Road Noise Policy (RNP) which had not been released at the time of the original assessment and the change in construction piling technique from vibration piling to vibration sheet-piling."

The predicted construction traffic noise has been assessed against the RNP and has been determined to be around a 1 dB(A) increase in traffic noise compared to current traffic flows. EPA notes that the existing traffic noise levels are stated as being around 7 dB(A) above the criteria and the construction traffic flows are indicated as being up to around 318 truck movements per day. EPA considers that the proponent should implement all feasible and reasonable mitigation to minimise traffic noise levels from the site. Measures could be included in the existing Construction Noise and Vibration Management Plan.

There is no assessment of potential vibration levels from the vibratory sheet-piling activities. The modelling of potential impacts from vibratory sheet-piling was undertaken in isolation of other construction activities, therefore the predicted levels would appear to be those from the vibratory sheet-piling alone. It is not clear to EPA whether vibratory sheet-piling will be undertaken concurrently with other construction activities (though it is likely to be). The predicted levels in Tables 3, 4 and 5 in the supplementary report are below the criteria, well-below at most receiver locations but just 1 dB(A) below the criteria at the Hickson Road residences for Saturday construction works, hence EPA recommends that feasible and reasonable mitigation measures should be incorporated into the Construction Noise and Vibration Management Plan for the vibratory sheet-piling activities, rather than the proponent stating simply that "Noise from these vibratory piling activities meets the required criteria at all receivers." Measures should include (but not necessarily be limited to) community consultation and noise & vibration monitoring.

Water

EPA considers that providing the works are done in accordance with the Water and Stormwater Management Sub-Plan and in compliance with the conditions attached to Environment Protection Licence number 13336, impacts on the receiving waters can be adequately managed.

Waste

EPA considers that the providing the works are done in accordance with the Revised Waste Management Plan and in compliance with the conditions attached to Environment Protection Licence number 13336, waste management impacts can be adequately managed.

