

13 February 2015

Our Ref: AS121111

Lend Lease (Millers Point) Pty Ltd  
Attn: Mark Burns  
Level 4, 30 The Bond  
Hickson Road  
Millers Point NSW 2000

*By email: Mark.Burns@lendlease.com*

Dear Mark

**Re: Reliance on Site Audit Report/ Site Audit Statement - Building R1**

**1 Introduction**

As a NSW-EPA accredited Contaminated Sites Auditor, I am conducting a contamination audit in relation to the southern portion of the site known as "Barangaroo", at Millers Point, NSW on behalf of Lend Lease (Millers Point) Pty Ltd (Lend Lease). I prepared a Site Audit Report and accompanying Site Audit Statement dated 14 July 2011 regarding the Remediation Action Plan (RAP, dated 7 July 2011) for the Other Remediation Works (South) area (ORWS).

Lend Lease has provided me with details of a three storey retail building to be constructed at Barangaroo South, known as Building R1. The following drawings were provided:

- BR1-ASK-12-04-05 – Site Locality Plan, issued 7 August 2014
- BR1-ASK-12-00-11 - Section (East-West), issued 9 September 2014
- BR1-ASK-12-00-12 - Section (North-South), issued 9 September 2014

The following letter, prepared by AECOM Australia Pty Ltd (AECOM) was also provided:

- "Barangaroo South – Building R1 Construction Works, Contamination Assessment, Hickson Road, Millers Point" dated 15 August 2014

The building is to be built in the southwest of the ORWS in a position that straddles the western basement perimeter retaining wall, crossing the wall by about 2m. Four piles are to be constructed outside the basement perimeter retaining wall and shallow excavation will be undertaken to accommodate a ground beam and slab. This positioning is not consistent with the assumptions made in the RAP and associated Human Health and Environmental Risk Assessments (HHERAs) therefore the implications of the building design as well as controls for piling activities require consideration.

## 2 Consideration of RAP and HHERA Assumptions

The RAP defined four areas within ORWS based on land uses and material types. Area A was defined in the RAP as “material to remain in situ within the Public Domain (South), outside the retention wall system and potentially in hydraulic connection with Darling Harbour, where limited or no excavation will be required”.

The following assumptions were made in the RAP and HHERAs (and hence the Site Audit Report and Site Audit Statement) regarding the proposed development within Public Domain (South):

- “Public Domain (South) usage will incorporate open space with community, mixed commercial and retail land use, and landscaping (planter boxes, paved areas and parkland). While shallow basement excavations are proposed along the eastern portion of the Public Domain (South), the existing concrete hardstand surfaces are proposed to be retained (and perforated to facilitate the drainage of water through them) within the Public Domain (South)
- The existing caisson walls associated with the historic wharf structures will be retained along the western (Darling Harbour) side of the Public Domain (South)
- The maximum height of any development within the Public Domain (South) will be limited to two storeys
- Material excavated for basement construction may be beneficially reused to build up the elevation of the Public Domain (South) by approximately 1m”.

The general land use scenario adopted for the audit was ‘parks, recreational, open space’ for Public Domain (South), noting that some buildings may also be constructed. Site specific remediation criteria were derived for Area A based on consideration of the following scenarios:

- Scenario 2 – upper-most basement car park level partially above water
- Scenario 4 – paved public domain
- Scenario 5 – commercial slab on ground – two storeys
- Scenario 6 – short term ground-intrusive maintenance
- Scenario 7 – residential above basement construction.

The proposed development is not consistent with that described in the RAP for Public Domain (South) since the building is proposed to exceed two storeys (three storeys are proposed) however the proposed retail (commercial) land use has been accounted for. While the proposed development does not exactly match the assumptions made, the above scenarios considered in deriving remediation criteria for Area A are considered adequately protective for the proposed usage of Building R1 given that Building R1 crosses only 2m into Area A, around 5% of the building footprint area, and that the difference is relatively minor (two versus three storeys).

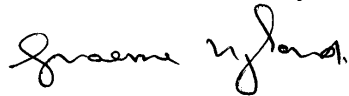
### **3 Consideration of Proposed Piling and Excavation Works**

The RAP allowed for limited excavation and possible shallow basements within Area A. The construction of piles and minor excavation proposed for the construction of Building R1 is considered to be consistent with this definition. The RAP specifies controls for excavation works and materials management in Area A, including management of asbestos-containing materials if encountered. These controls would be applicable to the construction of piles and proposed excavation within Area A for Building R1.

### **4 Conclusion**

I have reviewed the proposed Building R1 development against the assumptions and procedures outlined in the RAP. The remediation criteria developed and control measures specified in the RAP are considered appropriate for the proposed development. It is therefore considered that my Site Audit Report and Site Audit Statement dated 14 July 2011 can be relied upon as being relevant to Building R1.

Yours faithfully  
ENVIRON Australia Pty Ltd



Graeme Nyland  
Accredited Auditor 9808