

Lend Lease (Millers Point) Pty Limited
Level 4, 30 The Bond
30 Hickson Road
Millers Point NSW 2000

Level 10
201 Kent Street
Sydney
NSW 2000
Australia

t +61 2 9320 9320
d +61 2 9320 9341
f +61 2 9320 9321

bruce.kelly@arup.com
www.arup.com

21 June 2013

Dear Sir/Madam

Barangaroo South - Temporary Concrete Batching Plant - Environmental Impact Statement Waste Management Plan

This letter has been prepared by Arup for Lend Lease (Millers Point) Pty Ltd to support an application that is to be made pursuant to Section 78A of the Environmental Planning and Assessment Act 1979 in respect of SSD 5967-2013 for a Temporary Concrete Batching Plant at Barangaroo South.

A temporary concrete batching plant at Barangaroo South has already been approved under MP10_0023 for the purposes on providing concrete for the construction of the basement retention wall and basement envelope including foundations for the future above ground buildings that form part of Barangaroo South.

This application seeks to maintain the same concrete batching plant onsite until the end of 2018 for the purposes of providing concrete for all building construction works at Barangaroo South up until that time.

Arup has reviewed relevant documentation for this application as noted below:

The following drawings were reviewed as part of the original application under MP10_0023.

Drawing No.	Revision	Drawn By	Drawing Title
GA103 4OF5	Rev 4	x-tec Professional Solutions	Site Plan of Proposed XCM240 Batching Plant for Lend Lease Australia
-	2012	Boral Resources	Fenced Area Layout for Barangaroo Onsite Concrete Plant

The following information has been provided in respect to the current application (SSD 5967-2013).

Title	Author	Date
Concrete Production Estimates	Lend Lease	19 June 2013
Spoil & Waste Management Sub-Plan – Barangaroo Stage 1 - Document No: H010106LLC005	Lend Lease	Rev E – 14 December 2012
Advice on batch plant waste stream daily quantities	Boral Resources	20 June 2013

With respect to MP10_0023, the Waste Management Plan – Rev D (dated September 2010) prepared by Arup to support the original Project Application, and letters supporting subsequent 75W applications (dated 1 November 2010, 6 October 2011, and 31 August 2012) prepared by Arup addressed the construction and operational waste management issues associated with the basement in the context of the wider Barangaroo South site. In particular, the letter supporting the 75W application dated 31 August specifically addressed the temporary concrete batching plant.

Furthermore, a Waste Management Plan – Issue (dated July 2010) was prepared by Arup to support the Barangaroo South – Concept Plan Amendment (MP06_0162 MOD 4).

The extent of works proposed in this Section 78A submission are within the scope of the original reports and subsequent 75W application noted above. Notwithstanding this, the following commentary, based on the reports noted above, is provided for completeness.

Concrete was anticipated as a necessary construction material for Barangaroo South and the waste management principles and targets contained in the previous Waste Management Plan reports, and Spoil & Waste Management Sub-Plan, will be applied to the waste streams generated by the proposed concrete batching plant.

The Section 75W letter for MP10_0023 dated 31 August nominated estimated quantities for the anticipated waste streams and Boral have advised that these remain valid for the extended period of operation of the concrete batch plant that is the subject of this application. Namely:

- rejected (non-compliant) concrete (expected average range 0.5 – 2 tonnes per day);
- alkaline cementitious water (expected range 2,000-10,000 litres per day);
- silt from water settlement basins (expected range 20-50 kg per day); and
- domestic refuse (expected range 2-10 kg per day).

These identified waste streams can be appropriately managed by implementation of the following measures:

- rejected concrete would be transferred directly into plastic lined skip bins and periodically removed by an appropriately licensed contractor to a concrete recycling facility. The dried concrete is crushed, screened and re-sold as recycled concrete aggregate.
- cementitious waste water would be fully recycled within the batching process.
- silt from settlement basins would be extracted using a vacuum truck and dewatered onsite in an above ground ‘washout’ basin. The material would be periodically removed by an appropriately licensed contractor to a recycling facility where it is blended with other materials to create road base and other resalable products.

- domestic refuse would be incorporated into the site wide general refuse management strategy.

On this basis, Arup is of the opinion that the proposed application (SSD 5967-2013) for a Temporary Concrete Batching Plant will not result in any additional impact on the waste management strategy from that identified within the previous Waste Management Plans as referenced, and requires no further investigation or analysis at this stage of planning and design.

Yours faithfully



Bruce Kelly
Associate