



27 October 2023

Infrastructure NSW
Level 27, 201 Kent Street
SYDNEY NSW 2000
c/o Aqualand B Development Holding Pty Ltd
By email: diana.deborja@aqualand.com.au (via Aconex)

RE: SUITABILITY OF JBS REMEDIATION ACTION PLAN FOR CENTRAL BARANGAROO MP06_0162 MOD 9 CONCEPT PLAN - 2023 UPDATE

1. INTRODUCTION

As a NSW-EPA accredited Contaminated Sites Auditor, I am conducting a contamination audit in relation to the Central Barangaroo development at Barangaroo, NSW on behalf of Aqualand B Development Holding Pty Ltd (Aqualand).

A Site Audit Report (SAR) and accompanying Section B Site Audit Statement (SAS) dated 31 July 2013 (GN439B-5) (the Central Barangaroo SAS/SAR) regarding the Remediation Action Plan (RAP) for the site was previously prepared by Graeme Nyland of ENVIRON Australia Pty Ltd (now Ramboll Australia Pty Ltd). The RAP reviewed in the Central Barangaroo SAS/SAR was prepared by JBS Australia Pty Ltd (JBS) and was dated May 2013 (Rev H) (referred to herein as 'the JBS RAP').

I previously prepared a letter dated 15 November 2021 considering the applicability of the JBS RAP and Central Barangaroo SAS/SAR to MOD 9 to Barangaroo Concept Plan for Central Barangaroo proposed at that time (Original MOD 9 Concept Plan), in consideration of the requirements of State Environmental Planning Policy No 55 - Remediation of Land (SEPP 55) (now Chapter 4 Remediation of Land in the Resilience and Hazards State Environment Planning Policy (2021) (SEPP R&H)).

An amended MP06_0162 MOD 9 Concept Plan (Amended Proposed MOD 9 Concept Plan) has been prepared in response to submissions. The purpose of this letter is to review the applicability of the JBS RAP and Central Barangaroo SAS/SAR to the Amended Proposed MOD 9 Concept Plan.

Ramboll Australia Level 3 100 Pacific Highway PO Box 560 North Sydney NSW 2060 Australia

T +61 2 9954 8100 F +61 2 9954 8150 www.ramboll.com

Ref 318001084

Ramboll Australia Pty Ltd ACN 095 437 442 ABN 49 095 437 442

2. JBS REMEDIATION ACTION PLAN AND CENTRAL BARANGAROO SITE AUDIT REPORT

The JBS RAP (2013) contemplated development of Central Barangaroo in the long term for residential usage in the east and open space areas in the west, with interim development for public open space. The residential development was proposed to be constructed over two basement areas to a depth of 10 m below ground. The proposed southern basement was partially located within the former EPA Declaration Area (former gasworks) in Block 5 (Declaration was repealed in 2020).

The Central Barangaroo SAS/SAR identified documents that are required to be prepared and reviewed by the Site Auditor prior to commencement of remediation works. These were specified as conditions of the site audit, including:

- 1. A revised remedial works plan (RWP) to confirm the sequence of proposed remediation and validation tasks. Clarification is also required around the site acceptance criteria and relevant data sets and the proposed remedial extent (including vertically)
- 2. Materials Compliance Management Plan (MCMP)
- 3. Validation Sampling and Analysis Quality Plan (VSAQP)
- 4. Asbestos Management Plan (AMP).

The JBS RAP also contemplated implementation of a long-term environmental management plan (LTEMP). The need for and nature of long-term management measures would be considered following completion of the development as part of the ongoing (Section A) site audit for site suitability.

In determining the required extent of remediation documented in the JBS RAP, JBS referred to and derived a range of risk-based criteria. The derivation of these criteria was based on assumptions that need to be applied and validated for the basement construction.

It was noted in the Central Barangaroo SAS/SAR that the southern basement proposed for the future residential development crosses into the Declaration Area. This part of the Declaration Area had not been addressed in a RAP considering the suitability of the site for future residential use. It was recommended that a site audit confirming the site can be made suitable for its intended use be performed for the Declaration Area portion of the southern basement.

3. ORIGINAL MOD 9 CONCEPT PLAN

The Original MOD 9 Concept Plan comprised a series of mixed-use buildings, new streets and public spaces overlying a common basement spanning Blocks 5, 6 and 7 in the east of the site. Up to four basement levels were proposed, designed to a nominal depth of 15 m below ground level, with retail usage contemplated in basement levels and at ground level in public domain areas.

A comparison of the Original MOD 9 Central Barangaroo basement design with assumptions made in the JBS RAP (and the risk assessment documents the RAP relied on) was completed by EDP Consultants Pty Ltd (EDP) in the letter detailed below:

• "Suitability of JBS Remedial Action Plan for Central Barangaroo MP06_0162 (MOD 9)", Ref: S-00715.LOA.004 by EDP Consultants Pty Ltd, dated 26 July 2021.

The Auditor reviewed the EDP letter of 26 July 2021 and the Original MOD 9 Concept Plan, documented in the Auditor review letter of 15 November 2021, and considered that:

- The implications of variations in basement design and public domain development plans can be adequately addressed by the detailed design and additional documentation to be prepared (and approved by the Site Auditor) prior to the commencement of works, including: RWP, MCMP, VSAQP and AMP. A further risk assessment to address retail and commercial usage within basements is also required. The need for a LTEMP will be considered at a later stage of the site audit process, although the RWP documentation should be clear regarding the project objectives with regards to the need for long-term management.
- The JBS RAP (Rev H, May 2013) and the Central Barangaroo SAS/SAR (GN439B-5, 31 July 2013) are considered applicable to the proposed MOD 9 to Barangaroo Concept Plan for the relevant area assessed in the RAP and SAS/SAR and are considered to meet the requirements of SEPP 55.
- The RAP and Central Barangaroo SAS/SAR did not address that portion of Block 5 located within the Declaration Area, which is included within the footprint of the proposed MOD 9 Central Barangaroo basement. Consistent with the findings of the Central Barangaroo SAS/SAR, it is recommended that remediation planning documentation be prepared, and a site audit review of the proposed remediation be conducted for the Declaration Area portion of the basement. Preparation of remediation planning documentation and site audit review will be undertaken for the Stage 2 Development Application for this portion to meet the requirements of SEPP 55.

4. AMENDED PROPOSED MOD 9 CONCEPT PLAN AND CONCLUSION

EDP considered if the remedial strategies and action plan in the JBS RAP are applicable to the Amended MOD 9 Concept Plan in the letter detailed below:

"JBS, 2013 Remedial Action Plan Applicability for Concept Plan MP06_0162 MOD 9", Ref: S-04478.AQL.010 by EDP Consultants Pty Ltd, dated 26 October 2023.

Consideration of the difference between basement levels, basement construction and proposed land uses between the Original MOD 9 Concept Plan and the Amended Proposed MOD 9 Concept Plan is relevant with respect to contaminated land management.

EDP noted the following with regard to the Amended Proposed MOD 9 Concept Plan:

- "The proposed amended MP06_0162 MOD 9 basement construction is three levels, with the Metro interface at the North East Corner of the site and comparable the nominal basement RL in the Original MOD 9 Concept Plan.
- Mixed use of residential, retail and hotel land use for the basement and buildings is still proposed in the amended MP06_0162 MOD 9, which was contemplated and considered comparable to the Original MOD 9 Concept Plan.
- No new basement wall designs or thickness have been suggested and is assumed the risk assessment parameters on wall construction in the RAP will be met or improved. However, variability to the RAP assumptions around wall construction, even if not considered equivalent or better, can be addressed through subsequent risk assessment in the corresponding RWP".

EDP concluded in their letter of 26 October 2023 that "...the amended MP06_0162 MOD 9 proposal is adequately captured under the overarching remedial principles in the RAP".

Based on review of the EDP letters (26 July 2021 and 15 August 2023) and review of the Amended Proposed MOD 9 Concept Plan, the Auditor agrees with EDP's conclusion. The conclusions and recommendations of the Auditor's review (dated 15 November 2021) of the Original MOD 9 Concept Plan (as discussed in Section 3) remain valid, and the requirements of SEPP R&H (formerly SEPP 55) can be addressed in future stages of the development application and site audit process.

* * *

Consistent with the NSW EPA requirement for staged 'signoff' of sites that are the subject of progressive assessment, remediation and validation, it is advised that:

- This advice letter does not constitute a Site Audit Report or Site Audit Statement.
- At the completion of the remediation and validation of the site I will provide a Site Audit Statement and supporting documentation.
- This interim advice will be documented in the Site Audit Report.

Yours faithfully Ramboll Australia Pty Ltd

Rowena Salmon

EPA Accredited Site Auditor 1002

D +61 2 9954 8100 M +61 412 834 360 rsalmon@ramboll.com