

Our reference: DOC16/269668-04

Michelle Nettlefold
Team Leader Key Sites & Industry Assessment
Department of Planning & Environment
23 – 33 Bridge Street
SYDNEY NSW 2000

Dear Ms Nettlefold

I refer to Cameron Sargent's letter dated 30 May 2016 requesting the Environment Protection Authority's (EPA) comments on the *Further Response to Submissions Report for the remediation of part of Hickson Road Barangaroo* - SSD 6617 (JBA 23 May 2016) (the Report).

The EPA has assessed the Report and considers that it generally addresses the issues previously raised by the EPA in its letter dated 14 April 2016 (ref DOC16/156051-02). Some of the issues previously raised by the EPA have not been adequately addressed in the Report; however, the EPA considers that these outstanding matters can largely be risk managed by the proponent. Please see **Attachment A** for further details. Revised Recommended Conditions of Approval are provided at **Appendix B**.

If you have any questions in relation to this letter please contact Mark Hanemann on 9995 6845 or via email at mark.hanemann@epa.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'David Gathercole', written over a horizontal line.

DAVID GATHERCOLE
Unit Head Sydney Industry
Environment Protection Authority

9 June 2016

ATTACHMENT A

EPA COMMENTS ON FURTHER RESPONSE TO SUBMISSIONS REPORT FOR THE REMEDIATION OF PART OF HICKSON ROAD BARANGAROO (SSD 6617)

The EPA provides the following comments in relation to the *Further Response to Submissions Report for the remediation of part of Hickson Road Barangaroo - SSD 6617* (JBA 23 May 2016) (the Report):

Environmental Impact Statement

In its letter dated 14 April 2016 the EPA stated that the EIS lacks detailed project design information and that further assessment of impacts may be required if the project design plans change significantly to those presented in the EIS. In response, the Report states that the information provided in the EIS is sufficient for assessment purposes and that a significant change will require a modification or new application for the development.

The EPA considers that the proponent's response is generally satisfactory. However, to ensure the project complies with the design information and assumptions used in the assessment of impacts (which is required to ensure project impacts are acceptable), the EPA recommends that the project approval conditions include a requirement for the project to be consistent with this information. See **Attachment B** for further details.

Contingencies

In its letter dated 14 April 2016 the EPA stated that contingencies are required to ensure that the project is not reliant on Block 4 and 5 works, and that any contamination generated will be appropriately managed if offsite treatment and/or disposal is not possible. The Report states that if required, on-site contaminated material storage will be performed in accordance with the Soil and Water Impact Assessment (EIS, App O) (SWIA), and a yet to be developed Spoil and Waste Management Plan for the project.

The EPA notes that Section 6.6 of the SWIA refers to stockpiling contaminated materials external to the odour control structure where needed. However, the Project Air Quality Impact Assessment (AQIA) and Health Impact Assessment (HIA) do not consider or assess external stockpiling of contaminated materials associated with the main remediation excavation works. The EPA therefore considers that the SWIA does not provide adequate contingency measures with respect to on-site contaminated material storage.

The proponent also refers to temporary stockpiling in the Block 4/5 excavation enclosure as a contingency option. However, the proponent has previously stated the Hickson Road project will be stand alone and not reliant on any other project at the Barangaroo site. The EPA therefore considers that the proposed contingency to use Block 4/5 infrastructure is not a valid one.

The EPA recommends that the project approval conditions require the proponent to ensure that robust contingencies are available, and able to be implemented, to manage scenarios where offsite treatment and/or disposal of materials is not possible. See **Attachment B** for further details.

Odour suppressant foam

In its letter dated 14 April 2016 the EPA stated that the proponent should include the requirement in the project Air Quality Management Plan (AQMP) for the foam suppressant to be trialled and tested at the site prior to its general use, to demonstrate its effectiveness and that it can be reliably applied. The Report states that the use of Rusmar suppressant foam is proven, is currently effective, and a trial would be considered unreasonable.

The EPA notes that remediation works at the site have resulted in some odour observations, despite the use of the controls noted in the Report. The EPA considers that the proponent's response to this issue is

inadequate. However, the EPA considers that sufficient regulatory controls are in place for the project to enable this issue to be risk managed by the proponent.

Offsite Transport and Treatment

In its letter dated 14 April 2016 the EPA recommended that appropriate robust control strategies and measures for Offsite Transport and Treatment of Hazardous Waste be included in the project AQMP or related management plans. In response, the Report refers to control strategies outlined in the EIS.

The EPA notes that the strategies in the EIS do not include environmental controls at treatment or disposal facilities. The EPA considers that the proponent's response to this issue is inadequate. However, the EPA considers that sufficient regulatory controls are in place for the project to enable this issue to be risk managed by the proponent.

Elevated receptors

In its letter dated 14 April 2016 the EPA stated that the proponent should clarify whether elevated receptors at occupied buildings associated with Stage 1a of the Barangaroo project have been adequately considered. The Report states that all relevant receptors have been appropriately assessed, and that impacts at elevated receptors do not need to be assessed as emissions "largely do not have vertical momentum and produce ground based plumes".

The EPA notes that the Hickson Road excavation enclosure stack will have an emission velocity of 25 m/s and a volumetric flow rate of approximately 7.94 m³/s (AQIA, Table 12). The equivalent stacks for Block 4 and 5 remediation works have similar emission parameters. These emissions should not have any significant thermal buoyancy, however it is still expected that elevated plumes would result from these sources.

The EPA agrees receptors at 38 Hickson Road are likely to be more impacted than receptors located within Stage 1a buildings due to the closer proximity of 38 Hickson Road to the project emission sources. Consequently, where emissions are managed in a way to not cause any adverse impacts at 38 Hickson Road, no impact should occur at other non-assessed receptors. The EPA considers that the proponent's response to this matter is generally satisfactory.

Estimates for Stage 1C works

In its letter dated 14 April 2016 the EPA noted that the AQIA does not contain the emission estimates for Stage 1C works alone, and recommended that the proponent provide details clarifying the emission estimates used for Stage 1C works. The Report states that the proponent does not consider that the emission estimates from Stage 1C basement works need to be included in the Project AQIA. However, it is unclear why the proponent does not want to include this data in the report, as it would enable easier verification of the inputs used in the assessment of project impacts (especially where the Stage 1C AQIA was not publicly available).

ATTACHMENT B

BARANGAROO HICKSON ROAD REMEDIATION WORKS: REVISED RECOMMENDED CONDITIONS OF APPROVAL

1. Air Quality and Odour Management Sub Plan

(Note: Wording has been amended to be generally consistent with wording used for the Block 5 consent).

Prior to commencement of project operations, the proponent must prepare and implement an Air Quality and Odour Management Sub-Plan for the Project.

The Sub-Plan must be consistent with and adopt all recommendations, and ensure compliance with all design specifications and assumptions, of the Project EIS including the Air Quality Impact Assessment (AQIA) prepared by AECOM on 9 March 2016. The Sub-Plan must include:

- a) comprehensive, proactive and reactive air quality and odour management strategies for all pollutant emissions sources to ensure that the assessment criteria are met during the works;
- b) key performance indicators for emission controls;
- c) real time air monitoring program and monitoring methods including location, frequency and duration;
- d) response mechanisms;
- e) record keeping;
- f) compliance reporting and complaints response register; and
- g) management and monitoring strategies and associated responsibilities (for contractor and employees).

The Sub-Plan must include and ensure contingencies are available for implementation to manage potential scenarios that may result in significant impacts, including where offsite treatment and/or disposal of contaminated materials is not possible.

2. Asbestos Management Sub Plan

Prior to commencement of project operations, the proponent must prepare and implement an Asbestos Management Sub-Plan for the Project.

Note: Wording as per Block 4 and Block 5 consents is fine.

3. Emergency Plan

Prior to commencement of project operations, the proponent must prepare and implement environmental management and safety (EMS) plans for the Project. These Plans must include all potential hazardous and emergency scenarios based on the methodologies selected.

Note: Wording as per Block 4 and Block 5 consents is fine.

4. Health Management Sub Plan

Prior to commencement of project operations, the proponent must prepare and implement a Health Management Sub-Plan for the Project.

Note: Wording as per Block 4 and Block 5 consents is fine.