



14152
23 May 2016

Ben Lusher
Director – Key Sites Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Lusher,

**BARANGAROO – HICKSON ROAD REMEDIATION (SSD 6617)
FURTHER RESPONSE TO SUBMISSIONS**

We refer to the additional submissions received by the Department of Planning and Environment in relation to the proposed Remediation of part of Hickson Road (State Significant Development SSD 6617) for which a Response to Submissions Report was submitted in March 2016.

A total of seven (7) submissions were received in relation to the Response to Submissions Report, from the following parties:

- Department of Primary Industries (NSW Office of Water)
- Transport for NSW (TfNSW)
- NWS Health
- Port Authority of NSW
- Department of Planning and Environment (Hazards Unit)
- Environment Protection Authority (EPA)
- One local resident

A summary of all issues raised in these submissions and a detailed response to the issues is provided in **Attachment A**. The key issues are outlined below. It is noted that the Port Authority of NSW raised no further issues, and no response is required.

The responses to the issues raised provide further details / clarification about the impacts of the development and management of those impacts. The responses do not alter the proposed development, nor amend the proposed mitigation measures.

Department of Primary Industries – NSW Office of Water (DPI Water)

DPI Water requests ongoing monitoring of the groundwater system at the eastern edge of the Barangaroo site associated with Hickson Road, which should be incorporated into a Groundwater Monitoring Plan (GMP) prepared in consultation with DPI Water.

In response, the proposed monitoring can be incorporated into the GMP being prepared for the in-situ remediation works (if selected) as required by the Remedial Action Plan (RAP). The monitoring would continue for the duration required by the RAP.

Transport for NSW

TfNSW requests that the applicant be conditioned to prepare a Construction Pedestrian and Traffic Management Plan (CPTMP), and advises that Road Occupancy Licences are required for any activities likely to impact on the operational efficiency of the road network. TfNSW requests that the proponent consult with the CBD Coordination Office within TfNSW in relation to these issues.

Lendlease has no objection to TfNSW's recommended condition and other requirements, but requests that conditions be consistent with the Block 4 and Block 5 remediation consents in terms of terminology and content.

NSW Health

NSW Health notes that the Response to Submissions Report did not provide direct replies to issues raised in NSW Health's original submission – relating to the provision of monitoring data and project status information to NSW Health, and notification of NSW Health in the event of a public health emergency.

In response, Lendlease has no objection to the application of any of the conditions or notifications previously requested by NSW Health.

Department of Planning and Environment (Hazards Unit)

Specialists from the hazards unit within the Department provide recommendations in relation to preparation and implementation of hazard studies for the in-situ remediation option, including a Hazard and Operability Study, Final Hazard Analysis, Emergency Plan and Safety Management System.

As the Preliminary Hazard Analysis was only triggered for the in-situ remediation works, the proposed conditions should reflect that these hazards related documents are only required if the in-situ method remediation option is selected.

Environment Protection Authority

The EPA identifies a number of issues that require either further clarification or for which the EPA has made recommendations or suggested conditions in terms of further assessment or ongoing management. The key issues raised by the EPA are as follows:

- Clarification of predicted Ground Level Concentrations (GLC) which differed between the EIS and the RTS.

In response, it is noted that the original AQIA (exhibited as part of the EIS) added the maximum GLC from the adjacent Stage 1C works to all receivers - a conservative approach resulting in higher modelled air quality levels. The amended AQIA (submitted as part of the RTS) was updated to be more representative of likely future air quality by modelling the GLCs at each receiver, which reduced cumulative levels at receivers.

- Requirement for an Asbestos Management Plan and Environment Management and Safety Plan/s.

In response, it is requested that the terminology be consistent with the plans already prepared as required by previous development consents – being Asbestos Management Plan and Health Management Plan.

- That appropriate contingencies are in place in the event that the treatment and/or disposal of contaminated materials from Hickson Road is not, or cannot, be undertaken in an environmentally acceptable manner.

In response, there are a number of contingency options available that could be undertaken to ensure that the works comply with waste legislation and regulations, including temporarily stockpiling in the excavation enclosures at Hickson Road, Block 4 or Block 5 or to slow down or cease works.

- That the foam is trialled and tested at the site to demonstrate it is effective and can be reliably applied, prior to its general use.

In response, the foam (Rusmar) has been included in remediation proposals for Blocks 4 and 5, and is now available on site as part of the perimeter retaining wall works. This issue is covered by existing obligations under EPL 13336 and environmental protection legislation which require the works to not emit odour beyond the boundary of the premises. As such, a trial is not considered to be necessary.

- That performance testing is incorporated in the program of stack emissions tests to demonstrate, to the extent practicable, that for Volatile Organic Compounds (VOC) emissions in particular, the filter efficiencies match or are superior to those assumed.

In response, the amended AQIA (6.1.2) recommends that odour sampling be undertaken to demonstrate compliance with modelling rather than performance testing to demonstrate reduction efficiencies, given the reliance of the modelling on odour concentration rather than reduction efficiency. The program of stack testing in the amended AQIA (6.5) is considered adequate to demonstrate that there are no impacts from the stack emissions.

- Clarification as to whether elevated receptors at occupied buildings associated with Stage 1A of the Barangaroo Project have been appropriately considered in the air quality modelling.

In response, elevated receptors have been appropriately considered. Impacts on elevated receptors in Stage 1A buildings are unlikely as the emissions largely do not have vertical momentum and produce ground based plumes. Ground level receptors tend to have highest impacts, and impacts at lower levels were not predicted.

- Justification that only half of the Odour Control Structure area will actively emit odour at any time.

This assumption is based on the sizing of the enclosure within Hickson Road, and the requirement for other works and ancillary activities (such as parking, deliveries, materials handling, waste classification), to occur inside the enclosure which will limit the maximum area that can be excavated within the enclosure at any one time.

- Clarification that the before filtration total emission rates used to model the odour control structure (OCS) stack emissions for Block 4 are correct.

In response, it is confirmed that the before filtration total emission rates used to model the OCS stack emissions for Block 4 within the amended Hickson Road remediation AQIA are correct.

- The EPA recommends that the proponent provide details clarifying the emission estimates used for Stage 1C works.

In response, the relevant emissions estimates are contained in the Wilkinson Murray 2015 report for the Stage 1C works. It is not considered necessary to reproduce the emissions estimates in the amended AQIA.

- That an Air Quality Design Verification Assessment be provided to the NSW EPA to establish EPL limits and conditions.

In response, it is requested that the terminology and content of this report be consistent with the Block 4 and Block 5 remediation consents – being an 'Air Quality Verification Report'.

- That an Air Quality and Odour Management Plan be prepared prior to the commencement of project operations.

In response, it is requested that the terminology and content of this plan be consistent with the Block 4 and Block 5 remediation consents.

- That point source discharges associated with the remediation activities must be fitted with appropriate emission control systems and be monitored continuously for VOCs in accordance with *Approved Methods for Sampling and Analysis of Air Pollutants in NSW*.

In response, this condition is not required, as it is already covered in the requirements above for an Air Quality Verification Report and an Air Quality and Odour Management Plan.

- For ex-situ works, that:

- All excavation and loading of contaminated soils must be undertaken inside enclosure(s) fitted with suitable ventilation arrangements and pollution control equipment.
- Contaminated material must be stored within the odour control enclosure(s), or an equivalent level of control (such as sealed containers) at all times.
- During transportation offsite, all contaminated or odorous spoil must be appropriately sealed to minimise air emissions, to the maximum extent practical.

In response, it is noted that the conditions proposed by the EPA do not account for works that will need to take place outside enclosures, and are inconsistent with the approach to storage and handling of contaminated material established in the Block 4 and Block 5 remediation consents. To ensure the mitigation measures are suitably targeted and consistent with the approach adopted at Block 4 and Block 5 it is suggested that the EPA's proposed conditions be re-worded as follows:

- Excavation and loading of contaminated odorous spoil must be undertaken inside odour control enclosure(s) fitted with suitable ventilation arrangements and pollution control equipment as per the Air Quality & Odour Management Plan', except for the following:
 - o Site mobilisation and shallow services investigation/diversion.
 - o Installation of groundwater control walls.
 - o Installation of retaining walls to separate the excavation stages.
- Contaminated odorous material must be stored within odour control enclosure(s), or an equivalent level of control at all times.
- During transportation offsite, all contaminated odorous spoil must be appropriately sealed to minimise air emissions, to the extent practical.

The EPA also identified matters that should be addressed in the Air Quality Management Plan as well as aspects of the development that will be subject of licencing limits and conditions. Unless specifically identified, and responded to (above or in Appendix A), Lendlease acknowledges the EPA's comments, and no further response to these matters is required.

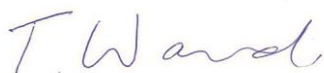
Private Resident's Submission

Requests that the Department further seek to ensure the preservation of night time amenity in relation to "Low Frequency Noise" given the close proximity of the site to the dwelling and the fact that the use of certain equipment at the Barangaroo site, (e.g. generators or self-powered lighting on the site) has already been the source of significant sleep deprivation.

In response, a Noise & Vibration Management Plan will be prepared that will include measures to manage noise emissions from the works, including night-time works. The Plan will include continuous noise monitoring and actions for responding to any noise limit exceedances.

We trust that this further response to submissions is sufficient for the Department to continue its assessment of SSD 6617 for the remediation of part of Hickson Road. Should you have any queries about this matter, please do not hesitate to contact me on 9409 4962 or tward@jbaplanning.com.au.

Yours faithfully



Tim Ward
Associate

Attachments:

- *Summary of Issues Raised Submissions and detailed Responses Table*