



Enspire Solutions Pty Ltd
Monique Elbarbary
Senior Project Manager
Level 7, 54 Miller Street
North Sydney NSW 2060

DATE
3 October 2025

SUBJECT
Hickson Road Upgrade and
Refurbishment Works - Proposed
Health and Safety Mitigation
Measures for Contaminated Land
During Construction

REFERENCE
0722434L03

Dear Monique:

1. INTRODUCTION

Environmental Resources Management Australia Pty Ltd (ERM) has been engaged by Enspire Solutions Pty Ltd (Enspire) and Lendlease Construction Pty Ltd (Lendlease) to outline proposed mitigation measures to manage potential risks associated with residual contaminated land which may be encountered during intrusive works proposed as part of the Hickson Road upgrade and refurbishment works program ('the works program').

Based on information provided to ERM, it is expected that these mitigation measures will be included in further detail within a future Construction Traffic Environmental Management Plan (CTEMP) to be prepared for the works program.

This letter has been prepared to support the Review of Environmental Factors (REF) which Lendlease is preparing for the works program.

2. BACKGROUND INFORMATION

The ERM *Preliminary Site Investigation, Barangaroo Hickson Road Upgrade and Refurbishment Works Stage 3 & 4* (ERM, 2025), summarised the setting and history of the Hickson Road upgrade and refurbishment works area, including previous contaminated land investigations and remediation.

Contaminated fill materials, natural soils and rock were remediated within the central portion of the Hickson Road upgrade and refurbishment works area in 2018-2019 and excavated areas were backfilled with validated materials (i.e., Virgin Excavated Natural Material – VENM). Residual separate phase gasworks waste and tar (SPGWT) in limited areas was immobilized via jet grouting. The PSI concluded the following:

- it is possible that residual contamination may be encountered during Hickson Road upgrade and refurbishment works construction within the previously remediated area and other areas comprising:
 - impacted fill material placed within the Hickson Road upgrade and refurbishment works area, particularly during historical development work and land reclamation; and
 - buried waste material derived from inappropriate handling and demolition of former Millers Point Gasworks structures, including SPGWT;
- it is unlikely that contamination would be encountered during the works program which could preclude the ongoing use of the area as an active public road at the completion of works; and
- additional remediation work beyond that completed and documented in the Remediation Summary Report (ERM, 2019) and the Site Audit Report (Ramboll, 2020) is unlikely to be required to enable the proposed Hickson Road upgrade and refurbishment works program to proceed.

These conclusions were made on the basis that a CTEMP is developed for the works program, including relevant mitigation measures to be implemented during the construction work and an unexpected finds procedure for contamination.

The Conceptual Site Model (CSM) for contamination outlined within the PSI (ERM, 2025) identified the following potential risks to be managed during construction due to the possibility that contaminated soil and groundwater may be present in the vicinity of the Hickson Road upgrade and refurbishment works area:

- Direct contact / ingestion of contaminated soil; and
- Inhalation of dust and / or vapours from contaminated soil and/or groundwater.

3. PROPOSED CONTAMINATION RISK MITIGATION MEASURES DURING CONSTRUCTION

Based on the potential risks detailed above, the following preliminary mitigation measures are proposed to be considered for inclusion within the future CTEMP. It is likely that adjustments and additional detail will need to be added in relation to these measures when construction methodology is finalised and the CTEMP is prepared:

- An appropriately qualified environmental consultant should be engaged to assist with the preparation of the CTEMP and during CTEMP induction and implementation;
- An unexpected finds procedure for contamination should be developed, including clear processes for identification, actions, communication processes and responsible parties for the management of unexpected finds of contamination during the proposed works;

- Safe Work Method Statements (SWMS) should be developed which identify the hazards and risks associated with the work in relation to potential residual contamination and describe to workers how following control measures will mitigate those risks;
- Personal protective equipment (PPE) should be used during the works which are appropriate for the planned activities. This may include nitrile gloves, chemical-resistant coveralls (e.g. Tyvek or similar), chemical-resistant boots and respiratory protection;
- Measures should be implemented to avoid/minimise contact by workers with soils/rock below the water table (approximately 2 metres below ground level (m bgl));
- Consideration should be given to the establishment of exclusion zones (and associated decontamination zones) in the event that residual contamination is identified during construction;
- Development and implementation of an air monitoring program for the work which is appropriate to manage potential risks associated with residual SPGWT and contaminated dust
- For excavations greater than 1m bgl, the staging of works to minimize/avoid stockpiling, and physical controls to minimise the transmission of odours from excavations. Such controls may include covering, enclosure, or localized air extraction within the face of the excavation. Odour neutralizing sprayers and/or misters may also be beneficial; and
- Development of a Waste Management Plan specific to the planned work should be prepared in consultation with an appropriately qualified environmental consultant. This plan should include the following items as a minimum:
 - Excavated soils which are excess to Lendlease's construction requirements within the Hickson Road upgrade and refurbishment works area should be classified in accordance with the *Waste Classification Guidelines* (NSW EPA, 2014) and disposed off-site as waste at suitably licensed landfills or classified for off-site reuse in accordance with the relevant Resource Recovery Orders published by the NSW EPA.
 - All waste should be transported by licensed waste contractors to appropriately licensed waste facilities; and
 - A waste and materials tracking log should be maintained and will include information on disposal of excavated materials to appropriately licensed waste facilities.

4. CLOSING

This letter has been prepared to outline proposed mitigation measures to manage potential risks associated with residual contaminated land which may be encountered during the Hickson Road upgrade and refurbishment works program. Please contact the undersigned should you wish to discuss any aspect of this letter.

Yours sincerely,

DRAFT

Joe Ferring
Consulting Director

DRAFT

Ian Batterley
Partner

REFERENCES

ERM (2025). *Preliminary Site Investigation, Barangaroo Hickson Road Upgrade and Refurbishment Works Stage 3&4.*