

## Environmental Health Referral Response - contaminated lands

Application Number:	DA2020/0433
Date:	01/09/2020
Responsible Officer	Nick England
Land to be developed (Address):	Lot 2 DP 543012 , 4 Cross Street BROOKVALE NSW 2100

### Reasons for referral

This application requires detailed consideration of Phase 1 and 2 contaminated land matters  
And as such, Council's Environmental Investigations officers are required to consider the likely impacts.

### Officer comments General Comments

#### General Comments

The proposal is for the construction of a storage premises at 4 Cross Street, Brookvale.

The site was previously a storage premises that was destroyed due to fire and subsequently contaminated with friable asbestos.

The asbestos contamination was remediated and a clearance certificate provided. The site following the fire is now predominately hardstand

A Pre-Lodgement Meeting was held with Northern Beaches Council on 28 January 2020.

Comments from environmental health at the time were:

*Environmental Health understands that 4 Cross st has provided all the required information on the Clean up Notice referenced as PEO2019/0020. This includes an asbestos clearance certificate. To facilitate a timely assessment, the documentation provided as part of the clean-up notice should be provided with the development application and mentioned in the statement of environmental effects under contamination. Based on the provided information Environmental Health are satisfied that the site does not require further contamination testing at this stage.*

Notwithstanding the above, there are potential concerns regarding any potential contamination located beneath the hardstand. In particular, any chemicals that could have been released during the fire, any fill materials below the hardstand and impacts from previous uses of the warehouse.

Furthermore, the Geotechnical Report prepared by JKGeotechnics and provided as part of the application states the following on Page 4:

*From review of the following architectural drawings, we understand that the proposed development will comprise a four storey Rent-A-Space self storage building, with no basement, founded on piles. Localised minor excavation may however be required for the centrally located lift and stair cores, and perhaps buried services. Existing floor slabs will be removed and new slabs constructed at about 0.1m to 0.2m below the existing levels.*

And on Page 9:

*In summary, the proposed development comprises a ground floor level plus three commercial levels for storage. The building footprint extends over almost all of the site. No bulk excavation is planned but proposed finished floor levels will be about 0.1m to 0.2m lower than existing. The investigation has confirmed uncontrolled, poorly compacted fill, a high groundwater level, and deep highly variable soils over rock which occurs at varying depths and is of varying quality.*

From the above it appears that the works will involve the disturbance of soils located beneath the hardstand and that fill materials may also be present.

This proposal is not for a change of use however, as part of SEPP 55 a Consent Authority must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated.

There needs to be consideration of the risks during the construction and operation of the development. This includes work safety issues and the potential for construction to disturb contamination and cause off-site movement of chemicals.

A preliminary site investigation (Stage One) in accordance with SEPP 55 and NSW EPA guidelines is required in order to establish if there will be any risks from contamination during the construction and operation of the development.

Depending on the outcome of the preliminary site investigation, a detailed site investigation (Stage 2) may also be required in accordance with SEPP 55 and NSW EPA guidelines. If the land is found to be contaminated and not suitable for the proposed development, a Remedial Action Plan (RAP) will also be required for the remediation of the land.

## **Recommendation**

REFUSAL

### **New Information – Additional Review 18.08.2020**

The applicant has submitted a Stage 1 Environmental Site Assessment prepared by JKEnvironments, Report Dated 30 January 2020 (Reference: E32885PRrpt).

The report advises/recommends the following:

*The limited soil assessment did not include analysis for all identified contaminants of potential concern (CoPC). Based on those pre-selected CoPC that were analysed for in the samples, the concentrations were below the adopted site assessment criteria (SAC). Overall significant, widespread soil contamination was not identified based on the scope of the Stage 1 assessment. However, a number of potential on-site and off-site sources of contamination and/or CoPC were not assessed due to the limited scope of the Stage 1 assessment. Further investigation (i.e. Stage 2) is therefore required.*

*Based on the findings of this Stage 1 assessment, contamination that would preclude the proposed development described in Section 1.1 has not been identified, therefore we consider that the site can be made suitable for the proposed development. The potential risks from contamination were assessed to be relatively minor at this stage, however, further characterisation is required in order to confirm that the site is suitable without the need for remediation, or that remediation is actually required.*

*JKE recommend the following:*

- **A Stage 2 Detailed Site Investigation (DSI)** is to be undertaken. The objective of the investigation is to characterise groundwater across the site. This will require installation of a groundwater monitoring well network across the site. Fill material will also require further characterisation with additional boreholes drilled across the site on a systematic sampling plan to meet the minimum sampling densities specified by the NSW EPA. Additional laboratory analysis for an extended suite of PFAS group of chemicals is also recommended, as well as confirmatory testing for asbestos fines across the surface of the concrete slab in place across the site to address the identified Data Gaps (refer to Section 10.3); and
- **An ASS management plan (ASSMP)** is to be prepared to manage the potential disturbance of potential ASS (PASS) materials during the proposed development works.

The preliminary site investigation (Stage One) has determined that a detailed site investigation (Stage 2) is required. In order to assess the application a detailed site investigation (Stage 2) by a suitably qualified and experienced environmental consultant is required in accordance with SEPP 55 and NSW EPA guidelines.

If the land is found to be contaminated and not suitable for the proposed development, a Remedial Action Plan (RAP) prepared by a suitably qualified and experienced environmental consultant in accordance with SEPP 55 and NSW EPA guidelines will also be required for the remediation of the land.

An Acid Sulfate Soils Management Plan (ASSMP) is also to be prepared by suitably qualified and experienced persons to manage the potential disturbance of Potential Acid Sulfate Soils (PASS) during the proposed development works.

## **Recommendation**

REFUSAL

### **New Information – Additional Review 31.08.2020**

The applicant has submitted a Stage 2 Detailed Site Investigation for contamination prepared by JKEnvironments, Report Dated 14 August 2020 (Reference: E32885PArpt2). The report advises/recommends the following:

*The DSI has not identified any soil or groundwater contamination that was assessed to pose a risk to on-site receptors and/or in relation to the proposed development and anticipated land use. Exceedances above the ecological SAC were identified for total recoverable hydrocarbons (TRH F3) in soil and for heavy metals arsenic, lead and zinc in groundwater.*

*The contaminant concentrations were relatively minor, risks were assessed to be low and acceptable, and no complete source-pathway-receptor (SPR) linkage was expected to occur. On this basis, the DSI did not identified any triggers for remediation.*

*Based on the findings of the investigation, JKE are of the opinion that remediation is not required and that the site is suitable for the proposed development.*

Environmental Health previously advised that an Acid Sulfate Soils Management Plan (ASSMP) is also to be prepared by suitably qualified and experienced persons to manage the potential disturbance of Potential Acid Sulfate Soils (PASS) during the proposed development works.

Environmental Health have no objects subject to conditions regarding Acid Sulfate Soils and contamination.

### **Recommendation**

APPROVAL - subject to conditions

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

### **Recommended Environmental Investigations Conditions:**

#### **CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE**

##### **Acid Sulfate Soils Management Plan (ASSMP)**

An Acid Sulfate Soils Management Plan (ASSMP) is to be prepared by suitably qualified and experienced persons to manage the potential disturbance of Potential Acid Sulfate Soils (PASS) during works.

The Acid Sulfate Soils Management Plan (ASSMP) is to be submitted to the satisfaction of the Principal Certifying Authority and Councils Environmental Health Team.

Reason: To ensure management of potential acid sulfate soils.

#### **CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK**

##### **Requirement to Notify about New Contamination Evidence**

Any new information revealed during demolition works that has the potential to alter previous conclusions about site contamination or hazardous materials shall be immediately notified to the Council and the Principal Certifying Authority.

Reason: To protect human health and the environment.

##### **Acid Sulphate Soils**

All excavation, construction and associated works must be conducted in accordance with the approved Acid Sulfate Soils Management Plan.

Reason: To ensure management of potential acid sulfate soils.