

Environmental Health Referral Response - contaminated lands

Application Number:	DA2022/1649
Date:	19/10/2022
Responsible Officer	Adam Susko
Land to be developed (Address):	Lot 12 DP 1119562 , 10 Namona Street NORTH NARRABEEN NSW 2101 Lot 3 DP 1018621 , 6 Namona Street NORTH NARRABEEN NSW 2101

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

A report on Detailed Site Investigation (Contamination) by Douglas Partners Project 86973.04 has been submitted :

Conclusion and Recommendation

This PSI with limited sampling comprised a review of site history, a walkover and limited intrusive soil and groundwater investigation to provide data on the potential nature of contamination at the site for the proposed redevelopment.

Contamination identified in the soils, or considered likely based on the findings of this investigation, which are considered to require further investigation and/or management, are summarised as follows:

- Asbestos in fill and / or surface soils, based on:
 - o Asbestos identified in the AMP for NNPS;
 - o The historical aerial photographs which show the demolition of older structures both within the investigation areas and the greater NEP;
 - o The presence of existing buildings, the footprints of which have not been investigated;
 - o The results of the HBM assessment (DP, 2020a) showing friable asbestos beneath the school hall (Building 6);
 - o The observation of building rubble (concrete, glass and plastic) in some borehole locations which can be an indicator for the potential presence of asbestos; and
 - o The detection of asbestos (material sample collected from BH112/ 0.5 - 0.6 m) through borehole sampling which is inherently conservative with respect to the detection of asbestos and hence can be an indicator for the potential more widespread presence of asbestos in other boreholes sample and conformation.
- Copper hotspot in sample BH8/0.05-0.15 (350 mg/kg) which exceeded the environmental SAC of 55 mg/kg;
- TRH fraction F2 in the fill at BH102/0.4-0.5 (190 mg/kg) exceeded both the human health and environmental SAC of 110 mg/kg and 120 mg/kg, respectively; and
- TRH fraction F3 in the fill at BH102/0.4-0.5 (440 mg/kg) exceeded the environmental SAC of 300 mg/kg.

In summary, whilst noting the preliminary nature of this assessment, gross widespread chemical contamination of the site does not appear to be prevalent, however, the primary risk driver for soil contamination, and likely future soil management, is considered to be associated with asbestos.

ASS was identified in the natural soil profiles across both NNPS (predominantly in the deeper natural

soil profile) and NSHS (predominantly in the natural soil around and just beneath the groundwater table).

In regard to groundwater, DP does not consider there to be broad or significant contamination of the groundwater within the investigation areas. This is generally consistent with the field observations and chemical analysis results of site soils (fill and natural).

Based on the above, the following is recommended:

- Further asbestos investigation across the site as DP considers that there is a moderate to high risk that asbestos may be present in other areas of the investigation areas;
- Additional investigations in the building footprints post-demolition. Assessment required for asbestos and other COPC for comparison against the adopted SAC;
- Additional investigation of the fill around BH8 and BH102, both laterally and vertically to assess the risk of copper and TRH at each location respectively;
- Additional ASS investigations which should be undertaken to gain a better understanding of the nature and extent of ASS across the investigation areas. When developing the approach for such investigation's consideration should be given to the proposed redevelopment design (e.g., foundations, excavation depths, etc.). DP notes that an ASSMP for the redevelopment works is also anticipated to be required;
- For buildings requiring demolition, the removal and disposal of the identified hazardous materials by an appropriately licensed and qualified contractor, at an appropriately licensed disposal facility;
- Validation / clearance of the demolition works area by a qualified occupational hygienist upon completion of demolition and removal of the buildings, confirming that there are no residual asbestos-containing materials or other hazardous materials remaining on the site.

Fill across the site has been preliminarily classified as either general solid waste (non-putrescible) or general solid waste (non-putrescible) - special waste (asbestos). It is however, noted that soils in other areas not currently classified as asbestos contaminated (i.e., not limited to the capped areas on NNPS and the BH112) have the potential to be impacted by asbestos and hence also potentially classified as special waste (asbestos) in the future. This report cannot be used as a formal waste classification.

8 DP notes that there is also considered to be a moderate to high risk that asbestos is present across the whole NEP site and beyond the investigation area of this PSI.

In regard to natural soils, there were no exceedances of the published background levels for chemical contaminants, however, ASS has been identified in the natural soil across the investigation area and hence a VENM classification cannot be provided. DP notes that the natural soils may be preliminarily classified as general solid waste (non-putrescible) subject to the appropriate treatment and validation of such soils for ASS.

As such, the following is recommended in regard to waste classification:

- For fill, confirmation of the preliminary waste classification by a qualified environmental consultant either in situ or ex situ including additional visual / analytical testing; and
- Additional visual and analytical assessment of natural or suspected natural materials should be conducted (namely for ASS) to confirm the waste classification.

It is considered that these investigations could be undertaken in conjunction with the recommended additional investigations listed earlier in this section.

The above recommendations and future investigations should be undertaken in consultation with other relevant project consultants such as, architect, geotechnical, civil, structural and heritage etc. In conclusion, DP considers that the site could be made suitable for the proposed development, subject to implementation of the above recommendations and any associated remediation and/or management requirements.

Environmental Health supports the proposal 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

Contaminated Land Data gap Analysis Investigation

Prior to the issue of any Construction Certificate and post demolition a data gap analysis investigation is to be undertaken with a report prepared detailing findings and recommendations.

Further investigation is to be carried out in accordance with the Detailed Site Investigation (Contamination) Project 86973.04 August 2022 to determine if there is any further contamination under building footprints an list what further actions are to be taken regarding any contamination discoveries. The investigation is to be in accordance with relevant industry guidelines including Resilience and Hazards SEPP and NSW EPA guidelines.

The report is to be prepared by, or reviewed and approved, by a certified consultant as defined under NSW EPA Contaminated Land Consultant Certification Policy and supplied to the Principle Certifier together with any recommendations around Contamination Management to be include in an amended Disposal/ Remediation Action Plan before work proceeds.

Reason: Protection of the environment, Resilience and Hazards SEPP Compliance

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.

Classification of waste

Prior to the exportation of waste (fill and/or soil) from the site, the waste materials must be tested and classified in accordance with the provisions of the Protection of the Environment Operations Act 1997 and the NSW EPA Waste Classification Guidelines, Part 1: Classification of Waste (November 2014). Testing is required prior to off-site disposal. In accordance with DECC Waste Classification Guidelines (2014) materials identified for off-site disposal must be removed by a suitably qualified contractor to an appropriately licensed waste facility.

Reason: Appropriate disposal of waste and protection of environment.

Dust Control Measures

Dust control measures, including best practice and in accordance with NSW Workplace Health and Safety Regulations and the Protection of the Environment Operations Act 1997, shall be implemented

to minimise dust to neighbouring residents and businesses and ensure any airborne substance is kept within the boundaries of the site.

Measures may include but not be limited to:

- Water sprays
- Bunker storage
- Limiting size of stockpiles and covering stock piles
- Vertical barriers e.g. fencing with fine mesh attached
- Exhaust and capture

Reason: To minimise dust to neighbouring residents and businesses and avoid air pollution.

Contamination management

Any recommendations within;

- Contaminated Land Reports including the Preliminary Site (Contamination) Investigation with Limited Sampling by Douglas Partners referenced as Project 86973.01 and dated March 2022,
- Detailed Site Investigation (Contamination) Report by Douglas Partners referenced as Project 86973.04 and dated August 2022,
- Remedial Action Plan by Douglas Partners referenced as Project 86973.04 and dated August 2022 and,
- the data gap analysis investigation & report to be completed prior to the release of the construction certificate

Must be followed during works.

Reason: Protection of the environment, Resilience and Hazards SEPP compliance.

Off-site Disposal of Contaminated Soil - Chain of Custody

'Chain of Custody' documentation including receipts shall be kept for the exportation of waste (fill and/or soil material) from the site.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority within seven (7) days of transport and made available to Council upon request.

Reason: Appropriate disposal of waste and protection of environment.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Validation for Remediation

At the completion of any required remediation works a validation report is to be prepared by, or reviewed and approved, by a certified consultant as defined under NSW EPA Contaminated Land Consultant Certification Policy and submitted to the satisfaction of the Principal Certifier.

The Validation Report must be in accordance with the requirements of the following:

- Resilience and Hazards SEPP;
- Contaminated Land Management Act 1997;
- Relevant NSW EPA guidelines including the NSW EPA Guidelines for Consultants reporting on contaminated Land: Contaminated land guidelines 2020.

The report shall document the following:

The extent of validation sampling, and the results of the validation testing; and
That the remediation and validation of the site has been undertaken in accordance with the Remedial Action Plan and any additional requirements identified in the data gap analysis..

Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: Protection of the environment, Resilience and Hazards SEPP.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Onsite Encapsulation of Contaminated Material

No onsite encapsulation of contaminated material is to occur without approval under a separate DA or modification submitted to Council.

Reason: To allow for a proper evaluation of any proposed encapsulation works and to ensure that any contaminated material is effectively capped and managed long term.