

Environmental Health Referral Response - acid sulfate soils

Application Number:	DA2023/0269
Proposed Development:	Alterations and additions to an existing shared jetty including a ramp, pontoon and berthing area
Date:	22/03/2023
Responsible Officer	Grace Facer
Land to be developed (Address):	Lot 92 DP 12749 , 45 Florence Terrace SCOTLAND ISLAND NSW 2105 Lot LIC 406583 , 45 Florence Terrace SCOTLAND ISLAND NSW 2105 Lot LIC 363575 , 45 Florence Terrace SCOTLAND ISLAND NSW 2105 Lot 93 DP 12749 , 43 Florence Terrace SCOTLAND ISLAND NSW 2105 Lot LIC 363575 , 43 Florence Terrace SCOTLAND ISLAND NSW 2105

Reasons for referral

This application seeks consent for one or more of the following:

- All development in class 1 land
- Any works below ground surface or will lower water table in area class 2 land
- Any works beyond 1 metre or lower water table by 1 metre in class 3 land
- Any works beyond 2 metres or lower water table by 2 metres in class 4 land
- Works on land below 10 metres AHD and within 500m of class 1, 2, 3 or 4 land which are likely to lower water table below 1 metre

And as such, Council's Environmental Investigations officers are required to consider the likely impacts.

Officer comments

General Comments

Site area affected is classified as Acid sulfate class 1.

- Class 1: Acid sulfate soils in a class 1 area are likely to be found on and below the natural ground surface.

The Statement Of Environmental Effects (SEE) by Kerry Hamann Waratah Planning - Director BSc (Environmental Biology)PIA Assoc. dated 3/03/23 states:

1.7.4. Acid sulfate soils

The proposed works are below the MHWL an area with a 'Class 1' Acid Sulfate Soil (ASS) classification.

The potential for the generation of ASS is high and therefore an assessment of the associated risk of the works and the potential impact to the environment is required in accordance with clause 7.1 the PLEP.

A preliminary Acid Sulfate Soil Assessment has been prepared by Copley Marine Group (GMG) and is provided at Appendix 2.6. It should be noted that all piling works will be undertaken in a way that ensures disturbed soil remains in the water and therefore cannot oxidise (leading to ASS). Silt curtains,

installed prior to works, will be utilised during pile driving operations. As such, soil and silt will not spread outside of the pile driving area.

The development of a Construction Environmental Management Plan (CEMP) will assist in limiting soil disturbance. It is considered the works would meet the objectives of clause 7.1 of the PLEP in that the development would not disturb, expose or drain acid sulfate soils and cause environmental damage.

The Geotechnical assessment by Ascentgeo Consulting Geotechnical Engineers 15 July 2022 finds : "Based on the lack of earthworks being proposed, and the lack of the formational conditions required for the generation of Acid Sulfate Soils, no field Acid Sulfate Soils Test or Acid Sulfate Soils Management Plan is required."

The preliminary Acid Sulfate Soil Assessment has been prepared by Copley Marine Group Pty Ltd (GMG) 3/3/2023 states:

The piling works will be completed using a piling barge with washing facilities and silt curtains with no soil being removed from the water (or a wet environment) to start the oxidization process. While temporary turbidity of the water will occur, the piling works will be completed individually and hence the volume of disturbance will be limited and closely managed.

Silt curtains, installed prior to works, will be utilised during pile driving and pile removal operations to limit the spread of soil outside of the existing pile driving/ removal area and assist in settling it back to the seabed quickly. The site Construction Environmental Management Plan will include these measures to assist in limiting the disturbance of soil.

The preliminary assessment has found that potential ASS will not be oxidised and therefore an ASS Management Plan is not required (as per the Acid Sulfate Soils Manual 1998). In addition, it is considered the works meet the objectives of clause 7.1 of the PLEP in that the development would not disturb, expose or drain acid sulfate soils and cause environmental damage.

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 COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Requirement to notify about new Acid Sulfate Soils evidence

Any new information revealed during excavation works or pile driving that has the potential to alter previous conclusions about Acid Sulfate Soils shall be immediately notified to the Council and the Principal Certifier and a report be obtained from a suitably qualified person. Any recommendations provided by the report are to be complied with during works.

Reason: To protect the environment.

Acid sulfate soils

All excavation, pile driving and construction and associated works must be conducted in accordance with the Acid Sulfate Soil Assessment prepared by Copley Marine Group Pty Ltd (GMG) 3/3/2023.

Reason: To ensure management of potential acid sulfate soils.

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

Acid Sulfate Soil Management Confirmation

Details demonstrating compliance with the Acid Sulfate Soil Assessment as prepared by Copley Marine Group Pty Ltd (GMG) 3/3/2023 is to be submitted to the satisfaction of the principle certifier prior to the issue of the occupation certificate.

Reason: To ensure management of potential acid sulfate soils.