Acid Sulfate Soil Management Plan for Minor Works

This plan provides guidance for the management of acid sulfate soils where they are disturbed during minor works including the installation of:

- footings for single dwelling and the like
- sewer and stormwater drainage associated with single dwellings and the like
- swimming pools (residential only)
- domestic sewage management facilities and associated land application areas
- other works determined by Council's Building and Environmental Health Unit as minor which disturb less than 10 tonnes of soil.

Exclusions

This plan is not suitable for any other type of development or where groundwater is likely to be disturbed or where dewatering will be or is likely to be required. In these cases, a site-specific management plan will be required.

Please note that Council reserves the right to require the applicant to submit a detailed acid sulfate soil assessment and management plan, where applicable, in accordance with the Acid Sulfate Soils Manual where the proposed works are not considered 'minor' in nature.

Acid sulfate soils

Acid Sulfate Soils (ASS) are extremely acidic, and sulphur rich soils found within the floodplain of coastal areas generally below RL 5m AHD. Potential Acid Sulfate Soils (PASS) is the common name given to soil and sediment containing iron sulfide (usually pyrite). They can become Actual Acid Sulfate Soils (AASS) and produce sulfuric acid if they become exposed to air through excavation or lowering of the water table.

Problems caused by Acid Sulfate Soils include:

- fish kills and aquatic habitat changes
- corrosion of concrete, iron and steel
- reduced plant growth – bare patches and scalds
- poor foundation bearing capacity (clay sediments only)
- iron staining of paths, driveways and retaining walls.

Where does this plan apply?

Clause 7.1 of the Tweed Local Environment Plan 2014 (or other relevant Standard Instrument) specifies that development consent is required for the carrying out of works described in the following table shown on the Acid Sulfate Soils Map as being the class specified for these works.

Class of land	Works
1	Any works
2	Works below the natural ground surface Works by which the water table is likely to be lowered
3	Works more than 1 metre below the natural ground surface Works by which the water table is likely to be lowered more than 1 metre below the natural ground surface
4	Works more than 2 metres below the natural ground surface Works by which the water table is likely to be lowered more than 2 metres below the natural ground surface
5	Works within 500 metres of adjacent Class 1, 2, 3, or 4 land that is below 5 metres Australian Height Datum and by which the water table is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land

Development consent cannot be granted for the carrying out of works unless an acid sulfate soils management plan has been prepared for the proposed works in accordance with the Acid Sulfate Soils Manual and has been provided to the consent authority, unless a Preliminary Soil Assessment prepared in accordance with the Tweed LEP.

The Acid Sulfate Soil Manual produced by the Acid Sulfate Soil Management Advisory Committee requires soil and water assessment, including chemical analysis to develop a detailed management plan. However, the Manual also notes that the level of assessment undertaken, and the complexity of an acid sulfate soils management plan, should match the level of risk to the environment. Council has concluded that the risk to the environment from the defined minor works is potentially very low and, in most cases, the conservative liming rates will address any likely negative impacts.

Management

Where the applicant has agreed ASS are present on site the following management strategies are deemed satisfactory. Agricultural lime is recognised as a cost-efficient method of neutralising acid generated by ASS.

Agricultural lime is to be used to treat ASS. Hydrated or slaked lime must not be used without specific approval from Council. Lime is to be thoroughly mixed with the excavation material. Treatment is to occur on-site unless previous approval has been obtained from Council's Building and Environmental Health Unit for alternative arrangements.

Excavated material is to be treated within 48 hours of excavation or the following measures are to be in place:

1. Provide a bed of agricultural lime beneath excavated material.
2. Provide non-ASS bunds to excavated material to contain any leachate.
3. Treat excavated material within 14 days of excavation.

Liming rates

Sandy material (assuming maximum 1% pyrite) – apply a minimum 50kg agricultural lime per tonne of excavated soil.

Clayey material (assuming maximum 3% pyrite) – apply a minimum 150kg agricultural lime per tonne of excavated soil

THIS NOTES PAGE IS NOT REQUIRED TO BE SUBMITTED WITH YOUR APPLICATION