ACID SULFATE SOILS (ASS)1 ON RELATIVELY UNDISTURBED LAND

Depth	Depth Code	Depth to Actual Acid Sulfate Soil2 (pH < 4.0)\(^3\)	Depth to Potential Acid Sulfate Soil2 (PASS)
0 - 0.5m	0	A0	S0
0.5 - 1m	1	A1	S1
1 - 2m	2	A2	S2
2 - 3m	3	A3	S3
3 - 4m	4	A4	S4
4 - 5m	5	A5	S5
NA	Land not assessed as part of this survey

1. The depth codes above imply that a predominance of profiles in the map unit fall within the nominated depth range.
2. Actual acid sulfate soil layers (designated with an A code) often overlie potential acid sulfate soil layers (designated with an S code). Where this occurs e.g. A0S2 the map unit is coloured according to the depth of the upper surface of the 'actual' layer (A0) and overlayed with yellow dots.
3. Acid sulfate soil is the generic term used to define soils derived from estuarine sediments containing iron sulfides (pyrite) or containing the acidic products of the oxidation of sulfides. The term includes actual and potential acid sulfate soils.
4. An "A" preceding the soil depth code indicates the probable depth to a soil layer or horizon where a field pH of < 4.0 is first encountered. A field pH of 4.0 or less is used as an indicator of an Actual Acid Sulfate Soil (AASS) which has mobile acidity in the form of ionic hydrogen, aluminium, iron or acid salts. Extensive areas with high actual acidity derived from sulfide oxidation may constitute a significant environmental hazard. Some soils with high organic matter may have low pH from organic acids.
5. An "S" preceding the soil depth code indicates the probable depth to a Potential Acid Sulfate Soil (PASS) layer or horizon. PASS are soils where the oxidisable sulfur percentage exceeds the prescribed 'action criteria' at which treatment is required if disturbed. Testing for Oxidisable sulfur is conducted by a range of methods which commonly include - Chromium Reducible Sulfur (SCS), and Suspension Peroxide Oxidation Combined Acidity and Sulfur (SPOCAS).

- disclaimer:
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Attachment 1

Moreton Bay Regional Council

DONNYBROOK - MELDALE - TOORBUL

SPECIAL ACID SULFATE SOILS MAP

SCALE IN METRES

Projected: Transverse Mercator (MGA Zone 56)
Horizontal Datum: Geocentric Datum of Australia (GDA94)
Note: This map is GDA94 compliant

Moreton Bay Regional Council

Natural Resources and Water

REFERENCE

Donnybrook
Meldale
Toorbul
Beachmere
Redcliffe
Island
Brisbane
Pacifie
Ocean
SOUTH
Kilometers
0 2.5 5 1.25

INTENSITY DIAGRAM

1: 25 000 scale - Generally 8 to 16 boreholes per km²
1: 50 000 scale - Generally 2 to 7 boreholes per km²
1: 100 000 scale - Broad scale mapping, generally one borehole per km²

Mapping Units interpreted from geomorphology, elevation and aerial photography, limited or no field investigation conducted.