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Environmental Regulation Division
Department of Environment and Conservation
Level 4, 168 St George's Terrace
Perth WA 6000

By email: acidsulfatesoils@dec.wa.gov.au

To whom it may concern

Re: *DRAFT Treatment and management of acid sulphate soils and water in acid sulphate soil landscapes*

The Urban Development Institute of Australia (WA) is pleased to provide the following comments on the Department of Environment and Conservation's *DRAFT Treatment and management of acid sulphate soils and water in acid sulphate soil landscapes*. UDIA is the peak body representing the property development industry in Western Australia with a membership drawn from the land development, engineering, environmental, planning, and urban design professions. Members also include State and Local Government Authorities, legal practitioners and financiers. One of the principal objectives of UDIA is to promote innovation in the creation of sustainable communities in Western Australia and we endeavour to ensure that requirements placed on development are feasible without compromising desired outcomes.

UDIA is aware that individual members have provided feedback on the documents and we endorse their stated positions. The purpose of this letter is not to focus specifically on technical feedback; however we have included some commentary on the following pages for your consideration. We would like to acknowledge that progress has been made by both government and industry on the handling and management of ASS through guidelines and industry's more experienced understanding of best practice and alternate ways of development to manage ASS risk. It has been reported to UDIA that a more common sense approach to ASS issues can be taken by DEC and we would like to build on this so that there is a balanced understanding of the risk of ASS from land development.

An ongoing key priority for UDIA is housing affordability and it is important that DEC understands the negative impact that delays in issuing approvals for ASS management have on housing affordability. It is imperative that the guidelines are clear and not open to interpretation as this inevitably leads to costly delays.

However, there are a number of items in the draft document that will inevitably lead to increased and unnecessary costs. The first is the requirement for SPOCAS as opposed to chromium suite testing which is considerably more expensive per sample to test. Other concerns are ground freezing, which we understand is unproven in Western Australia, and the requirement for more

than one monitoring event (Section 5.3.1) which is not possible given the timeframes in which ASS investigations are commissioned. UDIA suggests that these requirements be reconsidered and alternative policy options developed to eliminate the potential for higher costs.

We trust that you will find the following comments constructive in finalising the draft document and thank you again for the opportunity to provide feedback.

Yours sincerely

Debra Goostrey
Chief Executive Officer

Section Number	Draft Guideline	Issue	Proposed Amendment
General	The draft guideline does not explicitly state the type of acid sulfate soil testing required (SPOCAS vs. Chromium suite). The DEC prefers SPOCAS, with the exception of highly organic mediums such as peat, whereby chromium suite is more appropriate.	If some consultants are undertaking SPOCAS (as preferred by DEC) and others are undertaking chromium suite (which is not preferred by DEC, unless the soils are highly organic, such as peat) then this creates an economic advantage for only undertaking chromium suite. SPOCAS is approximately $20 more expensive per sample.	DEC should clearly specify what test is required for specific ground conditions. This should be included in this guideline or the final version of the *Draft Investigation & Identification of ASS.* The DEC should release relevant research confirming the use of SPOCAS. Previously the DEC has indicated that CRS was the preferred method for assessing ASS levels and potential acidity in sandy soils as it was more sensitive to low pyrite levels.
4.4.1 Calculating the quantity of neutralising agent	There is lack of clarity about the net acidity calculations.	It would be useful to emphasise that the net acidity calculation for determining treatment should exclude excess acid neutralising capacity.	DEC to clarify net acidity calculations.
4.4.5 Treatment Pad	The draft guideline states "For treatment of large volumes of material by mechanical application of neutralization materials, treatment should be carried out on a treatment pad."	The guideline currently refers to "a large volume" of material to initiate the requirement for a treatment pad. This should be more clearly defined.	It is suggested that Section 4.4.5 be removed and the requirement for a treatment pad be captured under the requirements of short, medium and long term stockpiling.
4.4.5 & 4.7.3	Section 4.4.5 talks about the requirement for "large volumes of material….. should be carried out on a	The discussion of treatment pad requirements under two different sections could be misleading and lead to non-	See comment above.

Section Number	Draft Guideline	Issue	Proposed Amendment
	treatment pad" Section 4.7.3 which talks about all short, medium and long term stockpiling of materials including the requirements for treatment pads.	conformance. Section 4.4.5 specifies a treatment pad is only required for large volumes of soil, whilst Section 4.7.3 specifies that treatment pad is required under all circumstances (medium term stockpiles.) and maybe required for short term stockpiling.	
4.4.6 Validation of soil treatment	There should be clarification of the points listed under 4.4.6 on p14	"soil pH must be in the range 6.5 to 8.5" Is that pHf and pHox?	Clarification required of points listed under 4.4.6.
4.7.5 Stockpiling of Topsoil	The draft guideline specifies that "if topsoils have a pH < 5.0, they should be treated to a revised criterion of pH > 5"	A default treatment criterion of pH< 5 is likely to result in the unnecessary treatment of topsoil in some cases.	The requirement to "treat" topsoil should be assessed in light of the following: • whether actual acid sulfate soils have been identified at shallow depth on the site; and • whether the topsoil supports living vegetation.
5.3.1 Groundwater Investigations	The draft guideline provides a list of laboratory analytes including such parameters as dissolved oxygen, pH and redox potential	The guideline implies these are laboratory tests, however, dissolved oxygen, pH and redox potential should always be measured *in situ*.	The aforementioned parameters should be removed from the list and added as "minimum field parameters".
5.3.3 Cone of Groundwater Depression	The draft guideline specifies that groundwater modeling is required for all dewatering proposals in ASS risk areas	Modeling for all dewatering proposals, which involve spear point dewatering methods is strongly supported. However, modeling for dewatering using	DEC should be aware of the implications of the two dewatering methods and assessment of reports should take this into consideration.

Section Number	Draft Guideline	Issue	Proposed Amendment
		a metal and open pump type method is not warranted in most cases, particularly for linear excavations. A scenario whereby modeling would not be warranted is dewatering (using metal and open pump) in clayey materials to remove water flow from a perched water table. Drawdown away from the works in this scenario is expected to be negligible, and hence, modeling would to demonstrate this would not be feasible.	
5.3.7 Groundwater Monitoring	The draft guideline specifies that for dewatering projects of greater than 4 weeks (regardless of flow rate) will require detailed groundwater monitoring program including a post dewatering monitoring.	As discussed above, the requirement for groundwater monitoring should be assessed in light of the dewatering method. A detailed groundwater monitoring program is not considered warranted for the abovementioned example.	DEC should be aware of the implications of the two dewatering methods and assessment of reports should take this into consideration.