Model Work Health and Safety Regulations for Mining - Public Comment Response Form

Individual/Organisational name: Seedsman Geotechnics Pty Ltd	
Regulations Chapter 9: Mines	
Part 9.1	
Regulation	**Comment**
Part 9.2	
Regulation	**Comment**
Part 9.3	
Regulation	**Comment**

Other Comments – included here because there is no opportunity for comments in the section on specific codes

I am making the submission as a mining consultant that operates in all states of Australia and internationally in both underground and surface operations. I am surprised that "mining consultant" is not specifically identified as a stakeholder in this process. I was not made aware of this process by my professional organisations – AusIMM or EAGCG – I was first informed by a report in the newsletter issued by my international society. Are mining engineering consultants stakeholders in this process? – it would appear not.

I have an underlying concern that some of the codes are formulated on the basis that non-geotechnical engineers can make major decision concerning the behaviour rock masses without consulting trained/experienced professionals. All the codes would be better structured if they provide all parties with an explanation of why geotechnical professionals do what they do, and to provide a check list for assessing any received advice. By either omission or admission, the codes are potential constraints on engineering best practice. Too much of what I have read looks like safety can be 'inspected in" rather than unsafe workplaces "designed out".

There is no consistency with the structure of the codes of practice for underground coal, underground metals, and surface mining. I do not understand why this is the case. The open pit code makes no reference to PHMPs that are required in QLD and are invoked in the Underground Coal code. The open pit code provides a description of the process while the Underground Coal code tends toward being proscriptive.

There would appear to be a significant lack of editorial control on the draft codes of practice. This is of great concern given the timeline that is presented for what

will become “court admissible” codes.

Codes of Practice	
Roads and Other Vehicle Operating Areas	
Section/page number	**Comment**
Managing Naturally Occurring Radioactive Materials in Mining	
Section/page number	**Comment**
The Mine Records	
Section/page number	**Comment**
WHS Management Systems in Mining	
Section/page number	**Comment**
Inundation and Inrush Hazard Management	
Section/page number	**Comment**
Emergency Response in Australian Mines	
Section/page number	**Comment**
Strata Control in Underground Coal Mines	
Section/page number	**Comment**
2.2	There appears to be a typographical error in the second dot point of the main test. Should “tailoring” be “tailings”.

	There is a reference to “stopes”, but not coal mining terms such as goaf or extraction areas.
3.1	The section entitled “Geological Information” would be better placed in Section 2.1, as would “Regional assessment of roof and floor strategy”. The substantial part of this work is typically done in advance of mining, in advance of the preparation of the PHMP, and by individuals not identified in the PHMP. Obviously the PHMP needs to ensure that the work is kept up to date.
3.9	This section strangely makes no reference to chain pillar design. The section of “Pillar working load” is seriously misleading in the absence of a prohibition in its use in longwall chain pillars. Figure 1 is misleading as it suggests that pillar strength is the only strength estimate required – What about roof and floor strength? The section on the “Extraction of regular sized pillars” is misleading. There is no accepted basis for the multipliers quoted, and giving numerical values the code is ill advised. The section on “Pillar Strength’ makes reference to a design method that relies on a destroyed confidential data base. There are serious concerns about the validity of some of the key components of this data base. There is no engineering basis for the probabilities of failure quoted in Table 1. Any reference to pillar strength using ACARP C5024 should be deleted from the code.
Ventilation of Underground Mines	
Section/page number	**Comment**
Survey and Drafting Directions for Mine Surveyors	
Section/page number	**Comment**
Health Monitoring	
Section/page number	**Comment**
Mine Closure	

Section/page number	Comment
Ground Control in Open Pit Mines	
Section/page number	**Comment**
All	This code needs a large degree of editorial review. Despite the statement that it represents a performance based standard rather than a prescriptive methodology, there is a lot of "musts" in the code – and some of them are very strange to say the least. There is much use of the verbs "is" and "shall" without their legal status being defined. I have a suspicion this code has been cut and pasted from a metaliferous operation onto coal mining without an appreciation of the differences in terminology and mining methods.
2	The terminology in Section 2.1 does not reflect dragline practice in coal mines. Where are terms such as highwall, lowwall, footwall, spoil dumps ? I do not accept the proposition in Section 2.3 that permanent stability is "prohibited". In Section 2.4, the requirement for domains and design sectors may not be appropriate for many coal mines. The requirement for geotechnical holes to involve coring does not reflect the continuing improvement in the ability of geophysical logs to replace core. There is no reference to bedding partings the overwhelming discontinuity or defect in coal measures. The requirement for a computer-based 3D model is unnecessary for most coal mines. There is no definition of "soft" rock. The rock mass rating approach has no status in modern coal mining practice. The text on factor of safety is appropriate in the way it outlines the uncertainty with the concept. Including Table 1 undermines the message in the text, Table 1 should be deleted. The comments about numerical methods do not outline the limitations. By omission it implies the numerical methods are superior – this is not the case as they require a large number of input parameters that cannot be quantified until after a slope failure (and then not all of them). The section on batter and berm design does not recognise current practice in dragline mines where the "batters" are often in excess of 40m.

Ground Control for Underground Mines	
Section/page number	**Comment**
Underground Winding Systems	
Section/page number	**Comment**