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Dear Mr Deane

**COMMENTS ON DRAFT GEOTECHNICAL GUIDELINE FOR TERMINAL AND REHABILITATED SLOPES EXTRACTIVE INDUSTRY MAY 2020**

Thank you for the opportunity to comment on the draft Geotechnical Guideline for terminal and rehabilitated slopes Extractive Industry (Guideline). The comments from BCA Consulting have been incorporated into CMPA's submission.

**General comments**

- The approach that the guideline takes to be extremely conservative, confusing, and unclear.
- A 'Preliminary geotechnical assessment' (Section 2.1 and Section 3.3) is required to determine the category of slope – this assessment process is laid out in some detail. This is in contrast with Section 3.3.1 and Table 1, which appear to offer a simple and straightforward means of determining the slope 'category' (and hence the required assessment approach). Where the Table 1 matrix reads **None**, the slope is 'simple', where the matrix reads **Competence Person's Letter**, the slope is 'intermediate' and for **Geotechnical Assessment** the slope is 'complex'. This is then contradicted by Section 3.3.3 which states the Competent Person's Letter will determine whether an excavation is 'simple' and why. The default position seems to be that every excavation, regardless of depth and size, will require assessment by a 'competent person'. This is considered an unnecessary cost and an increase in regulatory burden.
- The requirement (section 2.1) that all excavations, regardless of depth and type, require a Ground Control Management Plan is a gross over reaction and a further unjustified addition cost and increase in regulatory burden.
- Undertaking significant geotechnical assessment associated with quarry operations, with many decades of active extraction prior to the development of any terminal faces, is a significant up-front

cost which would be better spent after quarrying has exposed fresh faces and can provide meaningful rock characteristics and parameters.

- The discussion about ‘working operational faces’ and WorkSafe Victoria provides no clarity about the application of the guideline or the overlap between Earth Resources Regulation (ERR) and WorkSafe. This is best exemplified by the statement in Section 3.4 regarding the need for separate ‘geotechnical risk assessments at each phase of the project’.
- The draft seems to have been put together in haste and without adequate internal review.

### Specific comments

- The “Disclaimer” is incredibly broad, particularly when compared with such disclaimers in other States’ guidelines and seems to indicate ERR/DJPR are taking no responsibility for the content at all.
- The “Interpretation” includes definitions of ‘must’ and ‘must not’ - given the document is a guideline is this appropriate?
- The initial sections contain numerous references to the work authority holder – given that this document is to form part of the work plan process, in many instances there will not be a Work Authority or a Work Authority holder, only an applicant.
- Section 1.1 references the *Preparation of Work Plans and Work Plan Variations: Guideline for Extractive Industry Projects* (DEDJTR 2018) – these require the determination of a Geotechnical Risk Zone (GRZ) which does not seem to be addressed in this guideline.
- Section 1.2 makes reference to ‘well integrity’, the relevance of which is unclear.
- Section 1.3 states ‘movement may be significant.... or catastrophic’ – there seems to be no understanding that many/most instances of ‘movement’ are minor and insignificant.
- Section 2.2 includes a suggestion that an increase in ‘the design life of an excavation’ may require a work plan variation – we are not aware of work plans requiring a statement of the ‘design life of an excavation’.
- The angles defined in Section 3.1 are not shown in Figure 1.
- What is the relevance of the ‘Max 15m total depth’ shown in Figure 2, given the text reference states ‘regardless of excavation height’?
- Table 1 reads such that a 5m face can be either in the 5-15m or 0-5m category. Similarly, a ‘soft’ slope designed at exactly 1V:3H does not fall in either category.
- Table 1 should read “Competent Person’ not “Competence Person’.
- In section 3.3.2, the geotechnical/stability relevance of some of the dot points is not clear (noise, visual impacts etc).

- Similarly, the relevance of some of the features shown in Figure 3 (specific reference to a chain mesh fence with three bar wires, visual screening bund) might be better placed in a guideline on site wide rehabilitation.
- Section 3.3.4 had large blanks on Page 14 (and possibly Page 15), presumably where tables or graphs should have appeared. Possibly this was supposed to be the Table that appears at the end of Section 3.3.4 should have been.
- The final paragraph of Section 3.3.4 includes the statement ‘Similarly, a higher FOS or POF should be used if the samples used for engineering property testing are not representative of the rock mass’. Presumably, this should read ‘...higher FOS or lower POF....’.
- The Table at the end of Section 3.3.4 states that the failure of a ‘terminal slope whose end use is on private land with no public access’ is of ‘Moderately Serious’ consequence, without any consideration of proximity to receptors – this is considered an inappropriate description and the required FOS/POF is excessive. Similarly, the reference to a ‘30 m’ buffer distance in this Table seems to be completely arbitrary and without justification. It is acknowledged that these are examples, but such examples will be used in a strict sense by ERR assessors.

In summary, it is considered the Guideline takes an overly conservative and prescriptive approach to quarry slope design and stability. Such an approach fails to recognise the realities associated with the vast majority of Victorian quarries, and the complete lack of any history of significant terminal or rehabilitated slope failures.

The Guideline is not a practical document that will assist the potential/current Work Authority holder in managing geotechnical risk in quarries. It persists in only considering some aspects of geotechnical risk (WorkSafe versus ERR) leading to confusion for the Quarry Manager and an increase in red tape. Additionally, no impact assessment has been made on the increased costs to the work authority/potential work authority holder which in CMPA’s view would be substantial and would lead to increases in the cost of construction materials. The Guideline, if implemented in its current form, could lead to the potential loss of small to medium quarries (who account for half the annual production of construction materials in Victoria) in the market. More importantly, there is no evidence of systemic failure in the extractive industry.

On a final note, it has come to CMPA’s attention that these draft Geotechnical guidelines are effectively already being required by ERR in recent work plans under preparation. This is an additional \$20K - \$60K impost for new work plans and even with this money spent on recognised consultants, ERR are refusing to accept their findings.

As such CMPA **does not** support the Guideline in its current form.

I would be happy to discuss my comments.

Yours sincerely



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General Manager