

Peer Review Report

Review Report on Mineral Reporting Standards: PERC's role in CRIRSCO and its relevance to the European mining sector

Review, Earth Sci. Syst. Soc.

Reviewer: Tom Bide

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EVALUATION

Q 1 Please summarize the main theme of the review.

Excellent technical content but in need of re organisation of the structure and order of sections to ensure a clear narrative

Q 2 Please highlight the limitations and strengths.

Strengths: the authors clearly have significant technical expertise which is demonstrated

Weaknesses: whilst the content is all there the is a lack of a clear coherent narrative structure leading the manuscript to sometimes become fragmented and confusing to read.

Q 3 Does the review include a balanced, comprehensive and critical view of the research area?

Yes

Q 4 Check List

Is the English language of sufficient quality?

Yes.

Is the quality of the figures and/or tables satisfactory?

Yes.

Does this manuscript refer predominantly to published research? (unpublished or original research is non-standard for a review article, and should be properly contextualised by the author)

Yes.

Does the manuscript cover the topic in an objective and analytical manner

Yes.

Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes.

Does the manuscript include recent developments?

Yes.

Does the review add new insights to the scholarly literature with respect to previously published reviews?

Yes.

Q 5 Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List):

Overall comments:

I have very few comments regarding the technical content, which is excellent, however, I found the manuscript disjointed and repetitive in places with no clear narrative leading me to constantly jump back and forth between sections, the vast majority of the detailed comments below relate to this aspect. This may be a case of personal style but the authors may wish to re-read the manuscript and consider a significant restructure based on what they really want the reader to take away, as, as it stands I do not think it is immediately obvious. i.e. I want to know and understand the relevance of PERC in an ever complex world of standards/codes etc.. - how does this fit with the ever-changing focus on ESG, CRMs global supply etc. I think it's all there I just struggled to really understand it without constantly jumping back and forward between sections. An example of this is that there are 2 or 3 separate sections explaining professional competence, is it necessary to split the subject up in such a way?

I found it slightly confusing how PERC and CRIRSCO are introduced in both section 2 and section 3, I didn't really understand why these need to be different, and also there are essentially two historical context sections (one for the general/ international situation in section 1.3 and one specifically for PERC in section 2.2, where in fact the two are intertwined?

There is the assumption of much background knowledge from the reader regarding acronyms, organisations, historical context etc... whilst some of this is included in great detail a lot is missing which may confuse readers who are not experienced in the subject.

Specific comments:

Line 32 this sentence seems very wordy, suggest only mention neodymium and permanent magnets once within the sentence.

Line 38 reference needed for the forecast mentioned.

Line 45 this is the 1st mention of CRIRSCO and PERC with no explanation of what they mean. The entire of this paragraph assumes a fair amount of knowledge for the subject that might need further explanation, i.e. discussion over templates and reporting standards. this paragraph may be better at the end of section 1?

Line 80-84 repetition of subject of lines 101-102

Line 149 perhaps this may not be relevant, but would it be useful to mention the work of McKelvey and USGS here? It seems a jump from 1909 to 1971.

Line 149 1st mention of JORC - a sentence as to who this organisation is may be useful for context.

Line 158 space in between in and 1989

Line 205 there are numerous instances of this, it may be a case of editorial style but personally I find mention of details 'below' to be unhelpful, it may be better to reference the section that is being referred to. Additionally, there are numerous instances of 'above' and 'below' being used in this context, this goes back to my initial general comment about a fragmented structure and lack of a central narrative that makes the manuscript difficult to read and occasionally a little confusing at times.

Line 232 A brief explanation to what NI 43-101 might be useful here? To the non-expert it is a rather abrupt use of jargon.

Line 250 this paragraph seems unrelated to the previous ones or the section title - perhaps a new section here? Similarly perhaps the following 2 paragraphs may be better in the introduction?

Line 276 section 1.6 - The UNFC is introduced here without much context as to how it relates to the rest of the manuscript perhaps some inclusion of what the introduction of UNFC adds to the understanding of PERC may be useful, or what the point of UNFC is related to CRIRSCO may be useful? Or can it be reduced/removed?

Line 326 Section 2.1 It seems strange that we get as far as section 2 before there is an introduction to CRIRSCO (and PERC), should some of this go into the introduction?

Line 371, similarly to the comment made re Line 205, there are many instances of 'discussed in more detail later' I think this breaks up the narrative flow somewhat and also indicates the occasionally disjointed structure of the manuscript.

Line 440 - why is some of this not in Section 2? There are essentially 2 sections that introduce CRIRSCO? I appreciate there is little repetition as to the content but it seems odd to have two unconnected sections both explaining the various aspects of CRIRSCO - can these be combined?

Line 446 there is repetition with lines 369 - 371, does it need to be said twice?

Line 471 consistency will need to be checked throughout the manuscript - standardisation needed between 'Competent Person', 'Competent Person (CP)' and just 'CP'

Line 479 - can this section be combined with where it is discussed earlier?

Line 3.4 the subjects of sections 2.2 and 3.4 seem very similar can they be combined - or if not the subject matter of each section needs to be clearly separated.

Line 564 Public reports are 1st mentioned in line 468 perhaps it would be better to introduce them here instead?

Line 575 this repeats somewhat what has been said in line 456 and section 1.4 does it merit a separate section here as well.

Line 583 although this is a very important point it seems rather abruptly insert here - perhaps a short few sentences explaining the principles behind why it is an important issue? Or perhaps everything from line 549 on to the end of the section could be specifically on reporting and the previous parts of section 3 to go into section 2.2/the introduction?

Figures - the figure captions at on the figures themselves seem to be wrong - i.e. the map is labelled as Figure 3 where it should be figure 1? Additionally is figure 4 (labelled as figure 2) missing something? I'm not sure what this short extract clearly demonstrates - also if it to be included then it repeats quotes which are used elsewhere in the manuscript (i.e. definition of CP).

QUALITY ASSESSMENT

Q 6	Quality of generalization and summary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q 7	Significance to the field	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q 8	Interest to a general audience	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q 9	Quality of the writing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>