

Comments on CSA Notice of Proposed Changes to NI 43-101

September 18, 2025

To: British Columbia Securities Commission
Alberta Securities Commission
Financial and Consumer Affairs Authority of Saskatchewan
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers
Financial and Consumer Services Commission, New Brunswick
Superintendent of Securities, Department of Justice and Public Safety, Prince Edward Island
Nova Scotia Securities Commission
Office of the Superintendent of Securities, Service NL
Northwest Territories Office of the Superintendent of Securities
Office of the Yukon Superintendent of Securities
Nunavut Securities Office

Dear Sirs and Madams,

I am submitting my comments on the proposed changes to NI 43-101, Form 43-101F1 and Companion Policy on my own behalf as an experienced professional geologist and principal of Cameron Resource Consulting, LLC. My consulting practice is based in Idaho, U.S.A. I have either authored or co-authored several NI 43-101 Technical Reports in some cases acting as an employee of mining companies and in others in a consulting capacity as an independent Qualified Person (QP). I have worked on exploration and mining projects on five continents during my professional career (1976 - Present), comprising substantial amounts of time in the field as well as in Corporate management settings.

Preface

I concur that the instrument, companion policy, and accompanying form warrant an update, and this presents a valuable opportunity for their enhancement. My observations and comments are offered below, referencing the headings outlined in the Annexes. Objectives of the new policies and form are to "streamline", "modernize", and "clarify" according to the Notice. The current and proposed instruments, along with the form, exhibit a blend of general-to-specific guidance and prescriptive requirements. I would argue that, in certain instances, prescriptive instructions offer greater clarity and ease of compliance than general directives that employ vague terminology or provide excessive latitude, and that adding more prescriptive instructions for unambiguous tasks should also be a goal of the proposed revisions.

Many of my comments and suggested modifications stem from my experience and past frustrations with the overwhelming tendency of these instruments and guides to favor generality over specificity. I am also acutely aware of the evident dissatisfaction among agency reviewers regarding deficiencies in our Technical Reports, as reflected in publications such as the 2020 CSA review and others. Some of these deficiencies are certainly due to the nature of the current instrument, guides and instructions. Ultimately, it is far simpler for authors to adhere to a detailed, more prescriptive outline than to navigate a general one, especially one fragmented between several regulatory documents. I propose shifting the balance somewhat toward prescriptive, and consolidating instructions for our disclosures, especially Technical Reports, to a more comprehensive outline.

In Soviet Russia, and more recently in post-Soviet Russia where I worked in the 2005 - 2008 period, the approach to regulation entailed requirements that amounted to an experienced-based manual covering exploration procedures, resource estimation, all the way through to economic valuation, customized for different categories of deposits. It wasn't the Wild East. Everyone could read and

follow the Geological Commission for Reserves (GKZ) definitions and instructions without guessing. Our modern CRIRSCO system resource and reserve categories aren't so different from the Soviet ones, but the path to get there is different. If the Companion Policy General Guidance (7) is going to allow the QPs all latitude for professional judgment, then it should at least require the QPs to explain where and why they didn't follow condensed, but more complete guidelines that apply to universal elements of a report. The current and proposed policies and guidelines are weak and incomplete in some areas, a situation that, by allowing great latitude, guarantees a good percentage of problematic studies.

Allow me an anecdote on prescriptive regulations while on the subject of Russia. In the early 2000's I was part of a team for a Canadian issuer that built a very large and rich gold mine in Far East Russia north of the Arctic Circle. The calculated gold cutoff grade was pretty high due to USD350 gold and the remote location of the property. The government, presumably cognizant of the cyclical nature of prices and future technologies, forced the company to create a very low-grade, subeconomic stockpile which caused some grumbling by the mine planners at the time. It meant a bit more operating cost and some capital cost. I moved on a year after the mine went into production. A few years later one of the mine geologists called me to ask me about previous work I did. I asked him out of curiosity how big that low-grade stockpile was by that time. He said: "What low-grade stockpile?". Prices were much higher in 2010 and all of that large stockpile had been processed profitably through the mill. If the mine had been built in Canada, all that low-grade "ore" would have been mixed with a larger amount of barren waste and lost in the waste dump.

The suggestions I make here are also to cover a few omissions in the proposed Instrument, Policy and Form. These will help to reduce the all-too-common situation of new project failures and underperformance attributable to poor or incomplete exploration and planning practices. If the mining industry is going to serve the public and investors well in the future, it's going to have to do a much better job, and it probably won't achieve that without a helpful nudge from well-advised regulators.

I do heartily agree with several of the proposed changes as written and have noted that at various points in these comments. Please find my comments pertaining to Annex A, B and C following each heading below.

Annex A, NI 43-101

Definitions: Please define the term "relevant" and how it's different from "material". It is used dozens of times in the proposed revisions of all three documents, Annex A, Annex B, and Annex C.

11. (a) : add "bulk density" to the list of data to be verified. This is just as important as "analytical" data with no exceptions. It is not "other" data. Bulk density is a very neglected and critical area of mineral resource estimation.

12. (1) (c) The change from "the" to "any" QA/QC programs muddies the water, if anything. It would seem to allow project data that was not quality controlled and assured. **All** drilling, sampling, bulk density, and metallurgical data should be accompanied by a QA/QC program(s), in my opinion.

13. (1) (2) (c) This revision is an opportunity to protect investors from limited disclosure of poor quality data. A suggested insertion here is: "...the estimated true width of each mineralized zone, and if any interval is more than twice the length of the estimated true width, the Qualified Person should state his opinion as to the reliability of the interval and reasons for including it in the disclosure." The reason for this comment is that an interval that is twice the true width has an implied intersection angle of only 30 degrees (i.e., $\sin 30^\circ = 0.5$). Such a low angle of intersection implies great inaccuracy and uncertainty of location, grade and thickness, especially since drill holes tend to deflect at low angle intersections with a mineralized structure. These poor intersections can occur for various reasons which can include poor underground or topographic access for drill stations, poor planning, budget or time pressure, or pure promotion--the classic "drill down the vein" situation. I suggest that it's not enough to just report the true width. Very low-angle intersections should be disallowed for

use in mineral resources . The unsophisticated investor, and even most mining professionals are not cognizant of the significant uncertainty attributable to poor intersection angles and give this short shrift.

See my notes pertaining to Annex B, Item 10 (c) note 1. A bit more on the subject can be found on this post: <http://cameronresources.com/in-the-vein/>

22. : I agree that each QP should sign, not just the consulting firm. I don't see why a QP working for a large consulting firm should get any special treatment compared to an individual independent QP. Moreover, I think the consulting firm, if composed of more than an individual, should also have to sign and seal.

Annex B - Technical Report Form 43-101F1

Instructions:

(2) : "Do not incorporate by reference any previous disclosure." I may not understand the meaning of this statement. Does this mean not to incorporate by reference any information in a previous disclosure? Is the intention to disallow any copy/paste excerpt in quotes? I realize that the intent of the current 43-101F1 instruction (5) has been abused egregiously, but this seems draconian. Writers are allowed to cite others' work in every sort of scientific publication, in news media, and in speech. I think I can say that the authors of many technical reports have to analyze and interpret project information as a means of generating a coherent and relevant summary. This may involve synthesis of ideas, as well, for example, as presented the Conclusions and the Recommendations items. Thus, there tend to be elements of original research, analysis and findings in non-current technical reports, or in technical reports that are current but which have new information in some area that requires and update. To not allow any recognition and/or attribution of previous work will cause wasteful duplication of effort, a temptation to plagiarize previous work (i.e., use but not cite) and possibly degrade the current work.

Perhaps the best fix is to clarify how much excerpting is permissible in the current instruction instead. For example, in some previous instruction from B. C. Securities (?) I remember seeing an injunction against verbatim copying of sections of a previous report to compose the new report. In any case, the intent of the proposed addition of (2) is not clear to me. It also appears to contradict Part 4 Section 16 (8) of Annex C and Part 5 Section 18 (d) of Annex C which give instructions about how to handle material from previous reports.

(6) : Is the instruction "Do not include appendices with excessive information" compatible with Annex C -- CP Part 5 Section 20 instruction that seems to proscribe appendices altogether? "...we do not think that technical reports need to be a repository of all technical data and information about a mineral project or include extensive geostatistical analysis, charts, data tables, assay certificate, drill logs, **appendices** or other supporting technical information." Are we to NOT have appendices then? That's ok, but the instructions seem to be different. Then, under the heading Appendices in this same Annex C, there is an example of an appendix that you might include. At the very least, I recommend to consolidate the advice in one place; e.g., in the instructions for this section of the Form 43-101F1, and clarify it.

Contents of the Technical Report -- Illustrations: Shouldn't world or geographic coordinates be required explicitly in these instructions? It is specified in instructions for Item 4 for the location map, but not for other maps. Let's put all of the instructions on coordinates for the various maps and sections here.

2018 CIM Mineral Exploration Best Practice Guidelines "guides" that a conversion should be provided for local coordinate systems to world or geographic coordinates. I agree with that. This should be stipulated as a requirement, not a guidance, and should be somewhere in the Form.

Some types of illustrations are specified, but other essential ones are not. The first line reads: "Include legible maps, plans and sections, all prepared at scales that distinguish important features." To help the author, I propose adding new instructions, or modifying the existing ones to include more specifics such as included in (d), below:

(d) surface maps, cross-sections and level plans sufficient to show features in at least two different viewing directions, and in 3d as appropriate, relevant to each mineralization type or zone discussed in Item 7, and/or the mineral resource estimation plan, Item 14.

(e) level plans and cross-sections, and/or projections (e.g., 3-D or vertical longitudinal projections) of block model estimates that show the supporting data, block values, key geological features, and project limits, as necessary to support the discussion of these in the report.

Item 3 : A general comment is that this has never been a comfortable area for the QP. The QP has total liability for all but a few allowed categories that can be disclaimed, but practically, there is no amount of due diligence that can verify that all relevant data has been provided by the Company. Especially, if the Company is acting fraudulently, there is some risk that it won't be detected by the QP doing normal due diligence. It seems like there should be some protection for the QP from situations where a Company is misleading the QP by withholding relevant information or providing false information through negligence or deliberate intent.

(b): Why is this removed in the proposed Form? I'm supposed to have the marketing expertise to be able to verify a real expert's report? If I wanted to understand markets I would have gone to business school. What is the reason for this removal? What purpose does it serve?

Item 5 (a): Why is vegetation eliminated? It is totally relevant. Is the project timbered, is there outcrop or all soil or till, is the property under a lake, or a glacier? If only topography and elevation are relevant to the report, then replace the work Physiography in the Item (5) title. In my opinion, the list in (a) should be expanded, not shrunk.

Item 6 (b): An opportunity to clear up confusion is missed by not including instructions about how to discuss, or not discuss, historical drilling here. "Exploration" is mentioned, and exploration is a separate section of the report (Item 9) as is drilling (Item 10). In Item 9, only work by the issuer is to be discussed with the historical work discussed in Item 6. But historical drilling belongs in Item 10, not Item 6. This update should make the presentation of historical information more consistent between Items and thus more rational.

Item 7 (a): Agree with getting rid of the "local" geology category. The property geology is the local geology. Also agree with adding item (c).

Item 9: "Instruction" related to to previous operators included at the end of the item has been removed . I have commented about Item 6 with respect to different treatment of historical exploration and drilling data, and the different treatment of historical data between Items 9 and 10.

Item 10 (c):

1) I have commented about Item 6 with respect to different treatment of historical exploration and drilling data, and the different treatment of historical data between Items 9 and 10.

2) See my notes pertaining to NI 43-101 update (13. (1) (2)) pertaining to comment on significance of drill hole intersection angles with mineralized bodies. In my opinion, based on nearly 50 years of professional experience as a geologist following exploration projects through all stages of mining, it is not simply enough to report estimated true thickness. There is a minimum threshold, and I suggest a true width factor of 0.5 (equates to 30 degree angle of intersection) as the minimum, below which an intercept should not be considered reliable and should not be used to estimate Indicated or Measured categories of mineral resources. If such an intercept is used, for example, for Inferred Resource estimates, the QP should disclose that and explain why the intercept is reliable for use in the estimates and for the classification of the mineral resources. An absolute lower limit of a 15 degree intersection angle should be guided by these instructions as data unreliable for any

purpose, if not definitely prescribed. I can think of no instance where an intercept outside of these limits can be deemed reliable for grade or quantity of metal, or any defined resource classification.

3) This section is not consistent with the instructions for Headings in the Companion Policy. For example, the CP advice overrides c (ii) of the form, the discussion of true width. The CP advice that a plan and representative drill sections (why just drilling?--how about trenches or underground chip samples?) can substitute for (i), (ii), and (iii) is contradictory. Why not add these items to the Form guidance instead of substituting?

Item 11: Here is another opportunity to correct decades of neglect pertaining to bulk density samples. A correct estimate of bulk density is as important as the estimate of grade because it is a multiplier with volume and grade in the calculation of tons and contained metal. The details of the selection, collection, preparation, measurement technique, laboratory (commercial or in-house), and quality control and assurance measures should be documented in the Technical Report, as well as an opinion on adequacy. The type of density measurements taken should also be discussed (e.g., dry or in situ--it's different for different commodities). The method of measurement and the inputs to equation(s) for calculating the estimated bulk density from the measurements should be provided by the QP. The QP should be required to give an opinion as to the adequacy of the quantity and quality of bulk density measurements, and whether there are sufficient measurements to be representative of the deposit. This isn't a subject where the author should just be referred to the 2018 CIM Mineral Exploration Best Practice Guidelines (which in turn references a paper which is interesting but not especially practical) and 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines. A few key bullet points on bulk density should be extracted from the two CIM guides and added to the Form instructions.

The lack of current standards for bulk density estimates in this industry is an embarrassment. The only changes required to 11 (a), (b), (c), and (d) are to explicitly name assays and bulk density in each of these paragraphs so it's clear that each step applies to both types of samples. Some additional comments and background can be found at this link to my recent blog post on the subject: [bulk-density-for-mineral-resource-estimates](#)

Furthermore, why does QA/QC only apply to exploration or samples used for mineral resource estimates? Why shouldn't metallurgical samples be subject to the same diligence with respect to sample prep, security, dispatch, lab certification and independence, and quality control and assurance for results? Shouldn't it be made clear here that steps (a), (b), (c), and (d) apply to metallurgical samples, too? Or else, state that this section applies only to exploration samples and any resource samples.

Item 12:

- 1) If the suggested change to section 11 that I propose above is not made, bulk density should be explicitly mentioned here in 12 (a).
- 2) The Companion Policy "reminder" for Item 12 should be included here, but it will practically be impossible for a QP to verify historical data in many cases. Some of these projects go back 50 years or more. Even projects a decade or two old may have had multiple owners and situations which make it impossible to repeat data verification. So what does the Companion Policy statement mean? We can't even talk about previous data verification by another QP? This is just not workable. There are many cases where a QP can tell if the previous company/geologist/mine engineer/metallurgist QP did a good job of data verification. The previous author has signed off as a QP. Is this worth nothing?
- 3) I think the change to having EACH QP verify the data in their respective disciplines is very good!

Item 13 (a) : As above, why is there such an abbreviated and flexible-sounding note about metallurgical test quality in (a)? Why isn't it subject to the procedures prescribed in Item 11 for exploration and drilling samples?

(c) and (d): "to the extent known" has been eliminated. I think this is to take away an escape clause for the metallurgist and issuer to not address the issues. Why not add "(e): any analyses or tests for deleterious elements or process factors that would be indicated by the project geology, mineralization, and deposit type and that were not performed for the study"?

Item 14

(a) : I don't see the merit of the change. There should be discussion. The proposed revision leaves it open for the QP to simply present a table with no explanation. Please consider this paragraph to replace current one:

provide sufficient discussion of the key assumptions, parameters and methods

used to estimate the mineral resources for a reasonably informed reader to

understand the basis for the estimate and how it was generated, including, but not limited to

1. *Data used for grade and bulk density estimates, how it was stored and managed, what measures were taken to validate the database(s), and how any differing support issues, data types, data quality, and/or detection limits were addressed;*
2. *The software tool(s) used for data exploration (EDA) and estimation*
3. *Sample spacing in the deposit and the uniformity of spacing; e.g., any vertical or lateral trends in sample spacing*
4. *EDA methods used such as graphic plots, general and spatial statistical tools used, mineralization trend analysis, treatment of data outliers, and compositing;*
5. *Whether validation of the geological model by the sample data was performed and results of these checks*
6. *Estimation domain selection and geological and statistical factors used for their selection and/or construction;*
7. *For block model estimates, how the composite lengths were chosen, if any, and how the block size selection was appropriate and consistent with the geological resolution of the project and the likely mining method, equipment, and grade control program to be used*
8. *Estimation methods, search strategies, and sample selection parameters including a summary table showing these*
9. *Grade-tonnage-metal curve(s) and any checks on block smoothing performed*
10. *Accounting for voids and mining depletion in the MRMR tables*
11. *Validation methods applied such as global, local, and conditional bias checks, metal removal, graphic checks, and their results, and whether the estimates are validated by production reconciliations in present or past-producing mines.*
12. *A general discussion **and summary** table of the criteria used to classify the mineral resource, ~~the average drill or sample spacing~~, the continuity of the important zones in the mineralization model, **whether geostatistical methods were used to guide or validate the classification**, and, ~~if applicable,~~ a relevant visual representation;*
13. *A discussion of MRE risk assessment and sensitivities to cutoff grades.*
14. *Whether the estimates were the subject of internal or external peer-review*

(b) and (c): These are out of order and should be after (d)

(e) : "Nearest data support" does not deserve a special line in this guidance and this should be removed. Nearest data is just one factor of many that may apply to classification. It is commonly used as a class determinant by some QPs, but its use, especially as a sole criterion, is by no means universal. In fact, it is meaningless without proper context. The nearest data for an iron deposit can be much longer than for a platinum or gold deposit. Is the nearest datum more important than the average local data spacing? Are there other considerations such as whether multiple data surround the estimated block or is there only data on one side of the estimated block? And how many data estimate the block? Data from how many drill holes are used to estimate a block? Were geostatistical tools used as guides to classification and/or validation of classification? These are all common tests and criteria for classification that may be appropriate in one setting and not another. And there may be other criteria, too. The 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines gives a pretty good summary of parameters and techniques for classification.

Further to suggested changes on this item, why not combine and reconcile the suggestions above with the bullet points included in the 2020 CSA Staff Notice 43-311 Review of Mineral Resource Estimates in Technical Reports and the table in Appendix 2 of the same report? If better reports are desired, QPs and authors need a better, more specific guide. In my experience, the 2019 CIM

Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines if simply left as a guide and not a standard leaves too much opportunity for companies and QPs to make incomplete and poor studies. The Form is the place to consolidate the outline based on standards necessary to produce better studies and reports. If the 13 steps above are followed, in effect a checklist based on the CIM guides as listed in my comments, better reports will result and the QPs will still have plenty of latitude to apply judgment and exceptions where they can be justified by the nature of the deposit and data.

Item 15 (a): We have an opportunity to improve these guidelines which currently give the mining engineer too much latitude in applying modifying factors. Suggested paragraph:

An explanation of the key assumptions, parameters and methods used by the qualified person to convert the mineral resources to mineral reserve, including a summary of the modifying factors applied, and whether:

1. *Modifying factors of dilution and ore loss applied are substantiated by production reconciliations, where applicable;*
2. *Modifying factors are appropriate based on the nature of the deposit and mineral resources, the mining method, mining rate, pit phasing, and any other relevant factors.*
3. *The qualified person for mineral reserves has consulted with the qualified person for mineral resources as to (1) and (2) and if a consensus has been achieved*
4. *How any stockpiling scenario included in the mine plan supporting mineral reserves is practical for the number and type of stockpiles planned, their cutoffs, or material attributes, with respect to the nature of the deposit and the grade or material characteristics estimated*

This paragraph addresses two common problems in hard rock mining: 1) The geologist hands off a resource to the mining engineer and there is no process to ensure that the resulting mineral reserve is reasonable with respect to the nature of the deposit and the mining methods and production rate to be used -- too many failures in this business! A good example is where a mining engineer applies 50 cm dilution to the open pit resource, but the mineralized structure dips 50 degrees and will be mined on 10 m benches with big equipment. Who reviewed this? The dilution assumption does not make sense in this case without incurring excessive ore loss. Mine planning and economic modeling are paper exercises that should include a review by upstream sources (i.e., geologists and/or metallurgists). The 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines does not specify inclusion of geologist/metallurgist as part of the peer review of the Mineral Reserve (7.19.1). In fact, maybe all disciplines should peer review each other.

Also, some mine plans have elaborate stockpile schemes which look good on paper but have little chance of success as-planned. Any statistician or experienced operations professional knows that it's easier to mine and select material at a relatively low cutoff such as the project break-even cutoff. Every stockpile with a higher cutoff than that creates a risk of grade misclassification in the stockpiles and can lead to the underperformance or even failure of the operation. Was this considered in the mine plan? Was the stockpiling scheme developed with consideration of the geology, statistical characteristics of the deposit and the estimate, and the operational mining parameters?

I recently participated in the due diligence for a very large new mine transaction. The feasibility mine plan had 5 stockpiles planned and depended on the highest grade one for its mill feed in the ramp-up and first years of production. The mine, now operating, has since guided down 40% of its annual production and is having to mine all material ~30% faster to get enough higher grade material to fill the mill. The issue of too many stockpiles and a too selective mining plan was flagged during due diligence because it didn't make sense with the geology and grade distribution in the deposit. Problems with an overly selective data compositing and resource block model were compounded by optimistic dilution assumptions in the mine plan. The current 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines advise only peer reviews compartmentalized by discipline.

For further discussion of some problems in the handoff of resource to mine planning and reserves, see:

Cameron, D. E., 2018, Grade control and mine planning—observations from the front, Soc. Mining Engineers Pre-print #18-080.

Item 16: Insert between (b) and (c): *If multiple pit phases are included in the mine plan, whether the QP's for resources and reserves concur that the modifying factors are appropriate and sufficient to estimate the extra dilution and ore loss that will be incurred in the successive phases.*

The above suggested addition to Item 16 addresses another generally ignored planning issue, pit phasing. On paper (or digitally), mine economics are better if a pit is mined in phases, emphasizing recovery of more profitable material early in the mine life. In real life, every time a new phase is begun, dilution and ore loss occurs attributable solely to the required waste stripping for the pushback. Grade control is complicated by the phasing. In mining each successive phase some blasted ore falls down into the previous phase and will likely not be recovered.

I remember visiting a Nevada gold mine on its 7th pushback a response in part to rising metal prices. The bottom of the pit and all the intervening benches were filled with mixed ore and waste rock. The pushback benches amounted to no more than wide roads with shattered edges close to the berms. Did the modifying factors applied to the pushback ore account for the extra dilution and ore loss incurred due to pit phasing? I didn't ask, but I'd guess not.

Unfortunately, in my experience, there is a severe disconnect between resource estimation and mineral reserve estimation/mine planning activities. I have rarely seen reserves synced with resources, and vice-versa; new projects tend to underperform. It's no mystery to me why that is. It can be solved by knocking heads together through the entire resource and reserve estimation/planning stages. Some prescriptive language in the Form would be VERY helpful in this respect.

Item 23: Thank you for getting rid of the current Item 23 and I think the new one is a good addition. I have no issue with removal of the provision for deferring the inspection as I think one should actually visit a property before finalizing a report of this nature. In fact, each QP for geology, metallurgy, mining engineering, and environmental engineering should visit an advanced project, too, as further elaborated in my comments on Annex C Part 5 Section 21 (2) and (3). The Companion Policy leaves this open as a suggestion. Even tightening this to make the authors state WHY a QP of a certain discipline didn't need to do an inspection would be an improvement. In any case, the CP advice should be fully abstracted and/or moved to the Form.

Item 26: Why was the Instruction under this heading removed? It seems to be useful to me.

Annex C: Companion Policy

Item (7) : Per comments in Annex B: Form, I think this section is not complete. First of all, the Form 43-101F1 should be more prescriptive, incorporating the "guidance" of the CIM documents, expanded to include the suggestions here for Annex B and others from CSA Staff Notice 43-311 Review of Mineral Resource Estimates in Technical Reports. The Form should be a more detailed outline and comprehensive of "industry standard practice" mentioned in the text. As a starting point, the "items" in Form 43-101F1 should be checked to be inclusive and comprehensive with respect to the contents of the section headings of the two CIM Best Practice guides, plus additional suggestions made here for these annexes. The resulting Form outline with the supporting Best Practice Guides should be the "industry standard" going forward. Otherwise, there is no industry standard.

The QPs should identify if, in which aspect of the study, and why they did not follow the outline and explain their reasoning for departure from the standards. There is still a place for judgments based on QP skill and experience in the application of the standards.

Item (10) : I am glad to see this addition after reading and reviewing quite a few reports and press releases that use the "compliant" adjective.

Part 1 Section 1 (d) : I have a lot of concern about Paragraph (a) of the definition and I think it must be a mistake. I started my consulting business after having practiced my profession for 36 years. In order to be an independent Qualified Person since I was no longer an employee of a large mining company, I applied and obtained memberships at the appropriate level from organizations recognized in Appendix A. These professional organizations required a certain minimum years of experience to even qualify for QP membership (e.g., SME and MMSA). Once a member, I was expected to manage my own continuing education. There was no apprenticeship—I was expected to be fully equipped to qualify for the membership level. Under this proposed regime I would have been unable to perform this work for 5 years despite being more experienced and well-trained than most geologists in this profession.

Another unintended consequence of this change will be that companies will have less incentive to promote professional membership. It will more expedient to just rely on consulting companies to provide QPs because of the long-term investment required to develop in-house QPs. This might be more practical if every professional joined a society upon entering the workforce, but that is often not the case.

As an aside, I think it inadvisable that a person could potentially be a Qualified Person with only 5 years experience. This is an experience-based profession. No one with less than 10 years experience should be a QP. Why don't we change this to a requirement of 1) membership in an approved professional organization; and 2) total of at least 10 years experience of professional practice?

Section 3 Independence

I think the minor changes in the definition of independence are ok. I think there are some inherent problems with the Company-QP-Investor arrangement, and a possible solution is only conceptual. For more of my thoughts on the subject: [The QP System--Who's Being Served](#) .

Part 4 Section 16 (8) : As pointed out in my comment on Annex B - Technical Report Instructions: (2), there seems to be a contradiction between that instruction and the last sentence of this section: "...including any information referenced or summarized from a previous technical report."

(9) : I think this change is reasonable.

Part 5 Section 18 (d) : Refers to taking responsibility for information from previous technical reports. Again, is this contradicted by Annex B - Technical Report Instructions: (2)?

Part 5 Section 21 (2) & (3): Would it not be better to combine (2) and (3) and state that for advanced projects QPs for all the principal disciplines, geology, mining and environmental engineering, and metallurgy must do a current site inspection? When would that not be necessary? Is there a case when the latter three disciplines could explain why not? No space in the plane or not enough tents is not a good reason.

Part 6 Section 24 (4) : As commented above, I think listing the year of professional registration is not reasonable. All the professional organizations recognized require considerable professional experience, if not the 10 years I recommend, at least 5 - 7 years. It is silly for a professional with 30 years of experience to have to wait 5 additional years before he is allowed to be a QP. I bet there are a lot of comments on that and it was mentioned in the recent article by Sally Gillies, [Implications of Proposed Changes to Canada's National Instrument 43-101](#), Mining Engineering, September 2025, p. 37-41.

B. Guidance to the Form--General Instructions- last paragraph: Another paragraph that, if left unchanged, will ensure inconsistency between Technical Reports and omissions. It says: "*As noted in General Guidance (7) of this Companion Policy, the Instrument does not require a qualified person to follow CIM practice guidelines. However, we **think** [emphasis mine] that a qualified person, acting in compliance with the professional standards of competence and ethics established by their professional association, will use procedures and methodologies that are **consistent** with industry standard*

practices, as established by CIM or similar organizations in other jurisdictions.” How about : “We require...” to the first bolded word. For the second, replace with “consistent and complete with respect to industry standard practices for estimation of mineral resources and mineral reserves as established by CIM, and as listed in Items 13, 14 and 15 of Form 43-101F1.”

A report can be consistent with CIM Best Practices but not complete. It is common to find reports which omit certain necessary steps in mineral resource and reserve estimation and metallurgical testing about which I have extensively commented above. The Form 43-101F1 and its referenced CIM guides should be the “industry standard”, enhanced by the suggestions made here to cover omissions in these guides (e.g., comments to Annex B, Item 14).

Appendices : See my comment above about conflicting and/or unclear advice on appendices.

All Headings Under the Form : Why is all of this in the Companion Policy and not included in the Form instructions? It all pertains to the Form and much is redundant, some contradictory (e.g., advice on 10 (c)). As QP’s we are faced with a mountain of data to compile and summarize, some of which is outside our area of expertise. Besides all of the data we assemble we now have 3 - 6 regulatory documents at hand with overlapping and in a few cases, conflicting advice or requirements to check off. A review of the three annexes, A, B, and C should be conducted to move as much instruction as possible to the Form outline, thus consolidating, simplifying, and clarifying the instructions. At least here, **all of the advice on the Form Headings in the CP should be moved and/or merged to the Form 43-101F1 instructions**. Specific technical report instructions included in 43-101 (Annex A) that are not redundant with the proposed Form 43-101F1 and CP should also be added to the Form, even if they are included as footnotes in the Items. Also, as commented above, certain items of guidance common to all mineral deposit studies discussed in the CIM Best Practices guides should be abstracted and also added as instructions. This will ensure that if the authors read and follow the Form outline the report will reflect the intent and content of the proposed instrument, the companion policy, and Best Practices.

Headings Item 12 : The last paragraph deals with MRMR reporting and seems completely out of place here. Shouldn’t it be moved to Item 14 and Item 15, or better, moved to the Form 43-101F1 (Annex B) instructions?

Thank you in advance for your consideration of my comments. I am available at the email address or other contact information included in my message for discussion of any of these points.

Sincerely,

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