



Mining and Metallurgical Society of America

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September 26, 2016

Mr. Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090

Via E-mail (rule-comments@sec.gov)

Re: Release Number 33-10098; File No. S7-10-16 (the "Release") Modernization of Property Disclosures for Mining Registrants

Dear Mr. Fields:

The Mining and Metallurgical Society of America (MMSA) is pleased to submit the following comments on the Securities and Exchange Commission's proposed rules to revise the property disclosure requirements for mining registrants and related guidance (Release Number 33-10098; File No. S7-10-16 – Modernization of Property Disclosures for Mining Registrants). We appreciate the opportunity to provide these comments and would welcome the opportunity to discuss them further with the Commission or its staff.

Please feel free to contact Robert Cameron, Ph.D., who assembled our comments, if you have any questions. He can be contacted at either rcam@att.net or (303) 667-1363.

Sincerely;

Betty Gibbs
Executive Director
Mining & Metallurgical Society of America

Attachment (1)



THE MINING AND METALLURGICAL SOCIETY OF AMERICA

**COMMENTS ON THE
U.S. SECURITIES AND EXCHANGE COMMISSION'S
PROPOSED MODERNIZATION OF PROPERTY DISCLOSURES FOR
MINING REGISTRANTS**

26 SEPTEMBER 2016

**The Mining and Metallurgical Society of America
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1.0 SUMMARY OF MMSA COMMENTS

The Mining and Metallurgical Society of America (“MMSA”) was established in 1908 and is a non-profit association of mineral resource professionals whose members represent all facets of domestic mining and metallurgical interests. MMSA is pleased that the U.S. Securities and Exchange Commission (“SEC” or “Commission”) recognizes that Guide 7 is in need of updating in order to bring the Commission’s mining disclosure practices in line with current, internationally recognized mining disclosure standards. MMSA recognizes the considerable effort undertaken by the SEC and its team members in the preparation of the Proposed Rules.

The Commission published Release Nos. 33-10098; 34-78086; File No. S7-10-16, “*Modernization of Property Disclosures for Mining Registrants*” asking for comments on the Proposed Rules. This document consists of 296 pages of commentary, questions, and proposed changes and the document, in its entirety, will be referred to in this response as the “Proposed Rules.” There are 129 primary questions (most containing multiple parts) plus additional questions on cost of compliance.

1.1 GENERAL COMMENTS SUMMARY

On page 1 of the Proposed Rules, the Commission’s stated purpose for the changes include:

*“to provide investors with a more comprehensive understanding of a Registrant’s mining properties and help them make more informed investment decisions... modernize the Commission’s disclosure requirements and policies for mining properties by aligning them with current industry and global regulatory practices and standards... to rescind the current Industry Guide 7 and include the Commission’s mining property disclosure requirements in a new subpart of Regulation S-K.”*¹

While the MMSA philosophically agrees with the need to make these changes, we conclude that the proposed changes DO NOT meet the Commission’s stated goal and will ultimately result in a reduction of listings in the United States by confusing investors rather than helping them to make informed investment decisions. This is for the following reasons:

- The proposed changes are aimed at Minerals Resource and Reserve reporting for initial listing, first time minerals Mineral Resource and Reserve disclosure, significant changes to a company’s Mineral Resource and Reserve inventory and annual reporting requirements. However, the Proposed Rules fall short in that they do not adequately distinguish which parts of the rules apply to each situation. For example, the requirements for a Technical Report Summary versus the Use Summary Disclosure Tables appear to apply to initial property disclosures and initial listings, yet the Summary Disclosure Tables designed for Summary

¹Release Nos. 33-10098; 34-78086; File No. S7-10-16, “*Modernization of Property Disclosures for Mining Registrants*,” Securities and Exchange Commission, pg. 1.

Disclosures are all designed to be used for annual reporting. Likewise, annual reporting has been defined by the Proposed Rules to be required on a calendar year basis yet the Summary Disclosure Tables, as presented in the Proposed Rules, specify a company's fiscal year;

- The Proposed Rules require estimating and reporting Mineral Resources and Reserves in a manner inconsistent with all other recognized reporting standards requiring registrants to produce separate Resource and Reserves for jurisdictions outside of the United States. United States domestic issuers would still be reporting under a framework inconsistent with CRIRSCO international practice and standards requiring Registrants to prepare separate reports for U.S. filings;
- Numeric confidence limits for resource estimates are not practical and in many cases not technically feasible for most mining companies;
- Contingency requirements for Pre-feasibility and Feasibility studies do not meet industry accepted standards and should be revised;
- Defining Qualified Persons (QPs) as "Experts" for Securities Act, Section 11 will limit the number of QPs willing to produce reports for Registrants and significantly increase the costs for small and medium companies; and
- The cost of the additional record keeping and report preparation has been grossly underestimated.

1.2 RECOMMENDATIONS SUMMARY

MMSA would recommend that the Proposed Rules should be revised and consider the following.

- MMSA **strongly** recommends that the Commission's rules adhere to the international practices represented by the CRIRSCO template.
- MMSA believes that the regulations should specify minimum requirements for a QP. These should include:
 - Be an Individual and not a company;
 - Require minimum Education and Experience;
 - Licensing or Membership in a Recognized Professional Organization (RPO); and
 - Continuing Professional Development or Continuing Education.
- Multiple QPs should be allowed to sign reports.
- MMSA believes this extension of liability as "Experts" under Securities Act, Section 11 made by the Proposed Rules is not necessary to accomplish the objectives underlying the proposed disclosure.
- A single QP taking responsibility may violate ethics codes.
- Qualified Persons should be able to include a limited disclaimer of responsibility when relying on experts in fields in which the QP could not be expected to have professional training, such as legal and marketing (particularly gemstones) and social and political matters.
- The Proposed Rules should provide the flexibility for a Registrant or QP to utilize other pricing models including those deemed acceptable under the CRIRSCO

Framework and allow the use of forecast pricing aligned to a Registrant's business models, as appropriate for the commodity for determination of Mineral Resource and Reserves.

- The Proposed Rules should allow a QP to deviate from the Proposed Rules and reporting requirements in a manner similar to the JORC's "if not then why not" guidelines.
- A quantitative assessment of the percentage of Inferred expected to be converted to Indicated and Measured Resource is likely to be burdensome to small mining companies, is impractical and should not be required as proposed.
- Maximum contingency requirements for mining projects is not consistent with industry accepted standards and the maximum contingency in Table 1 of the Proposed Rules should be revised to better conform to those used in acceptable industry practices.
- The Proposed Rules should have the flexibility for a QP to exclude information required under paragraph (b)(96)(iv) should be on an "if not then why not" basis when the required information is not appropriate for a given mine or commodity.
- MMSA would recommend the following for Annual Disclosure:
 - The Proposed Rules should require "Annual Updates" (not re-estimation) of the Mineral Resources and Reserves;
 - The "Annual Update" should be reviewed by a QP; and
 - The "Annual Update" can be completed on either a calendar year or the Registrant's fiscal year basis. (Note – Tables 2-8 in the Proposed Rules references Fiscal Year while the Proposed Rules appear to require reporting on a calendar year).
- Royalty companies may not have access to or be able to legally disclose much of the detailed information required by the Proposed Rules and a second set of rules should be developed for disclosure and reporting for royalty companies. At a minimum, a royalty company or QP should be able to rely upon and disclaim the information provided by the project operator.
- MMSA would recommend that a separate set of disclosure and reporting requirements be developed for geothermal energy and brines. The economic viability of these commodities do not closely correspond with that of solid minerals.
- The Commission's rules should allow trade secrets, details of proprietary and licensed products or processing, the detailed drilling, and other information that may significantly impact a Registrant's competitive advantage, commodity pricing, or contract be exempt when appropriate from the detailed disclosure required in the Technical Report Summary or the Summary Disclosure requirements.

2.0 INTRODUCTION

2.1 SEC PROPOSED CHANGES

The U.S. Securities and Exchange Commission has proposed revisions to its property disclosure requirements for mining Registrants, and related guidance, as currently set forth in Item 102 of Regulation S-K under the Securities Act of 1933 and the Securities Exchange Act of 1934 and in Industry Guide 7. The stated purposes of the proposed revisions are to: provide investors with a more comprehensive understanding of a Registrant's mining properties and help them make more informed investment decisions; modernize the Commission's disclosure requirements and policies for mining properties by aligning them with current industry and global regulatory practices and standards and to rescind the current Industry Guide 7 and include the Commission's mining property disclosure requirements in a new subpart of Regulation S-K.

2.2 THE MMSA ORGANIZATION

The Mining and Metallurgical Society of America ("MMSA") was established in 1908 and is a non-profit association of mineral resource professionals whose members represent all facets of domestic mining and metallurgical interests. In its constitution, the MMSA formally commits to work for: Conservation of mineral resources; Advancement of the mining and metallurgical industries; Better protection of mine investors and mine workers; Increase of scientific knowledge; and Encouragement of high professional ideals and ethics. MMSA currently has 350 members of whom, 196 have Qualified Professional (QP) classification.

The MMSA has a long history of advocacy for the protection of investors. As early as 1909, formal action by MMSA recommended that mining companies should publish an annual report within 90 days of the close of the fiscal year, giving both the financial and technical information bearing on their operations, including a competent estimate of ore reserves. In 1924, a resolution was introduced in the Society's Council that investors should be educated to demand an engineer's report in connection with new flotations; that the society should urge on bankers the desirability of such procedure; and stock exchange authorities should require engineers' reports as a requisite for listing a security. Our members are mining engineers, metallurgists, geologists, environmental engineers/specialists, and other professionals who work in the mining industry in all parts of the United States and around the globe. MMSA has been an advisor to Congress, was instrumental in the establishment of the former United States Bureau of Mines, and continues support for reasonable mining regulation.

In 2005, the Society established a new membership class, that of Qualified Professional ("QP") to meet a need within an industry of individuals to certify public technical documents required by North American, Australian, and South African stock exchanges. The MMSA QP designation is internationally recognized and the work of our QP members help to protect investors against the promotion of ill-defined properties being used as a means to raise funding from the general public for exploration and mining ventures.

2.3 APPRECIATION OF THE SEC'S EFFORT

As an organization that has a 114 year history in advocating and promoting the protection of mine investors and the encouragement of high professional ideals and ethics, the MMSA is pleased that the Commission recognizes that Guide 7 is in need of updating in order to bring the Commission's mining disclosure practices in line with current internationally recognized mining disclosure standards. MMSA believes the Proposed Rules provided by the Commission represent progress for both protecting investors and helping Registrants with mineral interests. We also believe that this task is well worth the effort put forth but the SEC and are glad to provide the following comments on the proposed regulations.

2.4 MMSA'S EFFORTS TO PROVIDE COMMENTS

MMSA is pleased to be able to submit comments on the proposed regulations. It should be noted that our members have actively worked with and contributed to the comments submitted by both SME² and AIPG³ and we emphasize that our membership generally concur with the points made in those two documents. Hence, rather than duplicate those comments, MMSA has endeavored to submit a limited set of comments for the Commission's consideration in this document.

To prepare our response, MMSA sent an email to all of our members asking them to provide us any comments that they wished to be included in our organization's response. The main areas that MMSA membership had comments on or, concerns about the proposed changes have been divided into 2 main sections and they include:

- Issues and Requirements for QPs;
- Other Issues:
 - Consistency of SEC Definitions with CRIRSCO Framework;
 - Mineral/Commodity Pricing;
 - Report Structure; and
 - Miscellaneous Comments.

²Comments on the Proposed Rules submitted by the Society for Mining, Metallurgy, and Exploration (SME) on August 4, 2016.

³Comments on the Proposed Rules submitted by the American Institute of Professional Geologists (AIPG) on August 22, 2016.

3.0 ISSUES AND REQUIREMENTS FOR QPS

In 2005, the Society established a new membership class, that of Qualified Professional (“QP”) to meet a need within the mining industry of individuals to certify public technical documents required by North American, Australian, and South African stock exchanges. The MMSA QP designation is internationally recognized and the work of our QP members help to protect investors against the promotion of ill-defined properties being used as a means to raise funding from the general public for exploration and mining ventures. The MMSA QP designation was one of the first United States organizations to be recognized by overseas jurisdiction for technical reports involving the reporting of Mineral Resources and Reserves.

3.1 QP’S QUALIFICATIONS

In response to the Commission’s request for comments concerning QP qualifications, MMSA believes that the regulations should specify minimum requirements for a QP. These should include:

- Be an Individual;
- Education and Experience;
- Licensing or Membership in a Recognized Professional Organization (RPO); and
- Continuing Professional Development or Continuing Education.

3.1.1 QP Should Be an Individual (Question 33)

MMSA concurs that the QP should be an individual, as proposed. Many engineering firms or firms licensed by foreign governments who have completed thousands of projects in the mining industry appear to be well qualified; however, they tend to utilize low-cost junior people to reduce costs and maintain a competitive edge. Therefore, allowing other legal entities, even if that engineering firm is licensed by a board authorized by United States federal, state, or foreign statute to regulate professionals in mining, geosciences, or related fields, does not ensure the people working on the project and writing the technical report have the requisite qualifications.

3.1.2 Education and Experience – Recommendations (Questions 32 and 39)

MMSA believes the qualified person must have a university degree (bachelor’s or equivalent) in fields related in various ways with the discovery, extraction, and utilization of minerals, metals, and energy sources. MMSA believes the QP should have at least 10 additional years of practical or professional experience in geosciences after graduating with an engineering or geoscience degree from an accredited college or university. The experience should include at least 5 years in positions of responsibility in mining, metallurgical, or geosciences.

In addition, they should have at least 5 years of relevant experience in the type and style of mineralization and type of deposit under consideration.

3.1.3 Licensing or RPO Requirements – Recommendations (Questions 35 and 37)

The Proposed Rules leave it up to the Registrant to determine what constitutes a “recognized professional organization.” This differs from most CRIRSCO-based codes, which require a competent or QP to be a member of one or more “approved” organizations identified by regulators. MMSA agrees with the SME assessment that:

“the Proposed Rules threatens the quality and oversight of qualified persons which undermines the investor’s ability to rely on their disclosures. CRIRSCO members maintain and periodically update lists of recognized professional organizations so that Registrants can easily identify qualified persons are members of a recognized professional organization in good standing with the securities regulators.”⁴

MMSA believes that a QP should be a licensed professional in the geosciences, such as a Professional Engineer (PE) or they should belong to a recognized professional organization (RPO). Licensing or membership in an RPO means that a minimum standard of education and experience has been met and, therefore, an investor and the Commission can assume the person or persons are qualified to perform the work.

MMSA also is of the opinion that the RPO or licensing board must also have jurisdiction to discipline or suspend the QP, no matter where the QP resides, practices, or where the mineral deposit is located. MMSA suggests that the Commission develop a list of RPOs with the help of, or in reference to, a list maintained by an organization, such as the MMSA, SME, or AIPG who are much more in tune with the CRIRSCO member’s actions regarding current membership requirements of various RPOs.

MMSA would further caution that the Commission should be selective in determining acceptable RPOs or accepting licensing by a board authorized by foreign statute as, we can cite several examples of countries in Asia where licensing is generally sub-standard and sometimes are not based on qualifications or experience. Each acceptable RPO on the Commission’s list meet the following minimum requirements:

- Be generally accepted within the international mining community as a reputable professional organization;
- Admits individuals on the basis of their academic qualifications, experience, and ethical fitness;
- Requires compliance with the professional standards of competence and ethics established by the organization and which are compatible with industry-recognized standards; and
- Applies disciplinary powers, including the power to suspend or expel a member regardless of where the member resides, practices, or where the mineral deposit is located. For example, Canada has chosen to deny QP status of United States

⁴Comments on the Proposed Rules submitted by the Society for Mining, Metallurgy, and Exploration (SME) on August 4, 2016, pg. 11.

registered professional geologists in states that refuse to review or discipline members when the work in question is not within that particular state.

3.1.4 Continuing Education (Question 35)

MMSA believes that the QPs should participate in a Continuing Professional Development (CPD) or Continuing Education type programs similar to those established by SME or MMSA for their QP members. While MMSA recognizes that many state licensing boards and professional organizations do not currently require their members to participate in a Continuing Professional Development program, we believe it is important for a QP to be able to demonstrate commitment to their career and industry through on-going professional development in their field of expertise.

3.2 RESPONSIBILITY FOR ENSURING THE QP MEETS THE COMMISSION'S QUALIFICATIONS (QUESTION 21)

MMSA is of the opinion that it is the Registrant's responsibility that the QP it utilizes meets the Commission's adopted definition of "qualified person." The Registrant will ultimately employ or hire the QP it uses and, therefore, it should ensure that the person or persons meet the required qualifications.

3.3 DISCLOSURE OF QP'S AFFILIATIONS (QUESTIONS 30 AND 38)

For any filing or press release requiring a QP, MMSA is of the opinion that the name of the person or persons acting as QP should be disclosed and their License or RPO affiliation. If they are an employee of the Registrant, mining company, or contractor; have any interest in the properties, production of financing arrangements (royalty interest, stock, marketing interests, any payments contingent on financing, etc.); have any on-going business relationships or if they are acting as an "independent" QP, these should be disclosed.

It should be the Registrant's responsibility to ensure that the QP is a member in good standing of their RPO or licensing board prior to utilizing the QP.

3.4 USE OF LIMITED DISCLAIMERS

Provisions in the Proposed Rules do not permit a QP to include a disclaimer of responsibility, if he or she relies on a report, opinion, or statement of another expert in preparing the technical report summary. Examples of experts typically relied upon in resource and reserve reports would be lawyers giving legal opinions, experts on land tenure and title work, permit status, litigation actions, marketing experts providing market and sales/pricing forecasts, and experts dealing with local political and social issues. Canada's National Instrument (NI) 43-101 permits disclaimers for expert reports, opinions, or statements by non-engineering and non-geoscience work by persons that are not qualified persons and MMSA believes the SEC should allow such disclaimers in the reports.

Qualified persons should be able to include a limited disclaimer of responsibility when relying on experts in fields in which the qualified person could not be expected to have professional training, such as legal and marketing (particularly gemstones) and social and political matters.

3.5 USE OF MULTIPLE QUALIFIED PERSONS

The Proposed Rules do not allow multiple QPs for a single technical report. **MMSA is of the opinion that multiple qualified persons should be allowed** to ensure that all aspects of a technical report are covered by a responsible qualified person. SME and AIPG have already submitted comments urging the Commission to allow the use of multiple QPs and we agree with SME's statement that:

“Under Section 11 of the Securities Act, “experts” such as accountants, engineers, appraisers, etc. are only responsible for work items prepared or certified by them.”⁵

For simple properties in early exploration stages, it might be appropriate for one QP to complete a technical report; however, as a project advances, it becomes difficult to find a single QP who might have the background and experience in geology, mining, metallurgy, hydrogeology, rock mechanics, cost estimation, commodity pricing, marketing, economics, permitting, environmental, and social issues to sign-off on an entire report.

When MMSA members apply for QP status, they apply based on their education and experience. Currently, the MMSA grants QP status in the categories of Geology; Mining; Metallurgy/Processing; Ore Reserves; or Environmental Permitting and Compliance. As the industry and technical reporting requires increasing technical disclosures, MMSA is actively working to develop educational and experience guidelines for QP status in each of the modifying factors used to determine Mineral Reserves, including but not limited to hydrology, cost estimation, valuation, infrastructure, and rock mechanics/geotechnical fields. Each of these areas require specific training and experience to make appropriate assessments sometimes well beyond that of a generalized QP could be expected to have. In addition, MMSA is actively working to establish additional QP categories to cover all of the sections of a Technical Report. These examples of these potential additional categories are infrastructure, mining project management, and techno-economic modeling.

MMSA is of the opinion that multiple QPs should be allowed for a single report, each QP utilized should be named, the sections for which they are responsible identified, brief statement of qualifications, statement of independence, if applicable, and their License or QP affiliation and number attached as part of the report in a similar manner as required by Canadian NI 43-101 guidelines. Each QP should sign and/or stamp a certification statement as part of the report and the Registrant should provide a statement of consent from each QP used in the report.

⁵Comments on the Proposed Rules submitted by the Society for Mining, Metallurgy, and Exploration (SME) on August 4, 2016, pg. 13.

3.6 IDENTIFICATION AND DETAILED ANALYSIS OF REQUIREMENTS OR INTERESTS OF AGENCIES, NGOS, COMMUNITIES, AND OTHER STAKEHOLDERS

A requirement in the Proposed Rules in Table 1 includes the “*identification and detailed analysis of requirements or interests of agencies, NGOs, communities, and other stakeholders*” in pre-feasibility and feasibility studies. This work is typically conducted by highly trained professionals with non-engineering and non-geoscience training. MMSA is of the opinion that this requirement is burdensome and it is impractical for the Commission to expect a minerals QP to actually assume responsibility for that part of the report. As such, MMSA believes implementing this requirement may severely limit the number of QPs willing to accept responsibility for pre-feasibility or feasibility studies given that the Proposed Rules do not appear to allow either multiple QPs or limited disclaimers for non-engineering and non-geoscience work by persons that are not QPs.

3.7 INDEPENDENCE OF QPS (QUESTIONS 27, 28, AND 29)

MMSA is of the opinion that the Commission should require independence of the QPs involved in certain major filings or public disclosures to better protect investors. Internal or non-independent QPs are sufficient for most regulatory paper work, annual filings, etc.; however, when there are major changes to resource and reserve reporting, use of an independent QP provides more confidence to the investor. As such, MMSA believes it is important for the Commission to require independence of a QP or the review of an independent QP comparable to that required under the Canadian NI 43-101 regulations. MMSA is of the opinion that:

- The Commission should require a Registrant to state whether the QP is independent;
- Should define “independent” similar to Canada’s NI 43-101 regulations;
- Should require an Independent QP for the initial disclosure of Resources or Reserves;
- Should require an Independent QP reporting changes of 100% or greater of Resources or Reserves; and
- Require at least a review by Independent QPs of major reports, such as a pre-feasibility or feasibility study.

3.8 QP'S LIABILITY

3.8.1 Defining QPs as "Experts" for Securities Act, Section 11

Several of the comments that MMSA received on the Proposed Rules relates to the Commission's assertion on page 35 of the Proposed Rules⁶ that "*qualified persons*" will be treated as "*experts*" for Securities Act Section 11 purposes with the attendant liability. This is of major concern to our QP members. However, this decreed "expert" status by the Commission appears that the QP would have liability exposure similar to that of a Registrant's officers and directors allowing them to be named personally in class action litigation even though the independent QP typically has limited access to data and has no authority within the Registrant's company.

While Proposed Rules are based on CRIRSCO-based codes that require signed consents of the QPs for the inclusion of a study or technical report in public disclosures, MMSA is of the opinion that this is an unwarranted extension of liability beyond that typically assumed by financial auditors, appraisers, and other engineers in their work for non-minerals Registrants. **We believe this extension of liability made by the Proposed Rules is not necessary to accomplish the objectives underlying the proposed disclosure standards and that the Commission should revise this portion of the Proposed Rules.**

MMSA agrees with the Commission's comment that "*the resulting increase in legal liability could also raise the cost of hiring a qualified person*"⁷ as we believe that this will potentially drive professional liability insurance premiums well into six figures similar to mal-practice insurance for those in the medical profession, such as MDs. Many of the independent QPs who currently author a majority of the technical reports written for jurisdictions under the CRIRSCO Framework will have to increase significantly the fees for their work to Registrants to cover that cost as they typically only produce a limited number of reports each year. In addition to the increased costs for professional liability insurance will be the time, effort, and costs that a QP must spend to defend their work when being named in class-action litigation.

It is also MMSA's belief is that if the Commission insists on assigning "expert" status that many of the highly qualified, independent individuals currently serving as QPs will refuse to work for United States Registrants in order to avoid very high professional liability insurance or being named in class-action litigation. MMSA feels ultimately this will result in decreasing the quality of disclosure and information for investors as the majority of independent QPs being used will eventually be "lessor" or "underqualified" individuals that reside in jurisdictions where they are potentially sheltered from the SEC and United States litigation. Again, Registrants required to file in multi-jurisdiction may also have difficulty in obtaining the require release for United States

⁶Proposed Rules, Page 35 states: "*If the filing that requires the technical report summary is a Securities Act registration statement, the qualified person would be deemed an "expert" who must provide his or her written consent as an exhibit to the filing pursuant to Securities Act Rule 436.83 In such situations, the qualified person would be subject to liability as an expert for any untrue statement or omission of a material fact contained in the technical report summary under Section 11 of the Securities Act.*"

⁷Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, pg. 213.

filings from QPs producing technical reports for other jurisdictions who wish to avoid United States class-action litigation and the associated costs.

We agree with Sullivan and Cromwell LLP's comments⁸ that because "*the procedural forms being adopted from CRIRSCO-based codes resemble familiar Securities Act procedures does not justify imposition of "expert" liability*" and, MMSA joins Sullivan and Cromwell LLP in urging the Commission to **clarify that serving as a "qualified person" does not result in "expert" status** under Section 11 of the Securities Act.

3.8.2 Percent Inferred Resources Expected to be Upgraded (Question 55)

MMSA also believes that the Proposed Rules, which require disclosure or reporting of non-traditional numeric probabilities and confidence limits of Resource and Reserves, potentially add significant liability for QPs and confusion to investors. Assigning a numeric probability or requiring the QP to assign a percent of the Inferred Resource that they estimate would eventually be converted to Indicated or Measured rather than qualitative assessment of risk gives the mistaken impression that the QP can actually account for all of the uncertainty of the Inferred Resource estimates. This process requires large data sets and advance geostatistical analysis, which for an Inferred Resource, is likely not to be available in most segments of the mining industry.

Hence, MMSA is of the opinion that the proposed requirement of a quantitative assessment of the **percentage of Inferred Resource expected to be converted to Indicated and Measured Resource to be burdensome to small mining companies, is impractical and should not be required as proposed**. We believe that the QP should be able to comment on the uncertainty (qualitatively or quantitatively) in a manner that is appropriate for available data and type of deposit.

3.8.3 Numeric Confidence Limits for Indicated and Measured Resource

The reporting of numeric confidence limits to describe the uncertainty of a Mineral Resource or Mineral Reserve might be considered "**best practice**" in the industry, as asserted by the Commission; however, very few companies or consultants have the technical expertise or data sets required for these advanced calculations. As discussed by SME in their comments,⁹ the software for this task is limited, the required skill sets are limited to only a few experts, and it requires large data sets for the analysis to be meaningful. Even the large mining companies may not have sufficient data on their non-production properties to set numeric confidence limits reliably. Ultimately, it is MMSA's opinion that this requirement places an unnecessary burden on QPs and the industry and increase the QP's liability. A large segment of the mining industry (*e.g.*, coal, industrial minerals, aggregates, and mineral sands) does not currently employ or need to employ advanced geostatistical analysis to accurately estimate their resource, which would be required if the Commission requires a quantitative assessment to describe the uncertainty.

⁸Comments on the Proposed Rules submitted by Sullivan and Cromwell LLP on August 15, 2016, pg. 3.

⁹Comments on the Proposed Rules submitted by the Society for Mining, Metallurgy, and Exploration (SME) on August 4, 2016, Section 9.0, pg. 39.

Hence, MMSA is of the opinion that a quantitative assessment of **confidence limit of relative accuracy is burdensome to small mining companies, is impractical, and should not be required, as proposed.** We believe that the QP should be able to comment on the uncertainty (qualitatively or quantitatively) in a manner that is appropriate for available data and type of deposit (**Questions 58 and 60**).

3.9 A SINGLE QP TAKING RESPONSIBILITY MAY VIOLATE ETHICS CODES

The requirements of most of the organizations like SME, MMSA, AusIMM, CIM, state Registration Boards, etc. that have a member or recognized QP status require their people to adhere to ethics guidelines. Most of these guidelines have a statement similar to that found in the MMSA Ethical Guidelines in Clauses 3¹⁰ and 6¹¹. Thus, it may not be possible for a single QP to take responsibility without limited disclaimers for expert reports, opinions, or statements for other engineering disciplines where the QP has no experience, non-engineering, and non-geoscience work required in the report (see Section 3.4).

¹⁰“Members shall perform work only in their areas of competence,” MMSA Ethical Guidelines, pg. 1.

¹¹“Members shall only give evidence, express opinions or make statements in an objective and truthful manner and on the basis of adequate knowledge,” MMSA Ethical Guidelines, pg. 1.

4.0 OTHER ISSUES

4.1 ADOPTION OF THE CRIRSCO TEMPLATE

Because of the widespread adoption of the CRIRSCO standards, industry participants have requested that the Commission align its mining disclosure rules with the CRIRSCO-based codes thereby allowing a mining registrant to disclose both Mineral Resources and Reserves in a manner more consistent with other jurisdictions. We support the alignment to CRIRSCO Template nomenclature throughout the Proposed Rules.

MMSA, however, is of the opinion that under the Proposed Rules, as released for comments, United States domestic issuers would still be reporting under a framework somewhat inconsistent with the CRIRSCO international practice and standards. Comments from our members have also referred to potential conflicts in the definitions and standards used for financial reporting in the United States. This may create confusion for investors and require companies to generate multiple technical reports for different markets or jurisdictions.

MMSA recommends that the Commission should amend the Proposed Rules to better adhere to the international practices represented by the CRIRSCO Template. MMSA agrees with the AIPG statement that:

“the benefit of the Proposed Rules to the mining industry and to those who invest in mining company securities will be directly proportional to their conformity to the CRIRSCO Template.”¹²

MMSA also believes that the departure from the CRIRSCO-based standards undermines the Commission’s objective to more closely align its disclosure rules with current industry and global regulatory practices.

4.2 CONTINGENCY REQUIREMENTS FOR PRELIMINARY FEASIBILITY AND FEASIBILITY STUDYS

Table 1 of the Proposed Rules¹³ specifies requirements for contingencies for preliminary feasibility and feasibility studies. The maximum contingency requirements specified in the proposed rules **exceeds** those that are considered generally accepted industry limits for these types of studies. Chapter 12 of the *“The Project Management for Mining – Handbook for Delivering Project Success”* recommends¹⁴ limits of contingency based on the study level of 40% for scoping studies, 22% for pre-feasibility studies, and 15% for feasibility studies.

¹²Comments on the Proposed Rules submitted by the American Institute of Professional Geologists (AIPG) on August 22, 2016, pg. 9.

¹³Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, pg. 275.

¹⁴Project Management for Mining – Handbook for Delivering Project Success, Hickson, R.J. and T.L. Owen, 2015, pp. 189-201.

MMSA believes the maximum contingency in Table 1 of the Proposed Rules should be revised to better conform to those used in acceptable industry practices.

4.3 INITIAL ASSESSMENT

The introduction of the requirement of an “Initial Assessment” throughout the Proposed Rules is somewhat confusing. This appears to be a new document and technical study that is outside of the current CRIRSCO Framework used in the context as an initial qualitative economic justification for reporting of resources and to support the QP’s conclusion that there are reasonable prospects for economic extraction. The confusion arises in that it is not clear if this is a separate document or study or if it is a mandated section of the resource report. If part of the resource report, it has not been included as part of the prescriptive format. MMSA believes the Commission needs to clarify this item.

The Proposed Rules also states that a cash flow can be used and disclosed in conjunction with a resource report as part of an “initial assessment.” The Commission’s discussion about an “initial assessment” within the Proposed Rules states¹⁵:

“We believe that the proposed prohibition against using inferred mineral resources in an initial assessment’s cash flow analysis is reasonable because of the high level of geological risk associated with such mineral resources.”

This implies that an “initial assessment” is viewed by the Commission as more than a qualitative economic justification for reporting of resources and, the statement also implies that, in the Commission’s view, if a property has only Inferred Resources, the mineralization should not be reported because of the high level of geologic risk and that it is impossible under the SEC’s definition of Resource to have any Inferred Resource without a significant portion of Measured or Indicated Resource to demonstrate the potential of an economic extraction. MMSA is of the opinion that this represents a major deviation from the CRIRSCO Framework and that it will again be burdensome for Registrants filing in multiple jurisdictions by having to generate different technical reports for resources, which will create confusion amongst investors.

Further confusion would be created by the introduction of a new technical study called an “initial assessment” by the Proposed Rules since, under the CRIRSCO Framework, the first resource report containing cash flows is generally called a “preliminary economic assessment” (PEA) or “scoping study.” The “initial assessment” appears to be significantly different from the definition of a PEA or Scoping Study under the CRIRSCO Framework. The Commission states in the comments section of the Proposed Rules:

“An initial assessment, as proposed, is not a scoping¹⁸⁵ or conceptual study as defined in some of the CRIRSCO-based codes¹⁸⁶ or a preliminary economic assessment as defined in Canada’s NI 43-101. The purpose of an initial assessment

¹⁵Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, page 90

is narrower than those studies as it would be done solely to support disclosure of mineral resources and not to determine whether to proceed with further work leading to preparing a pre-feasibility study for reserve determination.”¹⁶

If it is the intention of the Commission to allow the use of a cash flow analysis to simply justify that there are reasonable prospects for economic extraction, we view this as reasonable; however, allowing the disclosure of that cash flow in the technical report might create confusion with investors as they may view the report equivalent to the more familiar PEA or Scoping Study allowed by the CRIRSCO Framework and other reporting jurisdictions.

4.4 COMMODITY PRICING

The MMSA taskforce probably received the most input and discussion on the mandated commodity price ceiling in the Proposed Rules.

The Proposed Rules mandates the use of either a 24-month trailing average historic pricing model or contract prices for economic justification of resources, reserve, and cash flows. The use of both of these commodity pricing models have problems.

Resources and Reserves are inherently “forward looking statements.” The proposed requirement of using a 24-month trailing average (or contract pricing) is mandating the use of an historic pricing model. While MMSA believes that the historic data should provide guidance to the Registrants for acceptable commodity pricing in their forward looking statements, MMSA would also point out that there is little logical justification of requiring **only** the use of historic data for a forward looking analysis or projection.

While mandating the use of a simplified 24-month trailing average historic pricing model would make evaluating one of the most volatile and contentious parts of a Resource and Reserve report easy, it may have no basis in reality for mining companies. BHP Billiton, a major global mining and resource company states in their comments on the Proposed Rules:¹⁷

“To estimate our mineral resources and mineral reserves in the context of historical prices is of no value to management or, we believe, to our investors, and would be completed for SEC regulatory reporting purposes only” (Emphasis added by MMSA).

The Proposed Rules also allows for the use of contractual pricing as an alternative. However, many times contractual pricing is confidential and disclosure may also be in violation of anti-trust legislation.

MMSA also views the requirement in the Proposed Rules of effectively applying the same commodity price to both resources and reserves as being overly restrictive for determining mineral

¹⁶Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, pg. 106.

¹⁷Comments on the Proposed Rules submitted by BHP Billiton, August 3, 2016, pg. 3.

resources. It effectively does not allow for a resource envelope to be developed around a reserve; therefore, it may not provide sufficient transparency for investors on the future value.

While our members suggested many other pricing models, including 36-month trailing, consensus pricing, etc., each of these models have drawbacks and limitations. Models that are suitable for base metals may not be appropriate for aggregates, coal, mineral sands, or precious metals. It would be **MMSA's recommendation that the Proposed Rules provide the flexibility for a Registrant or QP to utilize other pricing models, including those deemed acceptable under the CRIRSCO Framework** and allow the use of forecast pricing aligned to a Registrant's business models, as appropriate for the commodity. The selection of commodity pricing should also be transparent and presented in the reporting.

Canadian NI 43-101 reports commonly utilizes the 36-month trailing model for openly traded products. A dual listed Registrant, that is not a "MJDS registrant," may have to generate two different sets of estimates and reports; one based on the 36-month trailing model for Canada and one based on the 24-month trailing model for the United States. MMSA believes this will cause confusion with both the investing public and, indeed, within the Registrant itself.

4.5 RESOURCE AND RESERVE DEFINITIONS

MMSA is grateful that the Commission is updating and aligning its definitions for Resource and Reserves to the CRIRSCO Template; however, MMSA would **strongly recommend that the Commission's rules adhere to the international practices represented by the CRIRSCO Template**. This would help prevent inconsistency or the need for duplicate reports and filings with most of the major global jurisdictions.

MMSA would also recommend that the Commission's definitions for Resource and Reserves, by reference to either the CRIRSCO Template or the SME Guide, be in a manner similar to Canada's NI 43-101 reference to the CIM definitions. This recommendation for incorporations by reference will facilitate the continued improvement and updating for the mining disclosure rules and guidelines without the need for additional Commission rule making. This recommendation reflects the recognition given the accounting profession's auditing standards (GAAP and GAAS) that the Commission recognizes through incorporation by reference.

4.5.1 Mineral Resource Definition

Under the proposed rules, a "Mineral Resource" is limited to the mineralization defined by the 24-month trailing commodity pricing model. This requirement effectively applies the same commodity price to both Resources and Reserves determination, which does not allow for a resource envelope to be developed around a reserve. This expanded envelop is important for investors when determining any future potential of the operation and for the mining operation when preparing engineering studies.

The provision of the Proposed Rules that excludes the use of potential Inferred Resource in the "initial assessment" also limits the ability of a Registrant to declare Resources on properties that

do not yet have sufficient data or data density for Indicated or Measured Resources. Ultimately, MMSA believes this provision is contradictory to the goals of the Commission to align their reporting requirements to the CRIRSCO Framework, as many Mineral Resources summaries defined and reported under other jurisdictions will not be allowed under the Commission's Proposed Rules. This will result in Registrants having to bear the time and cost to prepare separate technical reports for SEC filings.

4.5.2 Mineral Reserve Definition

MMSA believes there is a flaw in the Commission's definition in the Proposed Rules of "Mineral Reserve" and would **Strongly Recommend the Commission's definition of "Mineral Reserve" adhere to the CRIRSCO Template.**

On page 105 of the Proposed Rules, the Commission states:

"We are proposing a definition of mineral reserve as an estimate of tonnage and grade or quality that is net of allowances for diluting materials and mining losses. This is in contrast to the definition of mineral reserve under the CRIRSCO standards, which includes diluting materials in reserve estimates. We are proposing a net estimate for reserves because our proposed rules would require disclosure of mineral reserves at three points of reference: in-situ, plant or mill feed, and saleable product. We believe estimates that are exclusive of diluting materials and mining losses would provide a clearer picture of the efficiency of the processing method, which we believe is important for investors. Because this difference is relatively minor (excluding diluting materials is a minor computational step in reserve estimation), we do not believe it would impose a significant additional compliance burden for registrants."¹⁸

The above definition of "Mineral Reserves" is a major departure from the definition of Mineral Reserves that is generally accepted by most major financial institutions and investors. MMSA is of the opinion that this change, which the Commission states to be "*relatively minor*," could create significant confusion among investors. Mineral Reserves, by long standing definition, are not in-situ and they include diluting materials and mining losses. Hence, the Commission's requirements to report "Mineral Reserves" at all three points of reference (also not consistent with other reporting guidelines) could create confusion as now an investor has three or four (if the company also reports under a CRIRSCO Framework) different Reserve figures.

Mineral Reserves reported, based on actual saleable material, is probably the most factual number for an investor. MMSA would note that reporting of "in-situ" reserves have always been recognized as misleading to potential investors in markets other than Russia and China. Therefore, MMSA would **caution against changing the definition of "Mineral Reserve" and recommend against requiring reporting Mineral Reserves at ALL three points of reference**, as proposed.

¹⁸Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, pg. 105.

MMSA disagrees with the Commission’s observation that “*excluding diluting materials is a **minor computational step** in reserve estimation.*” In some simple deposits, this may be true but, proper dilution and mining loss calculation is dependent upon many factors including the size and type of mining equipment, geologic and stratigraphic constraints, spatial orientation and distribution of the mineralization, geometry of the mineralized areas, etc. Proper calculation of the dilution and mining losses, in actuality, can be a fairly complex and time consuming analysis for most properties.

4.6 TECHNICAL REPORTING

In the request for comments and the Commission’s questions on the Proposed Rules, it uses several terms for technical reporting. It uses the terms: “Technical Report Summary,” an “unabridged technical report.”¹⁹ The differences between a “Technical Report Summary” and an “Unabridged Technical Report” are not clear, as the Technical Report Summary actually appears to be a full technical report.

MMSA is of the opinion that for all properties in which a Registrant publicly publishes any Mineral Resources or Mineral Reserve tabulation, they should make publicly available a technical report covering the aspects, as defined in the CRIRSCO reporting framework. A single technical report covering several properties may be appropriate for many Registrants as they may operate multiple distinct properties or groups of properties as a single logical unit, a common practice with many sand and gravel or coal operations.

4.6.1 Prescriptive Nature of the “Technical Report Summary”

The Proposed Rules requires a very prescriptive format for the “Technical Report Summary” to be prepared for each of the Registrant’s projects. As most mining projects are diverse in nature as well as mineral occurrences, disclosure reports suitable for base metals may not be appropriate for aggregates, coal, mineral sands, or precious metals. Likewise, the diversity of mining methods (open pit, underground, dredging operations, mountain top removal, in-situ leaching, brines, seabed, etc.), processing methods (concentrating, smelting, refining, comminution, hydrometallurgy, etc.), marketing of products (sale of metals, concentrates, final products), environment, social issues, and political risks are all issues that may or may not have a significant impact on the current or future economic viability of a given project for an investor.

Therefore, MMSA is of the opinion that the Commission should view paragraphs (b)(96)(iv)(B)(1) through (b)(96)(iv)(B)(26) and their associated instructions as guidelines and not rules.

The Proposed Rules should allow a QP to deviate from Proposed Rules and reporting requirements in a manner similar to the JORC’s “if not then why not” guidelines because of the unique differences of precious metals, base metals, ferrous metals, industrial minerals, mineral sands, coal, gem stone properties.

¹⁹Question 22

4.6.2 Term “Technical Report Summary”

MMSA is of the opinion that the term “Technical Report Summary” in the Proposed Rules is somewhat misleading and should be re-titled. While the proposed rule changes specify under paragraph (b)(96)(iii) that: “*The technical report summary must not include large amounts of technical or other project data, either in the report or as appendices to the report,*”²⁰ the required format for the “Technical Report Summary” under paragraph (b)(96)(iv) consist of some or all of 26 sections. The sub-paragraph and instructions also prescribes what each section is to contain, which is very specific and requires detailed information inconsistent with the Commission’s stated intent.

The Commission in their discussion notes that: “*The proposed requirements for the technical report summaries are largely consistent with the items of information required under the Canadian NI 43-101 standards...*”²¹ MMSA would point out that a typical Canadian NI 43-101 technical report consists of 200 plus pages in the body and several hundred pages of Appendices. If the Commission intends that the “Technical Report Summary” is similar to a Canadian NI 43-101 technical report with some additional requirements, referring to the report as a “Technical Report Summary,” it is not consistent with the details outlined by the Proposed Rules and could be viewed as misleading.

4.6.3 Technical Report Summary Requires Information not Required Within the CRIRSCO Framework

Pages 239 through 257²² of the request for comments on the Proposed Rules outline the requirements for the “Technical Report Summary.” There are 26 major items outlined in paragraphs (iv)(B)(1) through (26) which inclusion is based on the purpose of the Technical Report Summary, as stated in paragraph (iv)(A).²³ While MMSA believes that these items are important for investors to make informed decisions, some of the required information is not currently required within the CRIRSCO Framework. We note that items required by the Commission’s Proposed Rules involve very detailed information.

Paragraph (iv)(B)(7)²⁴ requirements for hydrogeology mandates information on sampling methods and details on the quality assurance/quality control (QA/QC) procedures for surface and groundwater parameters, groundwater modeling, characterization of aquifers, etc. Likewise, Paragraph (iv)(B)(8)²⁵ on geotechnical data and testing requires detailed information on soils and rock strength testing. This work may not be completed until advanced stage investigations for feasibility level work and yet it appears this detailed testing work will be required for simple

²⁰Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, pg. 240.

²¹Ibid., pg. 213.

²²Ibid., pp. 239-257.

²³Ibid., pg. 240.

²⁴Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, pg. 244.

²⁵Ibid., pg. 244.

resource reports. Many mines in production, due to their simple nature or permitting requirements, may never be required to produce these types of studies.

MMSA would recommend that the Proposed Rules have the flexibility to exclude information provided the reasons are clearly explained. Exclusion of required information should be allowed on a “if not then why not” basis when appropriate for a given mine or commodity.

4.6.4 Annual Update of Mineral Resources and Mineral Reserves

While MMSA is in favor of requiring “Annual Updates” of a Registrant’s Mineral Resources and Mineral Reserves for transparency, the procedures outlined in the Proposed Rules could be burdensome and costly for smaller Registrants. Requiring that a Registrant update both the Mineral Resource and Mineral Reserves at the end of every calendar year **using a commodity pricing** ceiling equal to, or less than, a 24-month daily trailing average for the preceding 24 months may require Registrants to recalculate and re-estimate their Mineral Resources and Mineral Reserves each year.

A proper estimate of the Mineral Reserves, at any given point in time, requires a mine plan and a production schedule developed for a specific commodity pricing structure. Changing a mine plan or production schedule is not usually just an “accounting exercise” of eliminating material or mineralization that might be sub-economic at any given moment in time. It may involve a complete re-design of mine haulage ways, accesses, utilities, etc. for a company to optimize its cash flow and costs, and hence, is a very complicated process. Normally, a company will only “adjust” their previously estimated resources and reserves annually based on factors that the project believes are appropriate at the time of reporting. They will typically use their previously developed Mineral Resources and Mineral Reserves models, which are based on a forward-looking pricing framework appropriate for their commodity for this adjustment.

Revisions to a mine plan and production schedule, due to a change in the projected long-term commodity pricing, can typical take a company 3 to 6 months utilizing a team of technical people. Hence, the Mineral Reserves or Mineral Resources primary models are usually updated by a mining company only every 3 to 5 years or when there are material changes to the mineralization, mine, or operation. Another drawback with the Proposed Rules is that a new mine plan and production schedule, started earlier in a year although completed by the end of the calendar year, may fail to meet the 24-month trailing average required by the Proposed Rules resulting in a Mineral Reserve estimate which will not meet the Commission’s pricing requirements for disclosure.

MMSA would, therefore, recommend the following for Annual Disclosure:

1. **The Proposed Rules should require “Annual Updates” (not re-estimation) of the Mineral Resources and Mineral Reserves;**
2. **The “Annual Update” should be reviewed by a QP; and**

3. **The “Annual Update” can be completed on either a calendar year or the Registrant’s fiscal year basis.**

4.7 SUMMARY DISCLOSURE REQUIREMENTS

The Proposed Rules allows “Summary Disclosure” for Registrants with multiple properties for annual reporting. MMSA would note that this provision favors companies with multiple properties and requires a lot of detailed information.

The proposed requirements of Table 5 (Summary Exploration Results) can be very extensive as even a moderate size Registrant may produce 50,000 plus drilling intervals or samples during any fiscal year. Hence, the reporting required by Table 5 may require space equivalent to over 1,000 pages of reporting in the format requested.

Likewise, the reconciliation required for Tables 7 and 8 require reconciliation by “ore type.” Many large mines may have 40 to 50 different ore types. This could result in 1,000 plus entries for a Registrant with over 20 properties. Plus, the Commission should note that many mining companies do not track production by “ore type;” hence, reporting by “ore type” may require additional record keeping and personnel to meet this requirement.

MMSA would also note that Table 7 requires reporting discrepancies or reconciliation of Mineral Resources by “ore type.” Only Mineral Reserves are considered “ore” by definition; hence, this requirement is in contradiction to the Commission’s definitions. Likewise, the Proposed Rules require reporting on a calendar year yet, Tables 3 through 8 require reporting on a fiscal year. The Proposed Rules and instructions should be revised.

4.8 XBRL FORMATTING OF TABLES 2 THROUGH 8 (QUESTIONS 96 AND 104)

MMSA believe that requiring Summary Disclosures Tables 2 through 8 be reported in eXtensible Business Reporting Language (XBRL) could be burdensome to smaller Registrants and not be valuable to most informed investors in minerals projects.

4.9 TREATMENT OF ROYALTY COMPANIES

Many royalty companies and holders of royalties may not have access to the detailed information required in the Proposed Rules. MMSA, therefore, believes that the requirement “*to provide all applicable mining disclosure if the mining operations that generate the royalty or other payment (the underlying mining operations) are material to the royalty or similar company’s operations*”²⁶ would be burdensome for many royalty companies. MMSA believes that the Proposed Rules should recognize that a royalty company may not have or be able to legally disclose much of the detailed information required and that a set of rules be developed specifically for disclosure and

²⁶Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, pg. 25.

reporting for royalty companies. At a minimum, a royalty company or QP should be able to rely and disclaim the information provided by the operator.

4.10 GEOTHERMAL ENERGY AND BRINES

MMSA would recommend that a separate set of disclosure and reporting requirements be developed for geothermal energy and brines. These commodities do not closely correspond with solid minerals.

4.11 TRADE SECRETS, CONFIDENTIAL INFORMATION AND COMPETITIVE ADVANTAGE

Many times mining companies use licensed products and processing methods that are covered under non-disclosure or confidentiality agreements, such as rare earth or hydrometallurgical processing. Likewise, premature release of drilling results, property maps, and location could adversely affect the ability of a Registrant to secure proper title or tenure to a potential property and release of certain product marketing information may put a company in violation of certain anti-trust legislation or give non-registrant peers a competitive advantage. However, the Proposed Rules requires very detailed information be disclosed. The mandatory reporting requirements of the Proposed Rules do not allow for exemptions from disclosing any required information. MMSA is of the opinion that the Commission should allow deviation from public disclosure of certain information to protect trade secrets, confidential information, product, pricing, and marketing information that is vital for a company to maintain its competitive advantage or that could represent violations in anti-trust or other legislation in the country of operation.

4.12 COST OF COMPLIANCE

The Commission has estimated that the cost to Registrants to prepare the Technical Report Summary would require only 11 to 50 man-hours²⁷ at a cost of approximately US\$11,975²⁸. MMSA believes this to figure to be significantly low as our members' experience would suggest that a report prepared containing all information required by the Proposed Rules for a "Technical Report Summary" typically requires at least 300 to 500 man-hours at a cost of over US\$100,000 when all of the information required to prepare the document is already available to the QP. This does not include the added cost of the required "Initial Assessment" to support the technical report summary or the added costs of record keeping and accounting associated with the required annual reconciliation of Mineral Resources and Mineral Reserves by "ore type."

²⁷Release Nos. 33-10098; 34-78086; File No. S7-10-16, Modernization of Property Disclosures for Mining Registrants, pg. 188, footnote 449.

²⁸Ibid, pg. 216.