



Disclosure Standards
for Companies Engaged
in Mineral Exploration,
Development & Production

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I Introduction

The disclosure of the results of exploration and development activity on mineral properties must comply with the requirements of the Toronto Stock Exchange *Policy Statement on Timely Disclosure*, the Ontario *Securities Act* and all applicable policies and rules of the Ontario Securities Commission and any other securities regulatory body having jurisdiction over an issuer listed on the Exchange. In particular, the requirements of National Instrument 43-101 must be followed.

The purpose of the standards is to set out the requirements of the Toronto Stock Exchange when a company provides information to investors, regulators and/or the media regarding its properties, whether such information is contained in a news release, a continuous disclosure document such as an annual report, or other form of communication, including, but not limited to, printed investor relations material and electronic publications such as Internet Web sites. These standards do not apply to prospectuses or listing applications, the standards for which are contained in the policies and rules of the securities commissions and the Exchange. These standards are also not intended to establish requirements for the content of technical reports.

Any information published by or on behalf of a company must comply with these standards. If a company becomes aware of information published by others regarding its mineral properties which is materially misleading to investors, it should take appropriate action to correct such information or otherwise make it known that it is not responsible for publishing such information and does not necessarily agree with such statements.

Disclosure concerning mineral properties should identify the “qualified person” as defined in NI 43-101 who is responsible for the work conducted on the property and such person shall have read and approved of the technical disclosure.

II News Releases

The standards herein provide guidelines for the content of news releases which when combined with the disclosure requirements of NI 43-101 require more comprehensive disclosure. While this may result in additional time and money being expended on news releases, it is intended that the public receive more and better information in order that it can make better informed investment decisions.

The prescribed information may be provided by reference to previous news releases or other documents, as long as they are readily obtainable from the company by fax, mail or on a Web site. For instance, when a company first announces exploration results from a property, it must describe the geological environment of the property; however, it may not be necessary to repeat that information in every news release subsequently issued regarding the same property. The subsequent news releases may instead refer to previous releases or other documents and indicate how they may be obtained.

III Continuous Disclosure Documents

Disclosure in documents such as annual and quarterly reports must be as complete as possible in compliance with these standards and NI 43-101. Periodic reports must provide summary information on activities on all

material properties. Where work has been discontinued on properties about which the company has made prior disclosure, there must be further information provided as to any undisclosed results and reasons for the cessation of work. Such disclosure should be provided even on properties which are no longer material so that shareholders are reasonably well informed of the company's activities.

IV Web Sites

Companies which maintain corporate Web sites must provide the address of the Web site in all corporate disclosure materials. Any such disclosure should also be posted on the Web site immediately after it has been otherwise published. All news releases containing information on a material exploration property should be posted on the Web site until such time as the company has disclosed that it has discontinued work on a property, or no longer has an interest in the property, or the information has been superseded by disclosure of further work on the property.

V Exploration Results General Requirements

When disclosing the results of exploration activity on its properties, a company shall state the source of the information when it was not obtained by the company itself. The company shall also provide the name(s) of the qualified person(s) responsible for the design and conduct of the exploration program. The relationship of such person(s) to the company shall also be disclosed.

Apart from disclosure of results of exploration activities as described in more detail below, a general description of the geological environment must be disclosed, including any known potential for problems, such as extremely erratic results or significant metallurgical difficulties.

If the company releases partial results, e.g., the first two holes of a six hole program, it must ensure that the balance of the results are disclosed in a timely manner whether the results are positive or negative.

Where possible, the company should provide information in table form for ease of understanding and publish maps, plans or sections as appropriate to the information and the stage of development of the property.

VI Preliminary Results

Early exploration activity designed to yield information as to the possible existence and location of minerals of value, e.g., geophysical surveys or soil sampling, when disclosed, must be clearly described as preliminary in

nature and not conclusive evidence of the likelihood of the occurrence of a mineral deposit. A description of the type of survey or the sampling methods, e.g., grab, chip or channel samples, and spacing intervals must be included. The company must also disclose who undertook the program, and their relationship to the company.

Analytical results should be reported in a timely and responsible manner. In circumstances where extremely high grades are encountered, it is important that the qualified person provide disclosure as to the comparability of the results with past results or, if there are no past results, with expected results based on geology. The sample grades reported should conform to industry best practices, such as ounces per ton or grams per tonne for precious metals, so as not to confuse the reader.

Visual estimates of quantity or grade of mineralization should not be reported. Observations of mineralization from outcrop, trench or drill samples should be reported only when analytical results will not be readily available and the presence of the mineralization is deemed to be material by the qualified person responsible for the project. What is then reported should be carefully and completely described in terms that will not lead unsophisticated investors to conclude that the information can be interpreted with the same confidence as assay results.

Similarly, results of exploration for a polymetallic property must not be reported in "metal equivalents" prior to disclosing resources or reserves, and then only in limited circumstances as set out in NI 43-101 and the CIM Standards on Mineral Resources and Reserves.

If the property is one of the company's material properties, the company must also disclose any independent sampling or audit programs that have been or will be undertaken, by whom, and what their qualifications are. Data verification programs undertaken should be disclosed, including sampling methods, location and number of samples, and comparisons with the company's own results.

Recommended programs for further exploration should be described, including proposed methods, time frame and cost. The company should state whether it intends to carry out the program(s) and whether it has the funds available to do so.

VII Advanced Results

When the company is releasing information as to advanced results, it must provide a description of the work undertaken and include all relevant details as to the methods used and who conducted the program in a similar manner as for preliminary results.

Results must not be disclosed selectively. If, for example, six holes are drilled and three return mineralization of interest, details of all six holes must be released, including location, direction, geological formations encountered, etc., so as to provide the reader with as complete a picture as possible as to the nature of the prospect.

Grades reported should conform to industry best practices, such as ounces per ton or grams per tonne for precious metals, and a complete and accurate portrayal of the drill intersections, true widths, cut grades, etc., should be included.

For any material properties, the company must also disclose whether any independent sampling or audit programs have been or will be undertaken, by whom, and what their qualifications are. Data verification programs should be disclosed, including sampling methods, location and number of samples, and comparisons with the company's own results.

Care should be taken to provide consistent reporting throughout the life of the exploration program. Estimations of tonnage and average grade of mineralization may not be reported until the company has performed a resource calculation as set out in the *Resources and Reserves Definitions* section below.

VIII Assay Results

The name of the analytical laboratories which assayed the material sampled must be disclosed together with their relationship to the company, if any. The accreditation of each laboratory, or lack thereof, must also be disclosed.

Assay results must include disclosure of the analytical method(s) used. If these are not standard procedures for the prospective minerals on the property, this should be disclosed in detail, including a discussion of the reasons for their use.

Complete disclosure of check assay results is not required. It is, however, a requirement that the company disclose the nature of the check assay program and whether the results are confirmatory.

IX Resources and Reserves Definitions

The use of the terms “resources” and “reserves” must conform to the definitions contained in NI 43-101, which adopts those published by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). These include the sub-categories of measured, indicated and inferred for resources, and proven and probable for reserves. Other terms, though they have been often used within

the industry, such as “in situ” resources or “geological” reserves, must not be used in public disclosure. If the location of the property is in another jurisdiction which has a definition of resources and reserves recognized by the Toronto Stock Exchange, such definition may be used, provided an exemption to NI 43-101, if necessary, has been obtained from the relevant securities commission and the definition used is identified. Significant differences between the definition used and that of the CIM must be described. For the purpose of these standards, recognized definitions include those of the IMM of the United Kingdom, the USGS of the United States and the JORC Code of Australia.

X Use

All resource and reserve estimations disclosed must provide the name of the qualified person responsible for the calculation and his/her relationship to the company. The company must also state whether, and how, any independent verification of the data has been performed.

Particular care should be taken to distinguish between resources and reserves so that they are not assumed to be equivalent in the mind of the reader.

Resources and reserves should, whenever possible, be published in a manner so as not to confuse the reader as to the potential of the deposit. Inferred resources must not be aggregated with measured and indicated resources nor proven and probable reserves, as the case may be. Any categories of resources and reserves which are aggregated must also be disclosed separately.

When reserves are first reported, the key economic parameters of the analysis must be provided, such as operating and capital cost assumptions, and the assumed prices of the mineral commodities which could be produced. If the prices used differ from the current prices of the commodities, an explanation should be given, including the effect on the economics of the project if current prices were used.

Sensitivity analyses may be used to provide a better understanding of the effects of changes in commodity prices on the economics of the project.

All reported quantities of resources and reserves must be expressed in terms of tonnage and grade. Contained ounces of gold, for example, should not be disclosed out of the context of the tonnage and grade of a deposit, with the possible exception of the resources and reserves of mining companies which have more than one mine in production. In that case, the company should not aggregate contained minerals from properties that are not in production with those that are in production.

Polymetallic resources and reserves must not be expressed in terms of “metal equivalents” except in the limited circumstances as set out in NI 43-101, F1, 19(k) and the CIM Standards on Mineral Resources and Reserves. It is also inappropriate to refer to the gross value or in situ value of resources and reserves. Ascribing gross values to resources and reserves remaining in the ground without disclosing potential capital and operating costs and other economic factors is meaningless and potentially misleading.

XI Development

Companies with properties which are at or near the development stage must avoid disclosure which leads investors to conclude prematurely that a mine is in production or is about to be placed in production. Care should be taken to distinguish between current and planned production rates. Operating capacities and production rates must be expressed in terms generally used in the mining industry and in a manner which is easily translated into gross revenues. Significant transportation costs, smelter losses, tolls or penalties for unwanted minerals should be disclosed for the same reason.

XII Feasibility Studies

Feasibility studies (including pre-feasibility studies) are undertaken for the purpose of determining whether or not a mineral deposit can be developed into a viable operating mine. Such a study is necessary to establish the presence of reserves on a property. When a company discloses the results of a feasibility study, it must disclose the purpose and scope of the study as well as the conclusions. The identity and qualifications of the firm or individuals that prepared the report must be provided as well as their relationship to the company.

Key parameters of the feasibility study must be disclosed as in the case of the reporting of reserves.

XIII Valuations

Reporting of a valuation of a property must include the valuation method and all key assumptions. The purpose and scope of the valuation must also be disclosed. The author(s) of the valuation, their professional qualifications and their relationship with the company, if any, must be disclosed.

XIV Tenure and Permitting

Upon acquisition of a material property, companies must disclose the basic tenets of the regulatory system of granting the rights for exploration and exploitation of minerals in the jurisdiction where the property is located. This would include a brief description of the permitting process, including required environmental assessments and what progress has been made during the course of an exploration or development program.

Companies must also disclose their proportionate ownership at successive stages of property development and any significant constraints or obligations. This should encompass cash or share payments, work commitments and production royalties. Any adverse claims or disputes as to title or rights to the property must be described including what steps the company must take to resolve the dispute and how long it may take to reach a resolution. Properties located in foreign jurisdictions will require more complete disclosure of tenure and permitting issues. Disclosure must address any constraints on access to the property including whether or not the company owns the surface rights to the property and what impact this may have on the company's ability to explore and mine on the property.

XV Production

Companies which publish their cost or anticipated cost of production, on a cost per unit basis, must clearly set out what costs are and are not included in the calculation. This provides investors with the ability to compare results of different companies which use different calculations. The Gold Institute has published a reporting standard for gold mines which is recommended for use by listed companies.

Production figures, including costs, that are disclosed on the basis of equivalents of a particular mineral (e.g., ounces of silver converted to equivalent ounces of gold) must include the amount of production of the secondary mineral and the value used for the conversion. Such conversions should be restricted to similar commodities, such as platinum group metals, and not used to convert base metals to precious metals, for example.

A similar breakdown of by-product production should be provided when it is treated as a cost reduction rather than as additional revenue.

Companies which do not have a 100% interest in the production from operating mines must avoid disclosure which provides gross production figures without also providing net figures or plain disclosure of the company's proportional interest in the operation.

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