

PDAC 2015 – March 4, 2015



Mining Disclosure:

NI 43-101 fundamentals, best practices, and useful guidance for TSX and TSX Venture issuers

Craig Waldie, *P.Geo.*, Senior Geologist, OSC
James Whyte, *P.Geo.*, Senior Geologist, OSC
Paul Ténrière, *P.Geo.*, Senior Manager Mining,
Compliance & Disclosure, TSX



Caution

The views expressed in this presentation are the personal views of the presenting staff and do not necessarily represent the views of the Ontario Securities Commission or other Commission staff.

The presentation is provided for general information purposes only and does not constitute legal or technical advice.

Information has been summarized and paraphrased for presentation purposes and examples have been provided for illustration purposes only.

Responsibility for making sufficient and appropriate disclosure and complying with applicable securities legislation remains with the company.

Agenda

Canadian Regulatory Overview

NI 43-101 History & Basics

- Misconceptions
- Qualified person

CIM Definition Standards – 2014 Revisions

TMX - Technical Disclosure Best Practices

- Disclosure framework
- Material information
- Disclosure standards
- Common disclosure issues
- News release examples
- Recent guidance on “economically interesting grades”

NI 43-101 Disclosure Pitfalls & Guidance

- Exploration target
- Mineral resource
- Preliminary economic assessment (PEA)
- PEA after reserves – what’s allowable?
- Production decision without reserves

Website Disclosure

Comparison of NI 43-101 & JORC 2012

Technical Report Basics

- Practical tips

Technical Reviews by the Regulator



Canadian Regulatory Overview

"Streamlining securities regulation no easy feat for Canada's fractious provinces"

J. Johnson, Financial Post

13 provincial/territorial securities commissions

Today

CSA/ACVM (Coordinating Role)

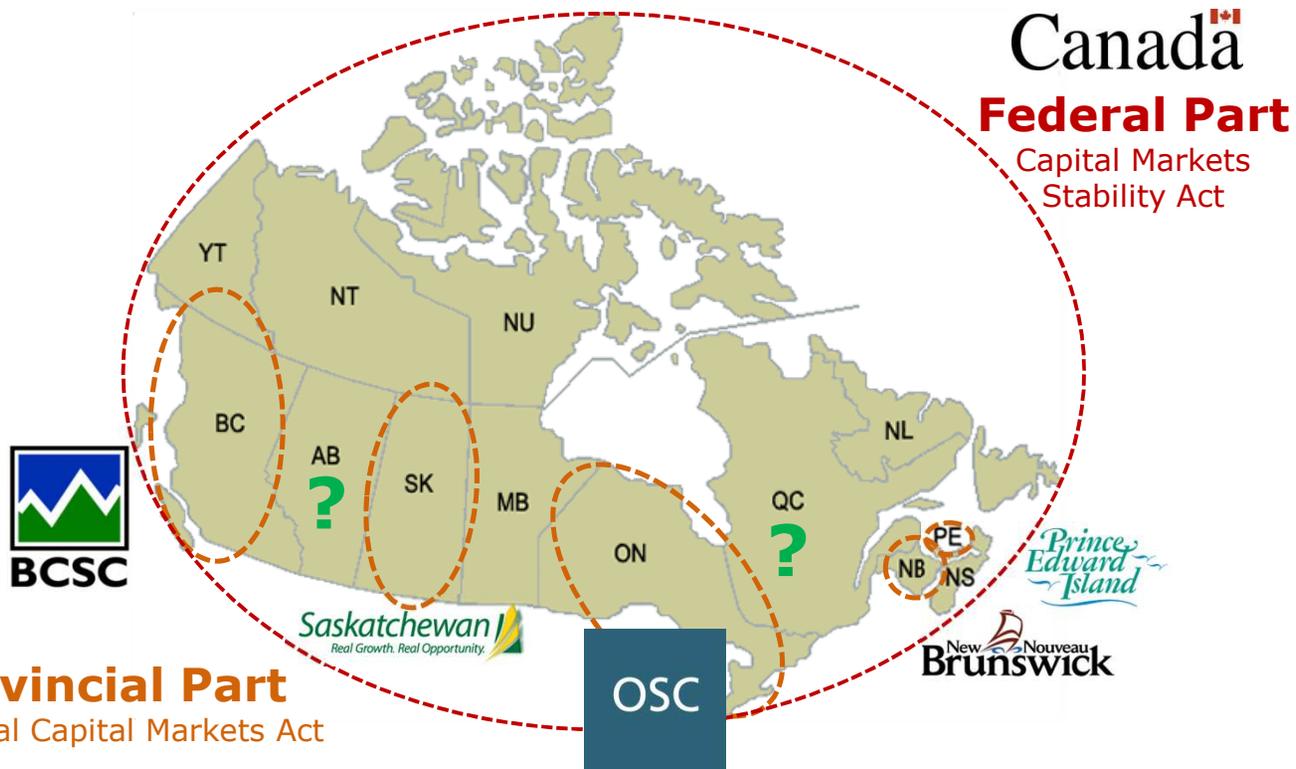


The “Big 4”

Each company has a “principal regulator” (based on the location of its head office)

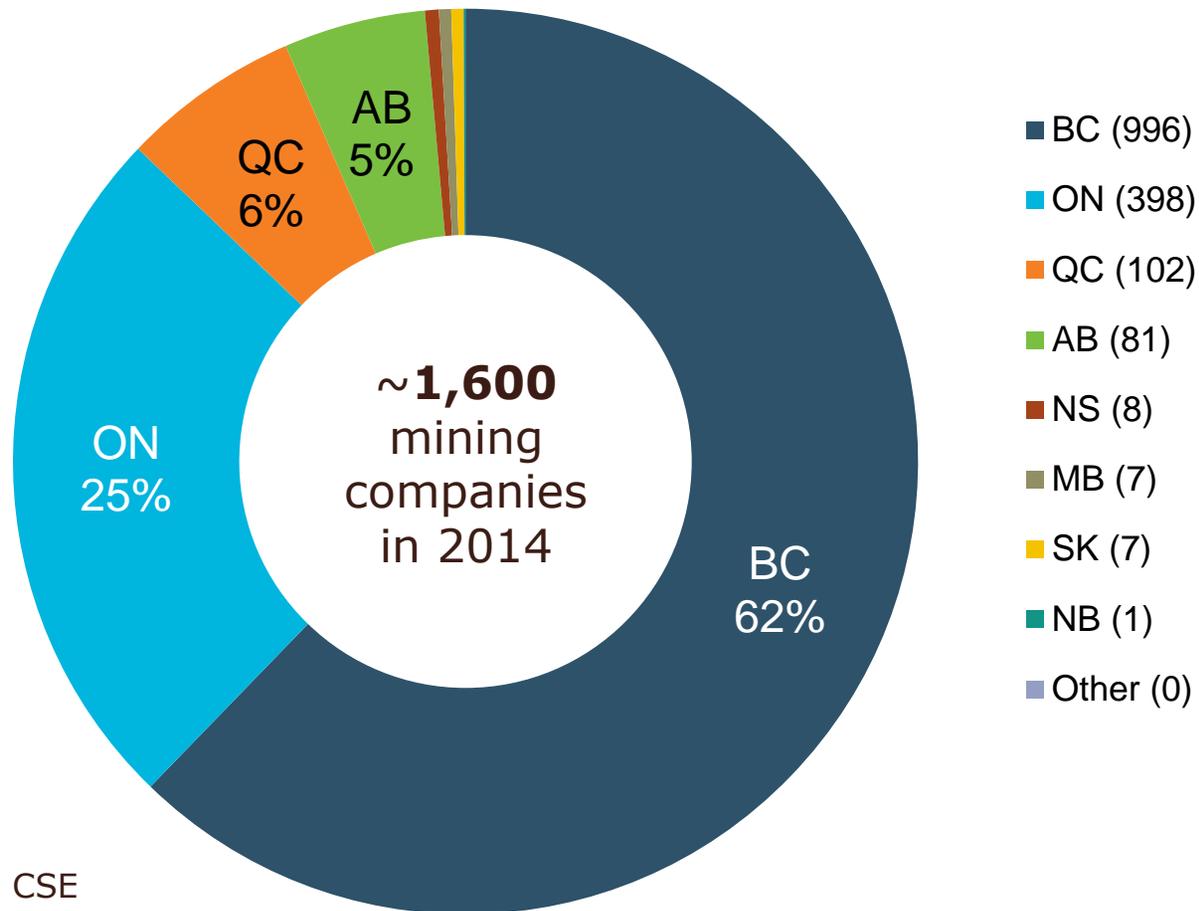
Capital Markets Regulatory Authority (CMRA)

Future?



The CMRA is working towards the goal of being operational by ???

Provincial oversight of mining companies



TSX, TSXV, NEX, CSE



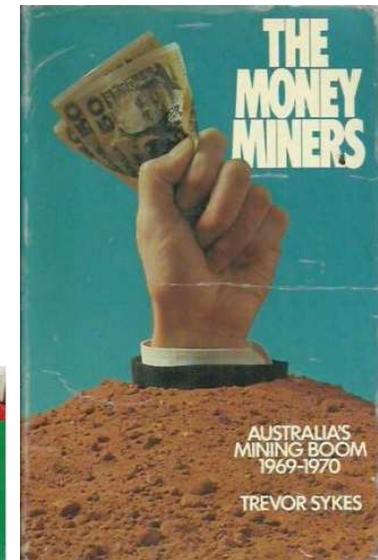
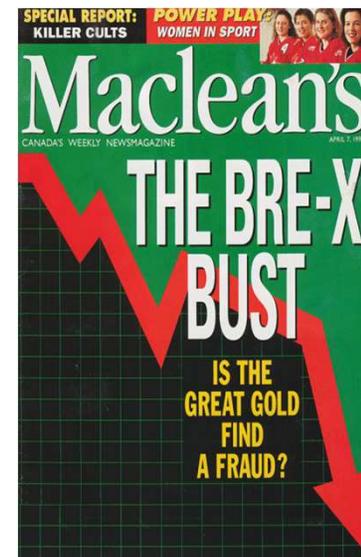
NI 43-101 History & Basics

"Rules alone cannot prevent fraud and scandals, but they create markets in which all those involved understand that the playing field is level"

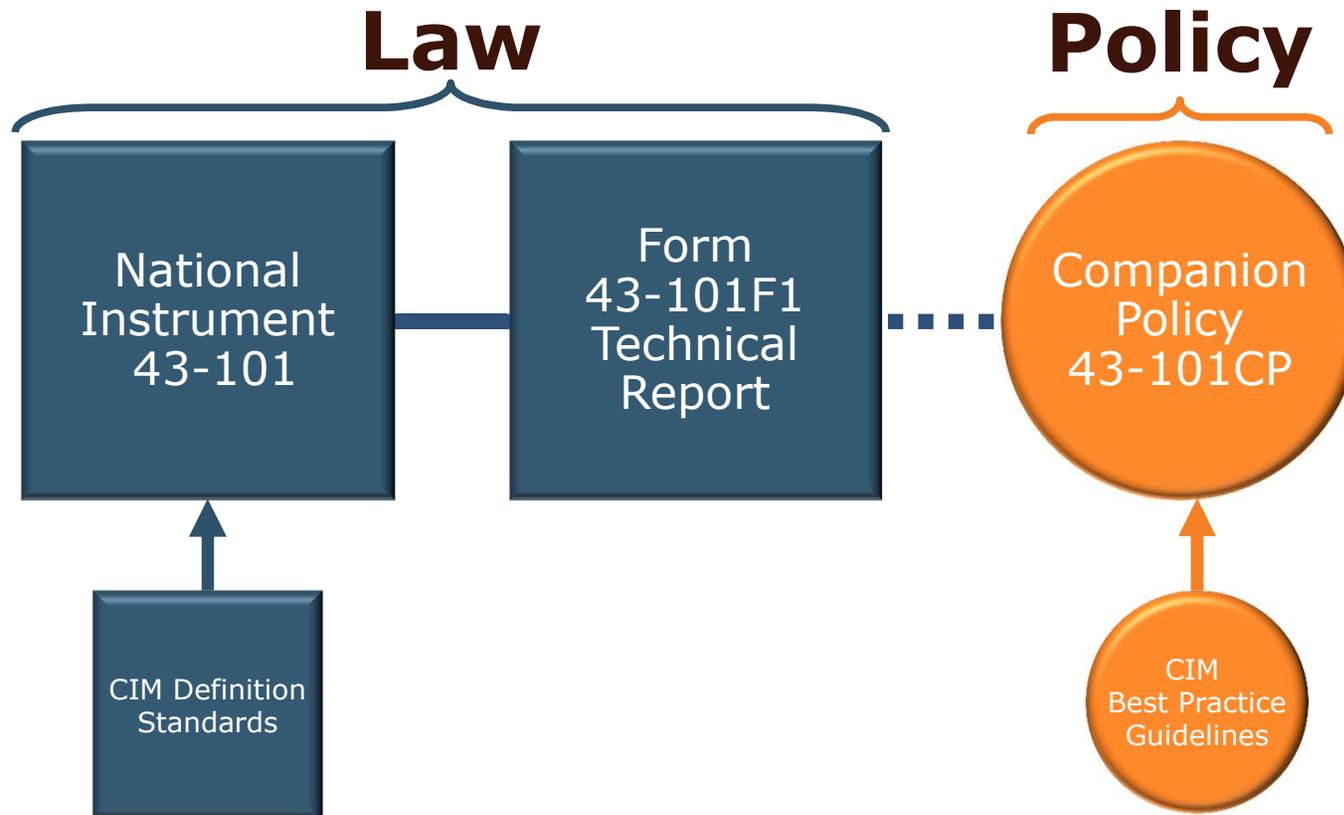
Former SEC Chairman

Why do we need mining disclosure rules?

- Investor confidence
 - It is critical for exploration and mining companies to access large amounts of risk capital over a long period of time
- Control disclosure
 - Need to deal with potentially misleading information to protect investors
- Perception of the mining industry
 - "A gold mine is a hole in the ground with a liar at the top"



3 Parts to NI 43-101 (aka the "Mining Rule")



Note: Revised May 10, 2014

What are the core principles of NI 43-101?



**Qualified
Person**



**Standards
&
Best Practices**

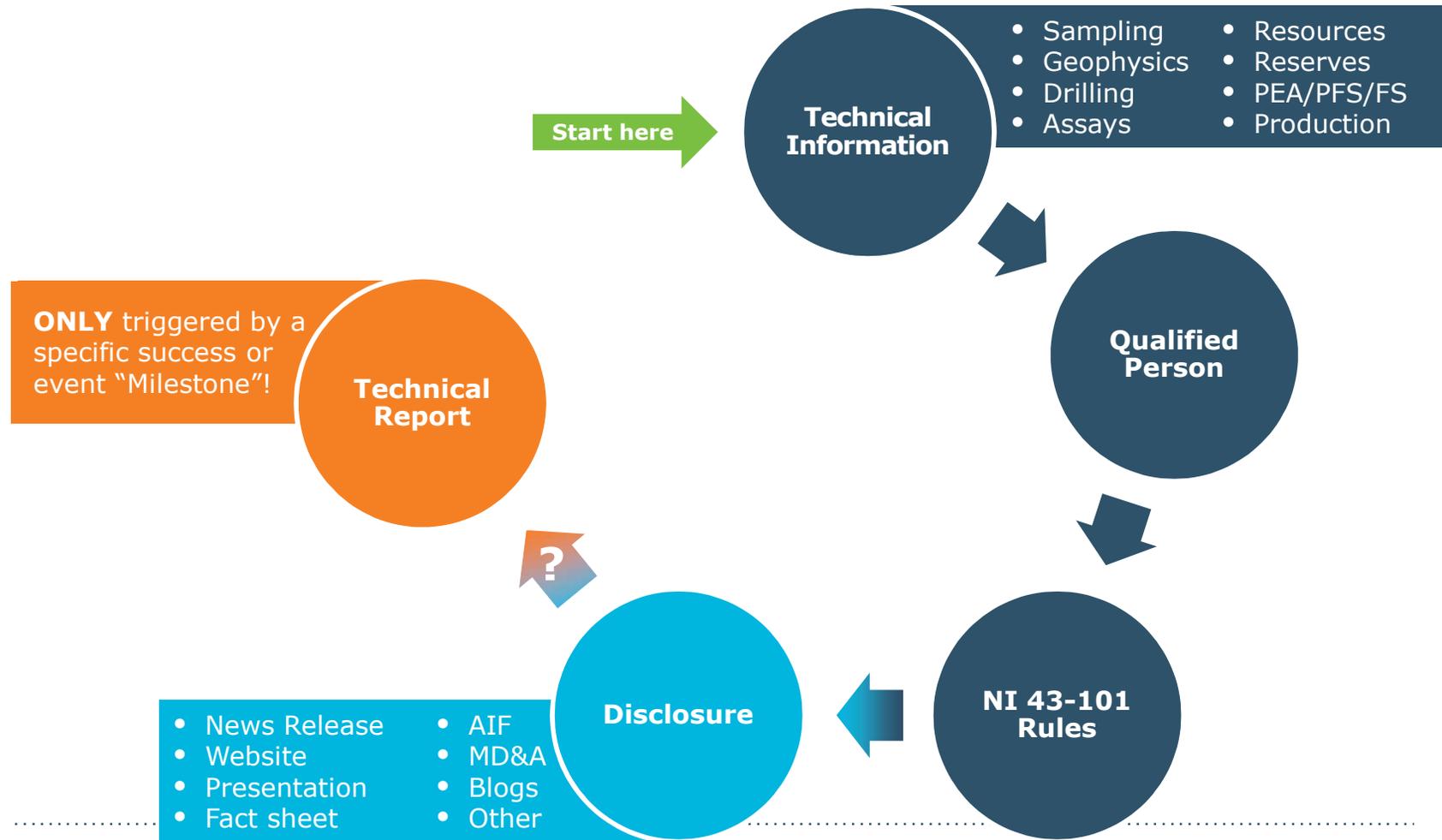


**Technical
Report**

Objective of NI 43-101:

Requires that disclosure is based on reliable information, reflecting professional opinions, based on industry best practices and using standardized terms.

Flow of technical information within NI 43-101





Misconceptions

"I can tell you 43-101 is a piece of garbage - it's not worth anything"

President and CEO of a Canadian mining company – Dec 2013

NI 43-101: What it's meant be

DISCLOSURE RULE

- Requires that companies provide technical information that is:
 - Signed off by a professional (QP) who takes responsibility for the information
 - Based on reasonable assumptions which are clearly explained
 - Consistent in its use of standardized terms and definitions
 - Unbiased and identifies the potential risks and uncertainties
 - Balanced and not misleading
 - In a format that allows for comparing similar projects
 - Understandable to a reasonably informed investor

NI 43-101: What it's **not** meant to be

- It's not a guarantee of good work
 - It places an obligation on the company to have work done by a QP
 - The QP is supposed to do it right
- It's not a cookbook for mineral estimation
 - The rule sets disclosure standards, not estimation practices
 - It's designed so others can review and judge the QP's work
- It's not a vetting process at the regulatory agency
 - Just because a technical report is filed doesn't mean it's compliant
 - It's the company's responsibility to comply



Qualified Person

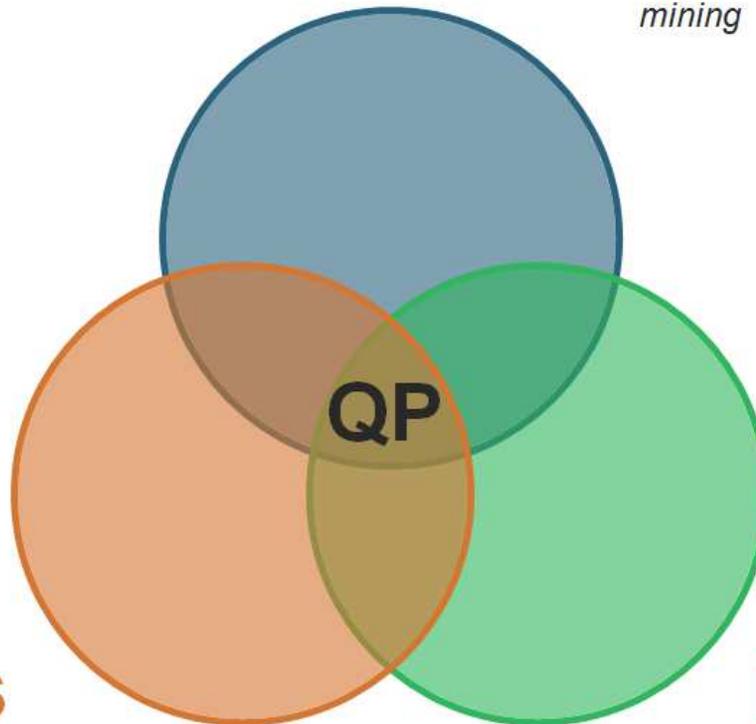
“What it all comes down to, and always will, is the integrity, honesty, competence and experience of the person performing the work—period!”

B. Cook, Exploration Insights

3 Es of a QP

Education

Geoscientist or engineer with a university degree in geoscience or engineering related to exploration or mining



Professional association recognized by law in Canada or a foreign association and membership designation listed in NI 43-101

Ethics

At least five years of experience in exploration, mining, or project assessment and experience relevant to subject matter being reporting on

Experience

QP and foreign “professional associations” (February 21, 2013)

CSA Staff Notice 43-308 (Revised)
Professional Associations
under NI 43-101 Standards of Disclosure for Mineral Projects

Additions to the List of Foreign Associations and Membership Designations

After considering submissions received, in staff's view the organizations listed in this Notice meet the definition of a "professional association" in NI 43-101, and the membership designations listed meet the criteria in paragraph (e) of the definition of "qualified person" in NI 43-101.

Foreign Association	Membership Designation	Date of Determination
The Institution of Engineers Australia (Engineers Australia)	Chartered Professional Engineer (CPEng)	May 29, 2012
The Institution of Professional Engineers New Zealand (Engineers New Zealand, IPENZ)	Chartered Professional Engineer (CPEng)	November 5, 2012

These associations and membership designations should be considered additions to the list of accepted foreign associations and membership designations in Appendix A of the Companion Policy.

QP self assessment for “relevant experience”



“QP should be clearly satisfied that they could face their peers and demonstrate competence and relevant experience in the commodity, type of deposit and situation under consideration”



Article: *“Standards for QPs: how to evaluate relevant experience”* – C. Waldie & J. Whyte, Jun/Jul 2012, CIM Magazine

QP – critical to investor confidence

- QP’s obligations as a “professional” through their code of ethics*
 - Hold paramount the health, safety and welfare of the **public**
 - Undertake only work you are **competent** to perform
 - Conduct yourself with **integrity**, honesty, fairness and objectivity
 - Comply with applicable statutes, **regulations** and bylaws
 - Uphold and enhance the honour, dignity and **reputation** of the profession

*(Modified from APGO)

5 Cs of the QP's responsibility

- **Comply** with your professional association's code of ethics
 - Perform work only in your area of competency and be honest and objective
- **CIM** definition standards and best practices
 - Follow CIM Standards and Best Practice Guidelines
- **Conduct** data verification
 - Perform a reasonable level of due diligence and validation of technical data
- **Communicate** the project risks
 - Clearly report on the material risks in a manner understandable to investors
- **Check** the company's disclosure
 - Helps reduce the risk of being misquoted

5 Cs of the company's responsibility

- **Company** is responsible for its disclosure
 - Company's directors and officers are responsible for their disclosure
- **Compliance** with rules and policies
 - Must comply with securities laws and stock exchange policies
- **Choose** an appropriate QP
 - Company is responsible for choosing an appropriate QP for the task
- **Current** site visit
 - Company must arrange its affairs so a QP can carry out a current site visit
- **Correctly** use the QP's information and advice
 - Allow the QP to review the technical disclosure, and any revisions to it, before filing

QP misrepresented

- What if you're cited as the QP but did not approve the disclosure?
 - The QP is an "expert" under Securities Act liability provisions – if your work is misrepresented, you have to protect yourself
 - If the company misrepresents your work, they may be committing a Securities Act offence
- To protect yourself:
 - Give them a chance to retract (with a deadline!)
 - If they don't, inform the Securities Commission and the exchange they trade on
 - Can't hurt to disseminate your own news release setting the record straight



CIM Definition Standards For Mineral Resources and Mineral Reserves

Revised - May 10, 2014

Where to find new CIM Definition Standards

The screenshot shows the CIM ICM website interface. At the top, the navigation menu includes 'HOME', 'ABOUT CIM', 'NEWS & EVENTS', 'SOCIETIES & BRANCHES', 'PUBLICATIONS & TECHNICAL RESOURCES' (circled in red), 'STUDENTS', and 'MEMBER SERVICES'. Below the navigation, there are three columns of links: 'Publications' (CIM Magazine, Subscribe, Advertise, CIM Reporter 2014, Journals, Proceedings, Books), 'Technical Resources' (CIM Technical Paper Library, CIM Journal Paper Submission, Being a Peer Reviewer, OneMine Electronic Library), and 'Industry Resources' (Centre for Excellence in CSR, Global Mining Standards, Resources & Reserves (circled in red), Canada Mining Innovation Council, Underground Coal Mining Safety, Canadian Rare Earth Elements Research Network). A banner for 'MAY 9-13 2015 Montreal NEW DIMENSIONS' is visible. The main content area features a sidebar with 'About Us' and 'Official Standards & Guidelines' (circled in red), and a main article titled 'CIM Definition Standards for Mineral Resources and Mineral Reserves' dated October 27, 2014. The article text includes: 'The CIM DEFINITION STANDARDS of May 10, 2014', 'On May 10, 2014, CIM Council approved the CIM Standing Committee on Mineral Reserve and Mineral Resource Definitions' request for an update of CIM Definition Standards for Mineral Resources and Mineral Reserves.', 'The new version includes changes to maintain compatibility with National Instrument 43-101 (NI 43-101), and addresses industry, CSA, CRIRSCO and UN requests for clarification and guidance.', 'The Canadian Securities Administrators (CSA) have always referenced the definitions and categories of Mineral Resources and Mineral Reserves used in NI 43-101 to CIM Definition Standards for Mineral Resources and Mineral Reserves. In 2011, NI 43-101 also referenced Mining Study definitions for Pre-Feasibility Study and Feasibility Study to the CIM Definition Standards.', 'PDF - CIM Definition Standards for Mineral Resources & Mineral Reserves 2014' (circled in red), 'Background', 'In the mid-1990s, a number of incidents related to the securities of mineral exploration and mining companies shook public confidence in the mining industry and negatively impacted the industry's capacity to raise capital.', 'In response, the Ontario Securities Commission and the Toronto Stock Exchange jointly formed the Mining Standards Task Force (MSTF) in 1997.', 'Two years later its final report, *Setting New Standards*, contained 66 recommendations focused on improving the standards of practice governing operating activities and the need for good public disclosure.', 'In response to the MSTF report, CIM developed the CIM Definition Standards on Mineral Resources and Mineral Reserves, which were adopted by CIM Council in 2000, and amended in 2005. The CIM Definition Standards for Mineral Resources and Mineral Reserves were amended in 2005, 2010 and 2014.'



Purpose of revisions = harmonize with CRIRSCO

1997 - CRIRSCO agreed on a common set of definitions

- Over time, these definitions drifted apart

2012 - CRIRSCO agreed to standardize 15 core definitions

2014 - CIM revised 10 definitions in CIM Definition Standards



Committee for Mineral Reserves
International Reporting Standards

CRIRSCO Members

- JORC (Australasia)
- CIM (Canada)
- IMEC (Chile)
- PERC (Europe)
- MRC (Mongolia)
- NAEN (Russia)
- SAMCODES (South Africa)
- SME (USA - not yet recognized by the SEC)

What about the other 5 core definitions?

- These are covered in NI 43-101, not in CIM

CRIRSCO definitions	NI 43-101 definitions
Public reports	Written disclosure
Competent person	Qualified person
Exploration results	Exploration information
Exploration target	Not defined [s. 2.3(2)]
Scoping study	Preliminary economic assessment (PEA)

Observation by the regulator:

- *Full harmonization of the CP and QP definition may be difficult due to different scope of responsibilities*

CIM Definition Standards

10 core definitions harmonized with CRIRSCO

1. Mineral Resource

reasonable prospects for **eventual** economic extraction

2. Inferred Mineral Resource

majority of inferred resources **could be upgraded** to indicated resources with continued exploration

3. Indicated Mineral Resource

4. Measured Mineral Resource

5. Modifying Factors

new term related to converting resources to reserves

6. Mineral Reserve

reference point for mineral reserves must be stated

7. Probable Mineral Reserve

8. Proven (Proved) Mineral Reserve

9. Pre-Feasibility Study

10. Feasibility Study

<http://web.cim.org/standards/>



1. Mineral resource - definition

- Concentration or occurrence of solid material of economic interest in or on the Earth's crust
- Form, grade or quality and quantity is such that it has **reasonable prospects for eventual economic extraction**
- Location, quantity, grade or quality, continuity and other geological characteristics are known, estimated or interpreted from specific geological evidence and knowledge, including sampling

What are “reasonable prospects”

- Implies a **judgment call by the QP** in respect of the technical and economic factors likely to influence the prospect of eventual economic extraction
- Mineral resource is an inventory of mineralization that under **realistically assumed and justifiable technical and economic conditions** might become economically extractable

CIM guidance – “reasonable prospects”

- New guidance about “**reasonable prospects**”
 1. Basis for determining “reasonable prospects” needs to be clearly stated
 2. Assumptions should include:
 - cut-off grade and geological continuity at the selected cut-off
 - metallurgical recovery, smelter payments
 - commodity price
 - mining and processing method
 - mining, processing and general and administrative costs

Observations by the regulator:

- *New guidance appears to imply that more rigor is required around the estimation of a mineral resource*
- *Simply picking a cut-off grade without providing the basis and assumptions may no longer be appropriate to meet the definition of an mineral resource*

CIM guidance – “eventual”

- New guidance about **“eventual”** economic extraction
 - Time period of the word “eventual” will vary depending on the commodity
 - Bulk commodities (e.g. coal, iron, potash)
 - Eventual may mean in excess of 50 years
 - Gold and precious metals
 - Eventual would normally be 10 to 15 years, or much shorter periods of time

Observations by the regulator:

- *Potential concern that the word “eventual” relaxes the definition standards*
- *Potential concern about using extremely forward looking metal price assumptions*

Additional CIM Committee guidance – Nov 2014

- It is up to the QP to use or misuse interpretation of the word “**eventual**”
- A misuse may include using an undefined or indefinite period of time for economic extraction resulting in metal pricing assumptions that would not meet the reasonable prospects test
- Ultimately, it comes down to whether another reasonable QP would derive the same conclusions under the same circumstances

2. Inferred mineral resource

- Wording about the “**certainty**” of inferred resources was revised to be consistent with CRIRSCO and JORC, etc.
 - “It is reasonably expected that the **majority** of inferred mineral resources **could be upgraded** to indicated mineral resources with continued exploration”

CIM wording from 2011:

“... it cannot be assumed that all or any part of inferred ... will be upgraded ...”

Observation by the regulator:

- *New guidance appears to imply a higher hurdle is required for data quality and verification to justify an inferred resource in the first place*

CIM guidance - Inferred mineral resource

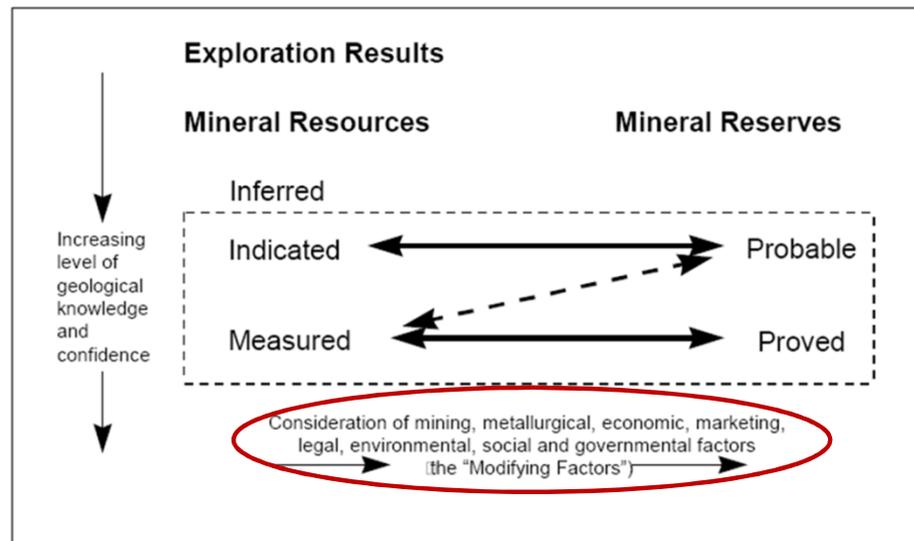
- New guidance about “**downgrading**” to inferred resources
 - If data integrity and geological and grade continuity are good but QA/QC is poor the QP can **downgrade** a measured or indicated resource to an inferred resource
 - BUT – QP must still take steps necessary to verify that the data meets the requirements of an inferred resource

Observations by the regulator:

- *New guidance appears to be directed to projects with existing mineral resources*
- *QA/QC data still needs to be appropriate for reporting an inferred resource*
- *Regulators may challenge an inferred resource based on questionable data, lack of appropriate QA/QC, or limited data verification*

5. Modifying factors

- Factors used to convert mineral resources to mineral reserves
- Include, but not limited to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors



Relationship between Mineral Resources and Mineral Reserves

6. Mineral reserve

- Added the concept of stating the “**reference point**”
 - Reference point refers to the mining or process point at which the QP prepared the mineral reserve
 - QP must clearly state the “**reference point**” used in the mineral reserve estimate
- Metal deposits
 - Reference point will generally be “mill feed” with reserves reported as mined ore delivered to the plant
- Coal deposits
 - Reference point will include reductions due to plant losses with reserves reported as tonnes as a “saleable product” (i.e. clean coal)



Technical Disclosure Best Practices and Useful Guidance for Exploration & Mining Companies

Paul Ténrière, P.Geo.
Senior Manager Mining, Compliance & Disclosure
Toronto Stock Exchange

Disclaimer

This information is provided for information purposes only. Neither TMX Group Limited nor any of its affiliated companies represents, warrants or guarantees the accuracy or the completeness of the information contained in this presentation. We are not responsible for any errors or omissions in or your use of, or reliance on, the information herein. This presentation is not intended to provide legal, accounting, tax, investment, financial or other advice and should not be relied upon for such advice.

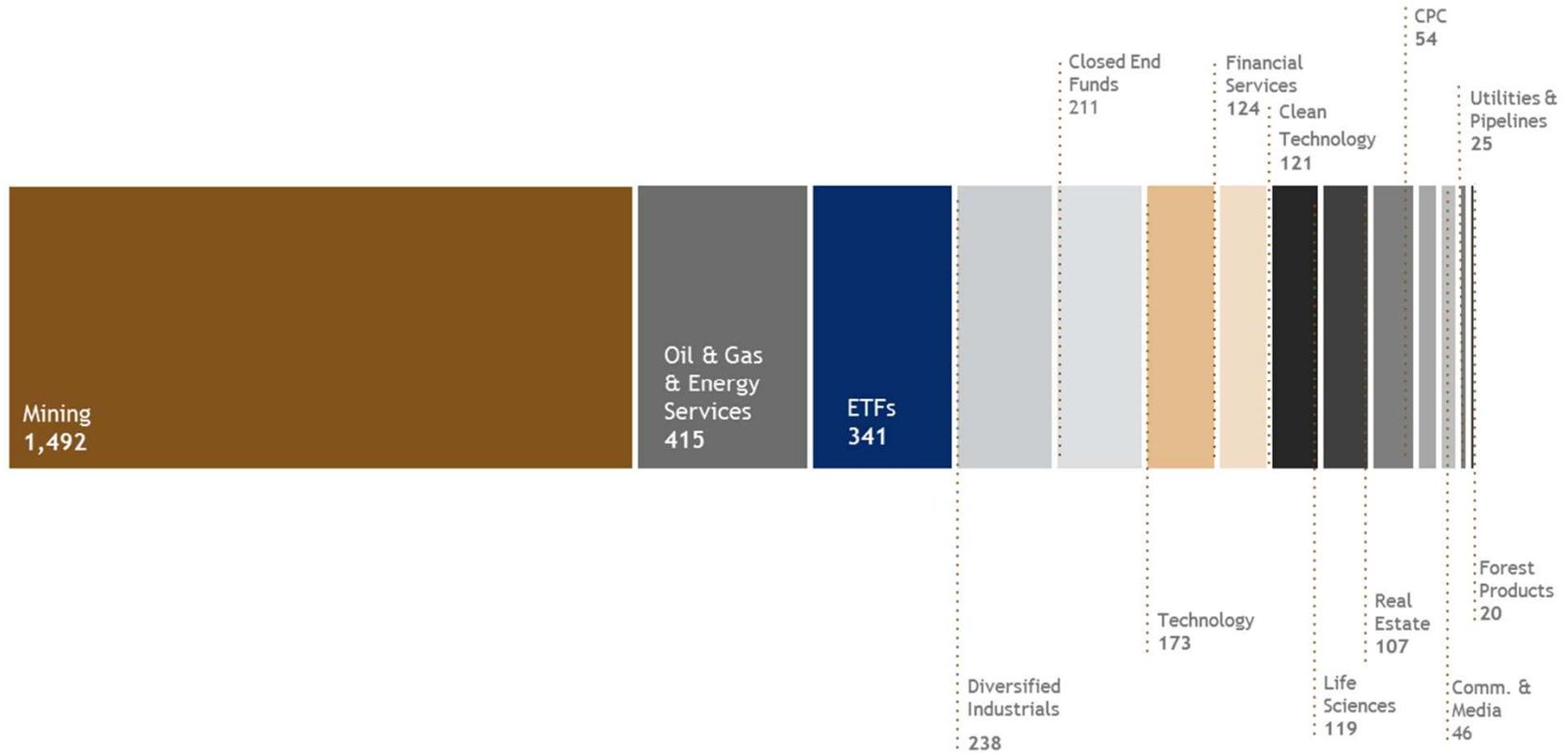
This information is provided with the express condition, to which by making use thereof you expressly consent, that no liability shall be incurred by TMX Group Limited and/or any of its affiliates as a result of any errors or inaccuracies herein or any use or reliance upon this information.

©TSX Inc. All rights reserved. Do not copy, distribute, sell or modify this document without TSX Inc.'s prior written consent.

Topics to be Discussed

- Disclosure Framework
- Material Information
- Disclosure Standards
- Common Disclosure Issues
- News Release Examples
- Recent Guidance on “economically interesting grades” related to TSX Original Listing Requirements for Mineral Exploration and Development Stage Companies

Mining Sector – TMX Group



*As at December 31, 2014, Includes issuers on TSX and TSXV (100% = 3,486)

Mining Sector – TMX Group

2014 Mining Markets at a Glance

	TSX	TSXV	TSX&TSXV	LSE	AIM	ASX	JSE	HKEx	NYSE/ NYSE MKT
Number of Mining Issuers Listed	291	1,201	1,492	28	149	673	45	53	109
Quoted Market Value (C\$ Billions)	219.7	9.3	229.0	431.8	5.6	296.0	278.4	185.4	672.9
New Mining Listings	10	33	43	0	2	10	2	4	2
Equity Capital Raised (C\$ Billions) <i>YTD Nov. 30, 2014</i>	6.5	1.6	8.1	0	0.620	4.0	0.2	0	0.385
Number of Financings <i>YTD Nov. 30, 2014</i>	194	1,087	1,281	0	230	1,513	3	0	3

Source: Gamah International, Capital IQ. Unless noted, data is as at December 31, 2014.

Mining Sector – TMX Group

Diversity in Issuer Base

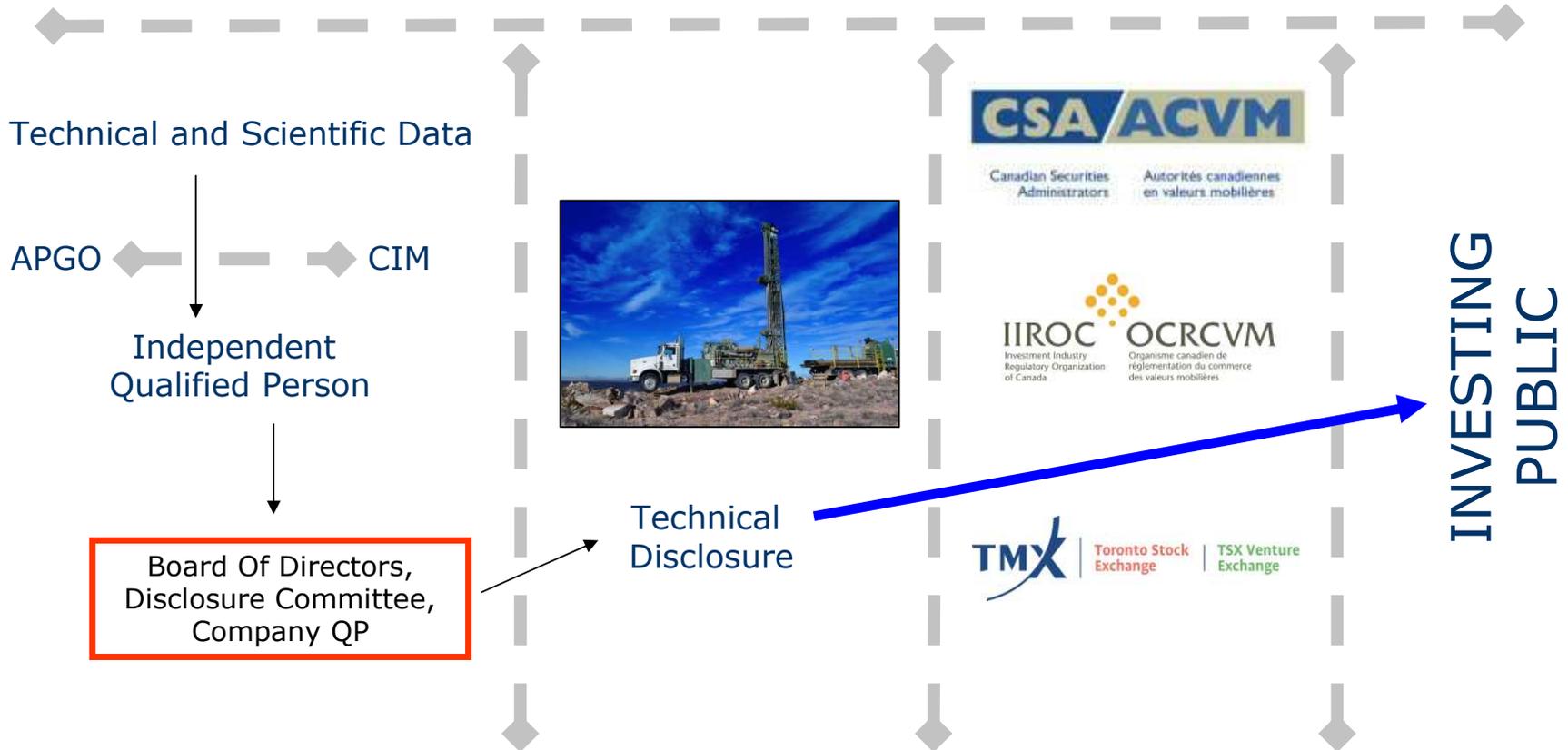
Number of Mining Companies by Stage of Project



Source: Infomine as at September 9, 2014

Disclosure Framework

National Instrument 43-101



Disclosure Requirements

- National Policy 51-201 Disclosure Standards
 - Timely Disclosure
 - Statutory Prohibitions Against Selective Disclosure
 - Materiality
 - Risks Associated with Certain Disclosures
 - Best Disclosure Practices
- National Instrument 51-102 Continuous Disclosure Obligations
 - Sets out your filing requirements
 - i.e. Financials, MD&A, AIFs etc.
- TSX Company Manual Timely Disclosure Policy – Sections 406 to 423.4
 - Appendix B: Disclosure Standards for Companies Engaged in Mineral Exploration, Development & Production
- TSXV Corporate Finance Manual
 - Policy 3.3 Timely Disclosure
 - Appendix 3F Mining Standards Guidelines
 - Appendix 3E News Release Guidelines

Material Information

"Material information is any information relating to the business and affairs of a company that results in or would reasonably be expected to result in a significant change in the market price or value of any of the company's listed securities... Material information consists of both material facts and material changes related to the business and affairs of a listed company."

- TSX Company Manual sec. 407
- TSXV Exchange Policy 3.3 sec. 2.1

"A listed company is required to disclose material information concerning its business and affairs forthwith upon the information becoming known to management, or in the case of information previously known, forthwith upon it becoming apparent that the information is material."

- TSX Company Manual sec. 408
- TSXV Exchange Policy 3.3 sec. 3.1

Material Information

- It is the responsibility of the TSX issuer to make the initial determination if the information is material – Part 4 of TSX Company Manual provides some guidance
- Reviewing with the Exchanges / IIROC / Securities Commissions does not remove this responsibility
- TSXV has deemed specific events to be material that require immediate disclosure (refer to TSXV Exchange Policy 3.3 – sec. 3.8)
- TSXV news releases must be pre-filed with IIROC prior to dissemination to the public where the news release contains material information relating to the following:
 - Reverse Takeovers, Changes of Business or other reorganizations
 - Qualifying Transactions, Reviewable Transactions, including corporate acquisitions or dispositions
 - Change of control
 - Future-oriented financial information or other operating projections
 - Disclosure of mineral reserves/resources or oil and gas reserves

Timely Disclosure Rules

		Outside Market Hours	During Market Hours
		Disseminating Information Before 8 am or after 5 pm (ET)	Disseminating Information Between 8 am and 5 pm (ET)
Material Information?	Yes	Distribute the news release through approved news wire service and copy IIROC at the time the release is sent to the wire. As a courtesy, call IIROC to advise that a material release has been disseminated.	Pre-file the news release with IIROC and obtain IIROC's sign off before distributing news release through an approved news wire service.
	No	Distribute the news release (approved news wire service not required) and copy IIROC at the time the release is sent to the wire.	Distribute the news release (approved news wire service not required) and copy IIROC at the time the release is sent to the wire.

**TSX
Timely
Disclosure
Policy**

- TSXV issuers must follow specific rules set out in TSXV Policy 3.3 and Appendix 3E and 3F
- May be a brief halt to disseminate material news
 - IIROC makes determination in consultation with issuer

Disclosure Standards - TSX

TSX Company Manual - Appendix B: Disclosure Standards for Companies Engaged in Mineral Exploration, Development & Production

- written prior to adoption of NI 43-101 in 2001 and very few updates since

Part 1: News Releases, Continuous Disclosure Documents, Websites

Part 2: Exploration Results – Prelim. and Advanced Results, Assay Results

Part 3: Resources & Reserves

Part 4: Development and Feasibility Studies

Part 5: Tenure and Permitting

Part 6: Production

Must always follow
NI 43-101 &
CIM Standards
(most up-to-date)

Disclosure of Technical Information

- TSX issuers must adhere to disclosure requirements defined in NI 43-101 as well as Appendix B (applies to both material and non-material technical information)
- Technical disclosure on mineral properties should identify the “Qualified Person (QP)” as defined in NI 43-101 who is responsible for work conducted on the property, and confirm that such person has read and approved of the technical disclosure
- Websites, corporate presentations, fact sheets, continuous disclosure documents (AIF, MD&A, annual reports) must also follow these rules
- Securities Commissions and Exchanges do routine checks to ensure compliance

Exploration and Drilling Results

- For a new project your news release should have at a minimum:
 - General description of geological environment
 - Type of samples and assay tests
 - QA/QC procedures
 - Assay laboratory description and any independent data verification or auditing (i.e. check sampling)
- Early exploration activities and results (i.e. soil or geophysical surveys) must be described as preliminary in nature and not conclusive evidence of the likelihood of a mineral deposit
- Analytical results should be reported in a timely manner and always report both positive and negative results including 'no significant assay' intervals
- Visual estimates of quantity or grade of mineralization must not be reported

Exploration and Drilling Results

Drilling and Assay Results - Balanced Disclosure is Key!

- Results must not be disclosed selectively, and avoid selective bolding of best results
- If six holes are drilled and three are encouraging, but three are not, all must be disclosed
- If three holes are disclosed as part of a six hole program, the balance must be reported as soon as assay results become available
- Comment on the true width of the drill sample (state if not yet known)
- Consider posting all drilling and assay results on your website

Metal Equivalents

Report in FULL compliance with NI 43-101, Sec. 2.3(1)(d):

"An issuer must not disclose a metal or mineral equivalent grade for a multiple commodity deposit, sampled interval, or drill hole intersection, unless it also discloses the grade of each metal or mineral used to establish the metal or mineral equivalent grade"

TSX Company Manual: Appendix B, Part 6.0:

"Production figures, including costs, that are disclosed on the basis of equivalents of a particular mineral (e.g. ounces of silver converted to ounces of gold) must include the amount of production of the secondary mineral and the value used for conversion. Such conversions should be restricted to similar commodities, such as platinum group metals, and not used to convert base metals to precious metals...A similar breakdown of by-product production should be provided when it is treated as a cost reduction rather than as additional revenue"

- Polymetallic properties must not be disclosed in "metal equivalents" prior to disclosing resources & reserves (Appendix B – Part 2.2)
- Disclose metal prices used, assumptions on recovery (ideally based on metallurgical recovery results), and show metal equivalent calculation
- Example: A silver mine with some gold cannot be portrayed as a gold equivalent if silver is the more valuable metal

Resources and Reserves

- Must always conform to NI 43-101 and CIM standards
- Use appropriate cautionary language if reporting historical resource estimates
- Disclosure of R&R estimations must provide the name of the QP responsible for calculation and their relationship to the issuer (independent or not)
- Inferred mineral resources must not be combined with measured and indicated resources nor proven and probable reserves
- Mineral reserve estimations must be backed up by a prefeasibility or feasibility mining study
- Gross or insitu values of R&R are not permitted

Production Cost Reporting

- Appendix B recommends using defined unit costs, and always include what costs are, and are not, included in the calculations
- Gold producers: Recommend following the World Gold Council Production Cost Standard to provide further transparency into the costs associated with producing gold (June 2013 press release)
 - All-In Sustaining Costs and All-In Costs – standard policy for most major Canadian gold producers
- Future production cost reporting standards specific to base metal producers and other commodities will be coordinated through CSA & CIM
- These standards will soon be adopted by CIM as a best practice and may be referenced in future updates to NI 43-101 – Stay Tuned!

Common Disclosure Issues

1. Overly promotional language – immediately flagged by IIROC and Exchanges and if not vetted may result in offending news release being retracted and clarifying statement
 - × World Class Discovery!
 - × World Class Deposit!
 - × Bonanza Grades!
 - × Abundant Visible Gold!
 - × Exceptionally High Grade Results!
 - × Spectacular and Extraordinary!
2. Burying bad/material news at the end of a news release
3. Abuse of metal equivalents resulting in misleading technical disclosure
4. Not disclosing whether drill hole intersections are true widths and potential assay stretching issues, and no details on sample type and assay methods used

Common Disclosure Issues

5. Qualified Person statement not included in technical disclosure, or QP has obviously not reviewed news release prior to being issued by company
6. Use of term “NI 43-101 compliant” in disclosure materials, and lack of disclaimers when reporting historical resource estimates
 - Please note there is no regulatory process for confirming whether a mineral resource or reserve estimate or technical report is “NI 43-101 compliant”
 - Recommend re-wording to “... *XXX completed (or prepared) in accordance with NI 43-101*” or something similar
7. Misuse of “target for further exploration” or “exploration target” category
 - Disclose only as range of tonnes & grades with supporting details and cautionary statement - NI 43-101 Restricted Disclosure Section 2.3(2)
 - Economic analysis (PEA) cannot include exploration target tonnages & grades

Common Disclosure Issues

8. Discussing production potential without economic analysis

- Any forward-looking comment regarding production without a supporting current economic analysis and mining study (PEA, PFS or FS) will not comply with NI 43-101 reporting requirements
- CANNOT quantify recovered metals or mine life, or any suggestion of production, profits or profitability

9. Disclosing the results of a PEA, PFS or FS that do not also include after-tax economic results (NPV and IRR) for a project

10. QA/QC procedures not disclosed as required by NI 43-101

11. JORC resources not reconciled to CIM definitions

News Release Example #1

Company Y Announces Probable Source of High-Grade Veins: Epithermal Gold System Theory Confirmed

August 2014 (TSXV:XYZ). When Company Y became involved in the ?? Property earlier this year it was to further explore a number of previously discovered high grade bonanza style gold veins. While examining the historical data ?? technical team initiated the first ever ground magnetic and VLF-EM survey on the property.

The recently completed survey outlined a previously undiscovered magnetic low anomaly measuring 1.2 km by 0.9 km with potential extension to the north and east beyond the surveyed area.

What makes this so exciting is that it suggests a very large gold bearing mineralized system, potentially the source of multiple high grade bonanza style gold veins. Based on the age of the host rocks and the location relative to known gold mineralization elsewhere on the property, this most likely means the new find is a significant epithermal system. The anomaly in theory could be the main feed source for the high grade veining that has always been the focus on the property to date. It appears that the surrounding veins are or could be leaked from this anomaly only 100's of meters away.

Several possibilities have been examined and reviewed to explain this discovery. The key potential explanation for this size of anomaly is a very large bulk tonnage gold epithermal system that hosts several high grade gold veins within it. This is similar to ??? deposit in central BC, which has an NI 43-101 compliant measured and indicated mineral resource (effective December 31, 2013) of 9.5 million ounces gold and 70.1 million ounces silver. The newly discovered anomaly on the ?? property is large enough to host a deposit of this scale.

...In 1984, follow-up prospecting located visible bonanza style gold in quartz veins exposed in outcrops in an area where virtually all work was focused from 1985 to 2004... The Company has put together a world class technical team drawn from the human capital pool usually tapped by the majors. The team has compiled, examined and reviewed all the previous work; this includes an impressive amount of work mostly focused on one of the shears, including 12,000 m of diamond drilling, 3,000 m of RC drilling, a 1,700 foot drift and a positive bulk sample. There were multiple holes with Bonanza style gold grade like 58 feet of 1.23 oz, or 1.6 metres of 4.5 oz gold.

"The property hosts several different styles of gold mineralization and several new epithermal veins have been discovered to-date." explains ??. "With the current drill permit in place, the company will be focusing on identifying targets that will advance and expand the multiple high grade gold targets we currently have. The opportunity is to identify as many high grade zones in what now appears to be a new and significant gold district."

DO YOU SEE ANYTHING WRONG WITH THIS NEWS RELEASE?

News Release Example #2

June 2014

Technical Report Recommends and Outlines Development to Production

There is no doubt in the author's mind that abundant resources are present and these resources shall be of sufficient quality, grade and quantity to justify an economically viable production of high-purity vanadium.

The Report enables the Company to proceed directly to resource calculations. No supplementary drilling is needed, years of expensive drilling campaigns to establish a resource are not required. The Report has unlocked all of the relevant past data and knowledge that is technically in the public domain but accessible to very few people. ??? Corp has authorized immediate claim expansion that facilitates preparation for eventual mine planning.

This release was approved by Mr. ??? P. Geo. Mr. ??? is a Qualified Person as defined by National Instrument 43-101.

OR THIS ONE?

“Economically Interesting Grades” Notice

- Published as a TSX Staff Notice on November 7, 2013
- Pertains to Subsection 314(b) of the OLR for Mineral Exploration & Development-Stage Companies
- For project located in remote or isolated area not readily accessible either by road, railway or port, infrastructure is important factor to determine if project qualifies as an “Advanced Property” and determining "economically interesting grades"
- Infrastructure is key for commodities shipped in bulk such as coal, iron ore, all base and precious metal concentrates, and industrial minerals such as sand and gravel, limestone, commercial clay, and gypsum ("Bulk Commodities")
- For Bulk Commodities, proper infrastructure such as roads, railways and ports are required to deliver large amounts of materials to the market
- Bulk Commodity projects in remote or isolated locations that are not readily or easily accessible by existing roads, railway or port should have plan to develop or obtain access to the required infrastructure with a cost estimate, and plan must not be unreasonable

“Economically Interesting Grades” Notice

TSX will assess the reasonableness of the plan, taking into consideration:

1. Whether infrastructure has been built over similar terrain and circumstances in the past and the cost associated with building such infrastructure,
2. Whether the infrastructure will be unconventional, such as a barge canal or a slurry pipeline that brings concentrate from mines to smelters downhill, and
3. The assumptions in respect of the funding of the infrastructure, specifically whether the applicant will fund the infrastructure or rely on third parties to fund or develop the infrastructure.
 - TSX does not require that the applicant have the necessary funds on hand to develop the infrastructure as a condition of listing
 - Infrastructure is not a material consideration for commodities produced on-site in relatively small quantities, which have a high value relative to their weight, and can be transported to market by air, even if project is in remote area (i.e. gold and diamonds)
 - Example: Infrastructure issues considered for “Ring of Fire” projects

Useful Contacts



IIROC – Market Surveillance

TSX issuers filing news releases:

- TSX SecureFile (preferred option)
- Tel: (416) 646-7220
- Fax: (416) 646-7263

TSX Venture issuers filing news releases:

- Tel: (604) 643-2792
- Fax: (604) 643-2799
- Email: prwest@iiroc.ca

TSX Venture Exchange (TSXV)

Compliance and Disclosure:

- Tel: (604) 488-3124
- Fax: (604) 688-6051
- Email: complianceanddisclosure@tsxventure.com

Toronto Stock Exchange (TSX)

Compliance and Disclosure:

- Tel: (416) 947-4767
- Fax: (416) 947-4547
- Toll Free: 1-888-873-8392
- E-mail: disclosure@tsx.com

Mining-Related Disclosure and Listing Requirements:

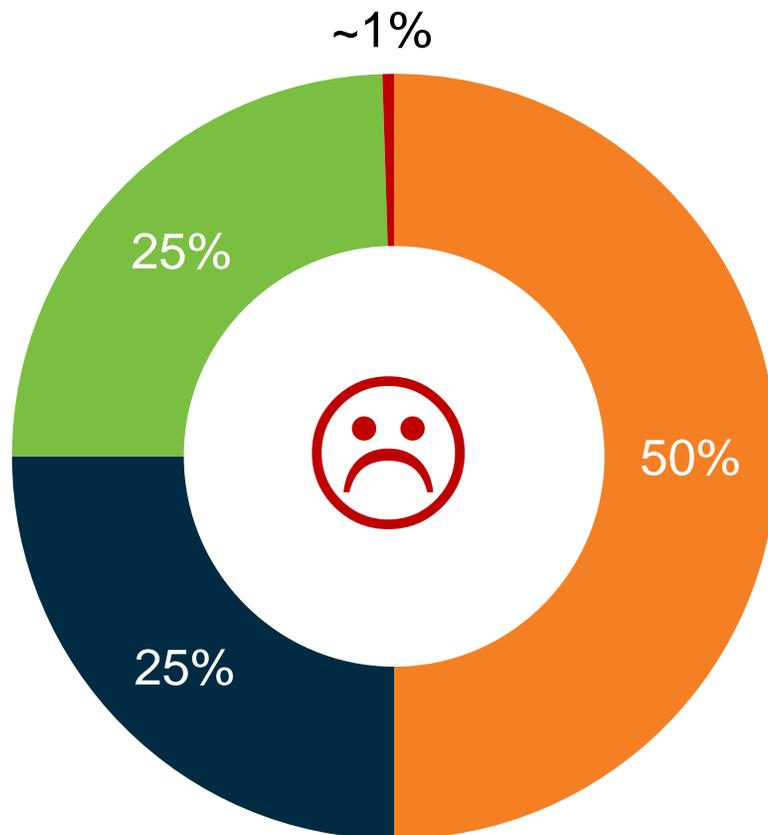
- Tel: (416) 947-4447
- Fax: (416) 947-4547
- E-mail: paul.teniere@tsx.com



NI 43-101

Disclosure Pitfalls & Practical Guidance

General observations from a regulator



Possible reasons why some companies have disclosure problems

- Not "understanding" the rules
- Not "following" the rules
- Not using industry best practice
- Fraud

How to improve your compliance

C
REGULATIONS
M
COMPANION POLICIES
L
STAFF NOTICES
A
CIM STANDARDS
C
CIM BEST PRACTICES

Disclosure problems and pitfalls

- ☹ Exploration target
- ☹ Mineral resource
- ☹ PEA
- ☹ PEA after reporting mineral reserves
- ☹ Production decision without reserves



Exploration Target

What is an exploration target?

- Statement of the exploration potential of mineralization in a defined geological setting
- Relates to mineralization with insufficient exploration to estimate a mineral resource
- Must be a basis for determining the target such as:
 - Exploration results
 - Historical estimate
 - Foreign estimate (non-CRIRSCO)
- Further exploration should be able to test the validity of the exploration target

Disclosing an exploration target

s. 2.3(2)

- May disclose the potential tonnes and grade, expressed as ranges, of a target for further exploration only if the disclosure states with equal prominence:
 - Potential quantity and grade is conceptual in nature
 - Insufficient exploration to define a mineral resource
 - Uncertain if a mineral resource estimate will be delineated
- Basis on which exploration target has been determined
- Exploration target disclosure checklist:
 - Range of tonnes & grade
 - Cautionary statement – next to the disclosed target ranges
 - Reasonable basis for target ranges

Example: exploration target

"Previous exploration, including over 12,000 historic drill holes, has been used to outline an exploration target of 550,000 to 650,000 oz Au contained within 1.2 to 1.6 Mt grading 10 to 15 g/t Au. The potential tonnages and grades are conceptual in nature and are based on previous drill results that defined the approximate length, thickness, depth and grade of the portion of the historic resource estimate. There has been insufficient exploration to define a current resource and the Company cautions that there is a risk further exploration will not result in the delineation of a current mineral resource."

Exploration target – Pitfalls

- ✘ Not providing ranges of tonnes and grade and lack of cautionary language
- ✘ Reporting an unrealistic and untestable exploration target
- ✘ Extrapolating resource grades into unsampled areas
- ✘ Creating a block model with a cut-off grade, but not disclosing it as a resource estimate
- ✘ Using an exploration target as a proxy for a resource or reserve estimate (and making a production decision)
- ✘ Disclosing an economic analysis on an exploration target



Mineral Resource

Definition of a mineral resource

- Remember 2014 revised CIM Definition Standards
 - Form, grade and quantity is such that it has ***reasonable prospects for eventual economic extraction***
- Remember 2014 revised CIM guidance
 1. Clearly state the **basis** for determining “reasonable prospects”
 2. The **assumptions** used for the **basis** should include:
 - cut-off grade and geological continuity at the selected cut-off
 - metallurgical recovery, smelter payments
 - commodity price
 - mining and processing method
 - mining, processing and general and administrative costs



“Must nots unless” about disclosing estimates

s. 2.2

- Must not disclose any information about a mineral resource or mineral reserve unless the disclosure
 - Uses only the five CIM categories (measured resource, proven reserve, etc.)
 - Reports each category separately
 - States whether resources include or exclude reserves
 - Does not add inferred resources to other categories
 - States the tonnes and grade for each category if the quantity of contained metal is disclosed

Disclosing mineral resources and reserves

s. 3.4

- When disclosing mineral resources and mineral reserves include:
 - Effective date of each estimate
 - Quantity and grade of each CIM category
 - Key assumptions, parameters, and methods used
 - Any known risks that could materially affect potential development
 - Statement that "*mineral resources that are not mineral reserves and do not have demonstrated economic viability*" if results of an economic analysis of mineral resources is disclosed (such as in a PEA)

- *Tonnes & grade figures are not precise calculations and should be referred to as "estimates"*
- *Rounding to the 2nd significant figure should be sufficient (JORC clause 25)*
 - *Example: 10,863,000 tonnes at 8.23% should be stated as 11 million tonnes at 8.2%*

Examples: Assumptions, parameters & methods

- Assumptions
 - Cut-off grade and basis for determination
 - Mining and processing method and the metallurgical recovery
 - Metal prices
 - Costs related to mining, processing, and G&A
- Parameters
 - Appropriate geological model for the deposit type
 - Cutting factors and specific gravity
 - Search distances and minimum samples per block
 - Interpolation distances and directions
- Methods
 - Polygonal, cross-sectional, etc.
 - Geostatistical

Information provided answers the question: How were "reasonable prospects of eventual economic extraction" determined?

Example: Reasonable prospects assumptions

Assessing Reasonable Prospects for Eventual Economic Extraction

To assess reasonable prospects for eventual economic extraction, an optimized pit shell was prepared using general technical and economic assumptions listed below to constrain the estimated resource blocks.

Technical and economic parameters for assessing reasonable prospects:

<i>Gold Price</i>	<i>US\$1200/oz</i>
<i>Silver Price</i>	<i>US\$18/oz</i>
<i>Gold Recovery</i>	<i>85%</i>
<i>Silver Recovery</i>	<i>45%</i>
<i>Exchange Rate</i>	<i>US\$:C\$: 1 to 0.85</i>
<i>Mining Cost</i>	<i>\$1.50/tonne</i>
<i>Processing Cost</i>	<i>\$7.25/tonne</i>
<i>G&A Cost</i>	<i>\$1.05/tonne</i>
<i>Pit Slope</i>	<i>45 degrees</i>

What is a reasonable metal price?

- CIM guidance on metal price assumptions
 - Consider the stage of development (resource vs. reserve vs. production)
 - Long term average
 - Industry/peer consensus
 - Margin over world cash cost curve
 - Contract price

- Commonly used standard
 - Lesser of the 3-year trailing average or current spot price



Open pit vs underground mineral resources (Observed practice)

- Open pit

- Pit shell is used to constrain and support the mineral resources that are potentially excavated by open pit methods

"All classified resource blocks located between the surface and the Whittle open pit shell with grades greater than 0.5 g/t Au were included in the reported open pit mineral resources"

- Underground

- Mineralization located below the pit shell, but within the coherent wireframe model, are used to constrain and support the mineral resources that are potentially excavated using underground methods

"For the potential underground material, a 2.0 g/t Au cut-off grade was used in the reported underground mineral resources"

Example: Open pit & underground resource

TABLE 14-17 MINERAL RESOURCE ESTIMATE – AUGUST 1, 2013
Marathon Gold Corp. - Valentine Lake Project

Category	Open Pit <u>(0.50 g/t Au cut-off)</u>			Underground <u>(2.0 g/t Au cut-off)</u>			Total		
	Tonnes	Grade	Gold	Tonnes	Grade	Gold	Tonnes	Grade	Gold
	(kt)	(g/t Au)	(koz)	(kt)	(g/t Au)	(koz)	(kt)	(g/t Au)	(koz)
Measured	3,523	2.18	247	108	4.83	17	3,631	2.26	263
Indicated	6,193	2.07	412	764	4.05	100	6,957	2.29	511
Leprechaun Gold Deposit									
Total Measured + Indicated	9,716	2.11	658	872	4.15	116	10,588	2.28	775
Inferred	1,207	1.82	71	349	6.13	69	1,555	2.79	139

Notes:

1. CIM Definition Standards were followed for mineral resources.
2. Open pit Mineral Resources are reported at a cut-off grade of 0.5 g/t Au for Leprechaun deposit and 0.6 g/t Au for Victory Gold deposit. Pit optimizations were used to constrain the resources.
3. Underground Mineral Resources are estimated at a cut-off grade of 2.0 g/t Au, beneath the open pit constraint and inside the high grade wireframe vein models
4. Mineral resources are estimated using an average long-term forecast, gold price of US\$1,350 per ounce and an exchange rate of US\$:C\$ of 1:1.
5. Totals may not add correctly due to rounding.

CIM estimation best practice guidelines

- CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2003-2012)

- Potash
- Industrial minerals
- Coal
- Uranium
- Laterites
- Placers
- Rock-hosted diamonds
- Mineral brines



What does NI 43-101 say about using best practices?

- General Guidance (6) of Companion Policy 43-101CP
 - QP is not specifically required to follow the CIM best practices guidelines
 - However, a QP acting as a “professional”, will generally respect industry standard practices, as established by CIM or similar organizations in other jurisdictions
 - Companies that disclose technical information not conforming to industry standard practices could be making misleading disclosure

Note:

- *Regulators may challenge a company’s disclosure if it appears to deviate from published industry best practices*

Example – Not using CIM best practices



June 07, 2012 21:04 ET

Strathmore Retracts Resource Estimate and Scoping Study for Church Rock Property

"... authors were not able to adequately verify the historical data through chemical assays or other means as required under the CIM Best Practices

... the mineral resource estimate and the results of the scoping study, as stated in these technical reports, have been retracted"

Investors should not rely on the resource estimate or economic information regarding the property"

Estimating mineral resources – Pitfalls

- ☠ Ignoring key geological controls
- ☠ Smearing grades into barren units
- ☠ Excluding unsampled intervals from composites
- ☠ Using unreasonable grade-capping levels
- ☠ Using inappropriate cut-off grades (metal prices)
- ☠ Not validating sectional interpretations in plan
- ☠ Not having your work peer reviewed

Example: Ignoring key geological controls

- **Aurcana Corp.** (December 12, 2013)
 - Previous model supporting the mineral resource estimate was inconsistent in predicting the tons and grade during mining
 - Updated geological model resulted in a significant reduction in the mineral resource estimate
 - A significant portion of the reduction was attributed to incorporating the geological and structural controls which were absent in the prior mineral resource estimate

- **Aurcana Corp.** (December 19, 2013)
 - Project placed on care and maintenance



Preliminary Economic Assessment (PEA)

Definition of a PEA

s. 1.1

- “preliminary economic assessment”
 - Means a study, other than a pre-feasibility or feasibility study, that includes an economic analysis of the potential viability of mineral resources

- s. 1.1(4) of Companion Policy 43-101CP
 - Term “preliminary economic assessment” can include a study commonly referred to as a scoping study
 - PEA might be based on measured, indicated, or inferred mineral resources, or a combination of any of these

Types of technical and economic studies

Criteria	Technical & Economic Studies		
Study	Preliminary Economic Assessment (PEA)	Prefeasibility Study (PFS)	Feasibility Study (FS)
Concept	"What it <u>could</u> be"	"What it <u>should</u> be"	"What it <u>will</u> be"
Objective	Early stage conceptual assessment of the <u>potential economic viability</u> of mineral resources	Realistic economic and engineering studies sufficient to <u>demonstrate economic viability</u> and establish mineral reserves	Detailed study of how the mine will be built, used as the basis for a <u>production decision</u>
Cost Accuracy	+/- 50%	+/- 25%	+/- 15%
Engineering	<1%	1-5%	5-25%
Mineral Estimate Inputs	Inferred/Indicated/Measured Resources	Indicated & Measured Resources	
Mineral Estimate Outputs	Inferred/Indicated/Measured Resources	Probable & Proven Reserves	

Caution: Generalized for presentation purposes

Disclosing a PEA

s. 2.3(3)

- May disclose the results of a PEA that includes inferred resources if the disclosure states with equal prominence:

- PEA is preliminary in nature
- Includes inferred resources that are too speculative geologically to have the economic considerations applied to them
- No certainty that the PEA will be realized

Also:

- States the basis and assumptions for the PEA
- Describes the impact of the PEA on any previous pre-feasibility or feasibility study

Appropriate uses of a PEA

- ✓ Road map for planning and strategic decision making
- ✓ Assessing project risks and opportunities
- ✓ Public disclosure to raise capital and advance the project
- ✓ Preparing for a pre-feasibility study

Problems with a PEA – Pitfalls

- ✘ Underestimates the cost and complexities of the project
- ✘ Overly optimistic metal price assumptions
- ✘ Uses “economy of scale” to overcome low grade deposits
- ✘ Over reliance on converting inferred resources to indicated resources
- ✘ Permitting process may restrict changes to mine design
- ✘ Reporting only pre-tax economic outcomes
- ✘ Making a production decision

CSA Staff Notice 43-307 on PEAs (Aug 16, 2012)



Canadian Securities
Administrators

Autorités canadiennes
en valeurs mobilières

CSA Staff Notice 43-307

Mining Technical Reports - Preliminary Economic Assessments

- Provides PEA guidance in seven areas:
 - Misuse of a PEA as a proxy for a PFS
 - PEAs done in conjunction with a PFS or a FS
 - PEA disclosure and technical report triggers
 - Potentially misleading PEA results
 - PEA disclosure that includes by-products
 - Relevant experience of QPs
 - Consequences of disclosure deficiencies or errors

Article: "CSA Staff Notice 43-307 provides important guidance on disclosure of PEAs"
G. Gosson, Nov 2012, CIM Magazine

PEA used as a proxy for a PFS

- Company may be treating a PEA as a PFS if it does any of the following:
 - Blurs the boundary between a PEA and a PFS and the treatment of inferred resources
 - Does not include the required proximate cautionary statements (s. 3.4(e))
 - Discloses “mineable” resources or uses the term “ore”, which are essentially treating resources as reserves
 - States or implies that the PEA demonstrates economic or technical viability
 - Uses the PEA as a basis to justify going directly to a FS or a production decision

PEA prepared in conjunction with a PFS or FS

- An early stage economic study done concurrently, as part of, or immediately after a PFS or FS is not a PEA if it:
 - Incorporates inferred resources into the PFS or FS
 - Updates, adds to, or modifies, a PFS or FS to include more optimistic assumptions
 - Is used as a way to avoid the restriction on including inferred resources in the production schedules or financial analysis in a PFS or FS
 - Is a PFS or FS in all respects except name

PEAs and technical report triggers

- Disclosing potential economic outcomes on the company's website, investor presentation, fact sheet, or any posted or linked third party documents may trigger a technical report to support the economic outcomes
- Examples of triggering disclosure:
 - Production rate
 - Mine life
 - Capital or operating costs
 - Revenue
 - Cash flow
 - NPV or IRR

PEAs and other disclosure problems

- Inappropriate assumptions
 - Overly optimistic or aggressive assumptions may result in misleading disclosure
 - Assumptions must have a “reasonable basis”
- By-product disclosure
 - By-product metals used in projected cash flows must be part of the resource estimate
- Relevant QP experience
 - QP taking responsibility for PEA disclosure must have relevant experience in the subject matter
 - Regulators may challenge the QP to explain or justify their relevant experience or require additions QPs to prepare the technical report

Example: Consequences of not getting it right

Osler, Hoskin & Harcourt LLP

Update March 27, 2012
page 1

Failed Public Financings in the Mining Sector – Use of Economic Analysis and Confusion Around Preliminary Economic Assessments

Orbite Files Revised Preliminary Economic Assessment Technical Report (PEA) Confirming Economic Results



Press Release: Orbite Aluminae Inc. – Thu, 31 May, 2012 9:08 AM EDT

Banks Island Gold Ltd. Clarifies Technical Disclosure



Press Release: Banks Island Gold Ltd. – Wed, Feb 6, 2013 6:41 PM EST



September 10, 2012 16:02 ET

Focus Clarifies Disclosure on its Lac Knife Project

True Gold Mining Inc.: Clarification of Technical Disclosure



Wed, Mar 20, 2013 4:04 PM EDT

PRESS RELEASE
March 28, 2013, 8:01 p.m. EDT

Timberline Clarifies Technical Disclosures for Canadian NI 43-101 Compliance

PRESS RELEASE
July 18, 2013, 9:06 a.m. EDT

Tahoe to Clarify PEA Disclosure



PEA after reporting mineral reserves

What is allowable?

PEA after reserves – What is allowable?

1. Companies may take a **step backwards**

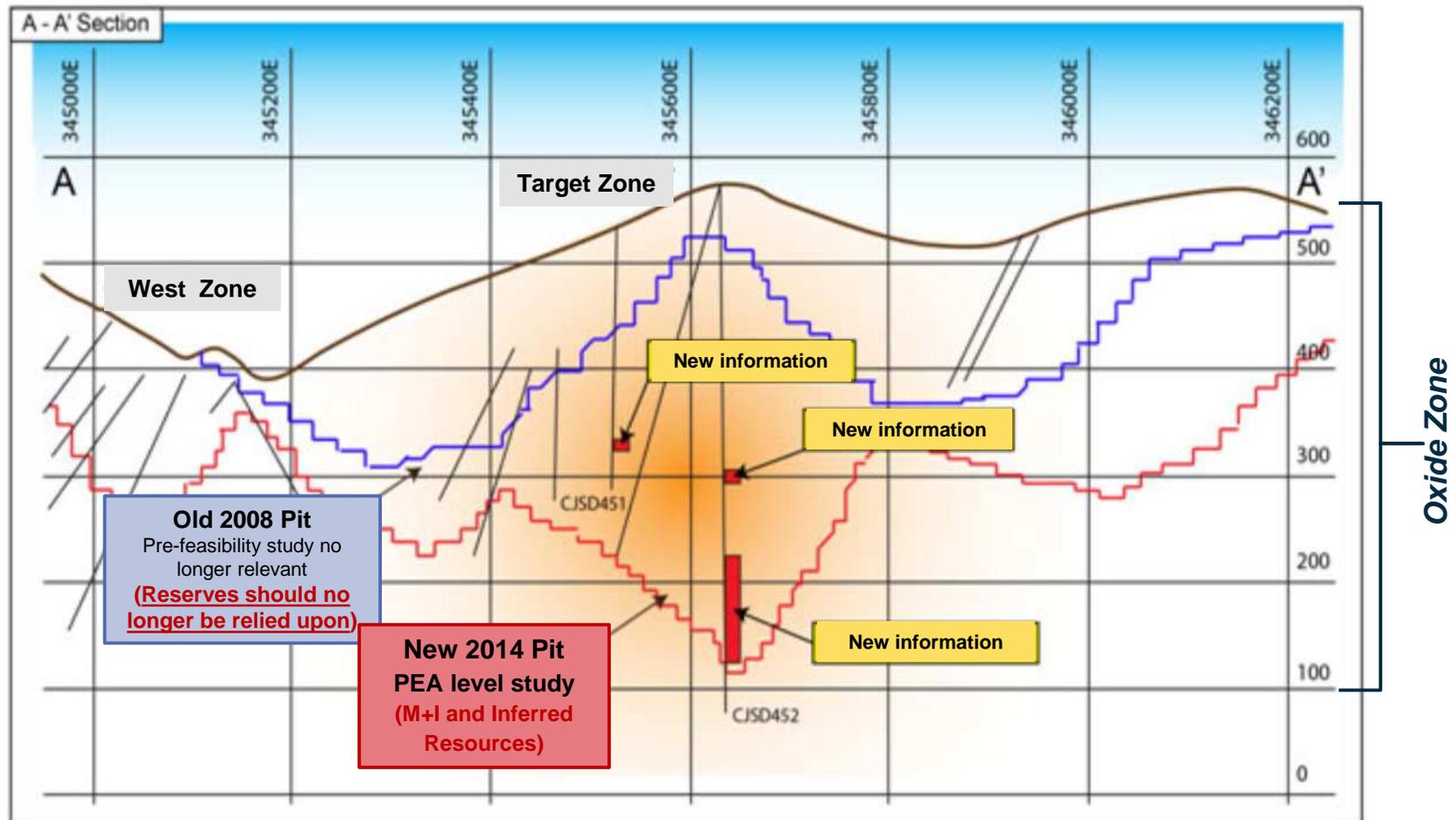
- Reserves are no longer relevant – entire project moves back to a PEA stage
 - May be due to new property ownership, new information, etc.
 - All references to mineral reserves are removed from the disclosure

2. Companies may consider **re-scoping** an existing project

- Based on significant new information or a different production scenario
 - Significant new discovery or deposit type on the same property
 - Significantly different mining or processing methods
 - Changes to infrastructure requiring significant capital investment

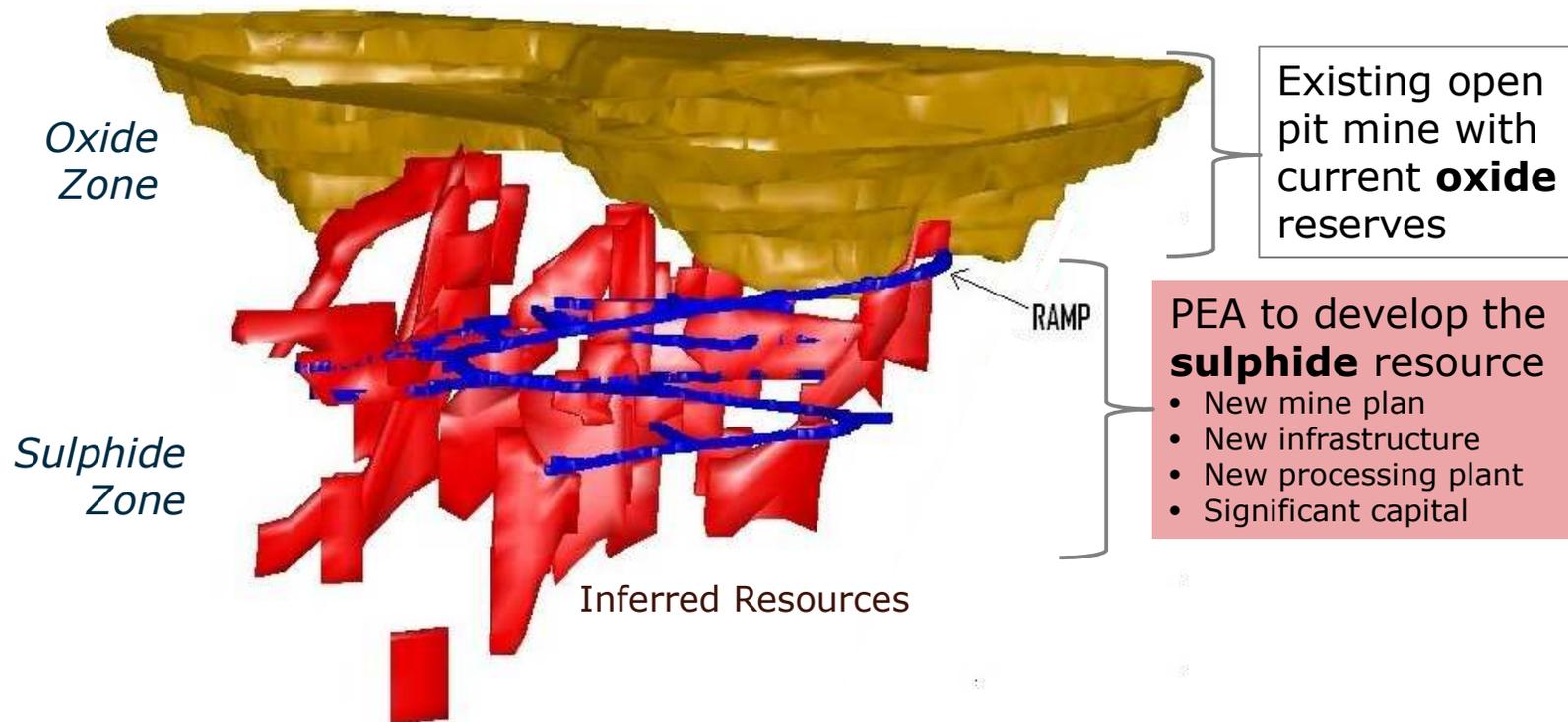
- *Technical report includes both the existing project and the PEA information*
- *Put the PEA discussion in Item 24: Other Relevant Data and Information*

Example 1. Company takes a **step backwards**



NOTE: example only

Example 2. Company **re-scopes** existing project



Article: "CSA Staff Notice 43-307 provides important guidance on disclosure of PEAs"
G. Gosson, Nov 2012, CIM Magazine

NOTE: example only



Production decision without reserves

Production decision without reserves – Risky?

- Production decision: (s. 4.2(6) of Companion Policy 43-101CP)
 - Doesn't trigger a technical report to support the decision
 - Is the responsibility of the company and its management and board
 - Is typically based on at least a prefeasibility study establishing mineral reserves which reduces the risk of economic and technical failure
 - Without disclosing the added risks, the company may be misleading investors
- Quarterly MD&A
 - Disclose the production decision and state that there's no technical report supporting it

How do you avoid making misleading disclosure?

- Clearly state the risks:
 - *Production decision is not based on demonstrated economic viability*
 - *Such projects have a much higher risk of economic or technical failure*
 - *Project failure may adversely impact the company's future profitability*

Example: Clarification about production decision based on a PEA

- Risks** { *"The Company advises that it has not based its production decision on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit."*
- Impact of risks** { *Historically, such projects have a much higher risk of economic and technical failure. There is no guarantee that production will begin as anticipated or at all or that anticipated production costs will be achieved.*
- Failure to commence production would have a material adverse impact on the Company's ability to generate revenue and cash flow to fund operations. Failure to achieve the anticipated production costs would have a material adverse impact on the Company's cash flow and future profitability."*
- PEA caution** { *The Company further cautions that the PEA is preliminary in nature. No mining study has been completed. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that the PEA will be realized."*



Website Disclosure

*If you disclose it – physically or electronically –
you must ensure it complies with NI 43-101*

Remember: "written disclosure" captures it all

KINROSS
TSX: K NYSE: KGC

News Release

Kinross reports results of pre-feasibility study on Tasiast expansion
 Company proceeding to feasibility study for 38,000 tonnes per day mill

This news release contains forward-looking information subject to the risks and assumptions set out in our Cautionary Statement on Forward-Looking Information located on page three of this release or other portions of the release and is not intended to constitute an offer.

Toronto, Ontario, April 29, 2013 – Kinross Gold Corporation (TSX: K, NYSE: KGC) today announced the results of its pre-feasibility study (PFS) for its Tasiast expansion project. Based on these results, the Company has decided to proceed with a feasibility study on an expanded Tasiast operation with a 38,000 tonnes per day (tpd) mill.

The PFS was based on constructing a new 30,000 tonne tpd mill at Tasiast utilizing heavy fuel oil as an energy source. It assumed a \$1,500 per ounce gold price for overall project economics and, consistent with the Company's year-end mineral reserves estimates, a \$1,200 per ounce gold price for pit design purposes. The PFS estimates are based on a pit design mineral resource estimate of approximately 10 million recovered gold ounces, which does not include additional known resources estimated using a gold price assumption above \$1,200 per ounce. In addition, the PFS estimates do not include potential district exploration upside.

The study found that during the first five years of production, a 30,000 tpd mill would be expected to have average gold production of approximately 630,000 ounces per year, with average cash costs of approximately \$500 per ounce, and average all-in sustaining costs¹ of approximately \$735 per ounce. The expected initial capital cost would be approximately \$2.7 billion². The PFS indicated an estimated IRR for the project of approximately 11% and an estimated NPV of approximately \$1.1 billion.

In addition, the PFS incorporated trade-off studies which considered utilizing the existing 8,000 tpd mill capacity at Tasiast in addition to a new 30,000 tpd mill. These studies concluded that a single new 38,000 tpd mill would be expected to provide the optimum economics for an expanded project. Therefore, based on these results, the Company is proceeding to a full feasibility study (FFS) on an expanded Tasiast operation with a 38,000 tpd mill. The FFS work process will begin immediately, and is now scheduled for expected completion in the first quarter of 2014. Following completion of the FFS, the Company will make a decision on whether to complete engineering and proceed with construction. The decision will depend on a range of factors, including gold price assumptions and projections, expected economic returns, and various technical and other considerations.

"Although there is considerable work to be done at the feasibility study level before we decide whether to proceed with construction, the results of the PFS are encouraging," said CEO J. Paul Robinson. "As we continue to evaluate the project, we remain firmly focused on preserving the strength of our balance sheet."

The FFS will assess construction of a standard carbon-in-leach (CIL) circuit with a primary crusher and SAG mill, in addition to the existing dump leach facilities. The FFS will assume an open-pit mining sequence based on developing a series of pushbacks that would allow the mine to encounter expected higher grade ore early in the mine life. A variable cut-off grade strategy is expected to be applied to bring gold production forward and stockpile lower-grade material for processing later in the mine life.

¹ Cash costs include operating costs and royalties.
² After factoring in debt reduction operating costs, royalties, sustaining capital, and capitalized stripping, and does not include any allocation of financial or corporate overhead costs.
³ Includes estimated capital expenditures from April 1, 2013 forward, and a contingency of \$200 million.

www.kinross.com

North American Palladium Ltd.

HOME ABOUT MAP INVESTORS OPERATIONS EXPLORATION PALLADIUM CAREERS CONTACT US

North American Palladium's vision is to become a low cost, mid-tier precious metals company operating in newly friendly jurisdictions. NAMP is an established producer of palladium that has been operating in Russia for over 30 years (2003 transfer to Canada). Canada since 2003, is one of only two primary producers of palladium in the world, and is currently undergoing a major expansion to increase production and reduce cash costs per ounce. NAMP also operates the Taseco gold mine located in the Athabasca region of Quebec. NAMP's experienced management and technical teams have a significant commitment to exploration and are dedicated to building shareholder value.

EVENTS & PRESENTATIONS >

- **WEBCAST**
 Fourth Quarter 2012 Results Conference Call and Virtual Investor Meeting
- **CONFERENCE**
 CIBC 30th Annual Investor Meeting - Virtual Investor Conference (October 22-23, 2012)
- **VIDEO CLIP**
 18 Weeks After an L14 (January 12, 2012)

NEWS >

- February 6, 2013
 North American Palladium to Host Year End 2012 Results Conference Call and Webcast on February 22
- January 31, 2013
 North American Palladium Reports Expanded Exploration Results from the January Half of 2013 Drilling at Lac Des Iles
- January 22, 2013
 North American Palladium Appoints Chief Financial Officer

LOI MINE EXPANSION PROGRESS

 Track the mine expansion progress >

EXCITING CAREER OPPORTUNITIES

 Build a rewarding career with a growing company >



NI 43-101 Technical Report Mineral Resources of the North Creek Gold Deposit Birchbelt District, Ontario

Prepared for:
Vector Venture Resources Inc.
 Toronto, ON MSJ 2L9

Prepared by:
North American Mining Associates
 Toronto, Ontario

Qualified Persons:
 John Smith, P.Eng
 Kathy Allen, P. Geo.

Effective Date: July 1, 2011
 Report Date: August 15, 2011

Written Disclosure

Follow Us On

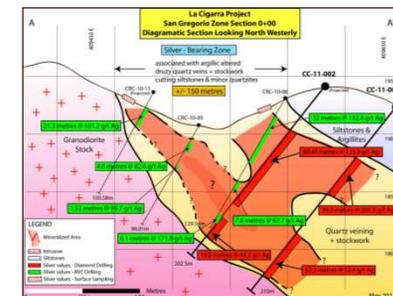
 
 Facebook YouTube

  
 Twitter Flickr RSS

BlueSky Resources Inc.



Corporate Presentation January 2013



Website disclosure

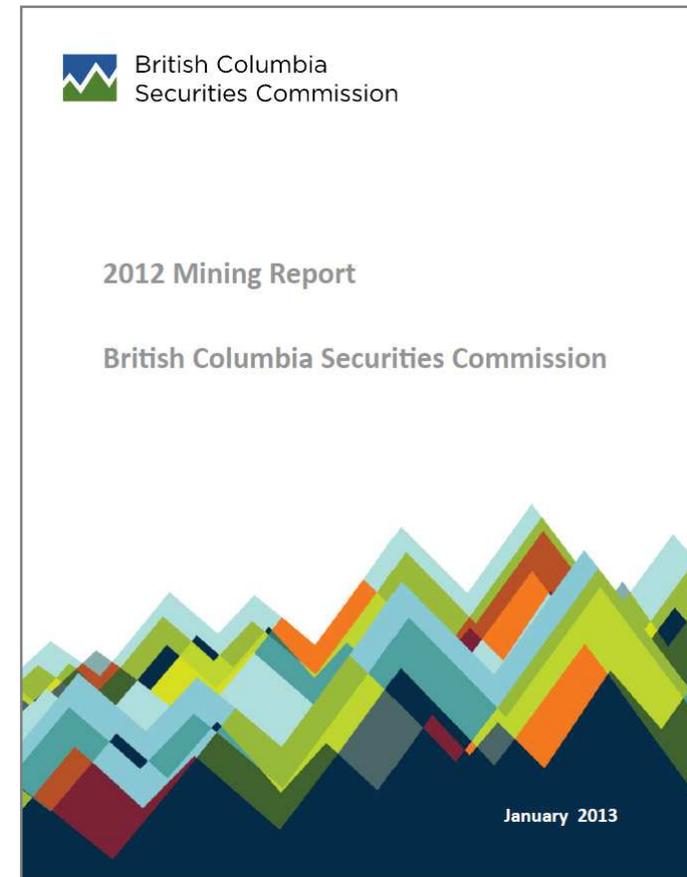
- Investor relations materials
 - Provides a powerful tool for companies to communicate with investors
 - Investor presentations
 - Fact sheets
 - Media articles
 - Links to third party content
- General observation
 - Website disclosure, and other types of voluntary disclosure, are often less likely to comply with disclosure rules compared to regulatory filings

*Article: "Electronic disclosure and regulatory compliance"
C. Waldie, Mar/Apr 2011, CIM Magazine*

BCSC 2012 Mining Report

Overall compliance

- **65%** Required Filings
 - (News releases, MD&A, AIF, technical reports)
- **50%** Voluntary Disclosure
 - (Websites, presentations, linked analyst reports)



BC-based mining companies
Approx. 120 reviews (2009 to 2012)

Website disclosure - Pitfalls

- PEs
 - Lack of information about taxes
 - Missing cautionary language about the use of inferred resources
- Mineral resources and mineral reserves
 - No information about metal price assumptions and cut-off grades
 - Unclear if mineral resources include or exclude mineral reserves
- Exploration targets
 - Failing to express the target as a range of tonnes and grade
 - Missing cautionary language
- Historical estimates
 - Lack of information about the source and date of the historical estimate
 - Missing cautionary language
- Naming the QP
 - QP needs to be named and their relationship to the company

Tip – Make use of section 3.5 of NI 43-101

Exception for Written Disclosure Already Filed

- *Include in the written disclosure a reference to the title and date of a document previously filed by the company that includes the required information*
- **Note** – only applies to the following disclosure:
 - s. 3.2 – Data Verification
 - s. 3.3 – Exploration Information
 - **ONLY** some parts of s. 3.4 – Mineral Resources and Mineral Reserves
 - Effective date
 - Key assumptions (ex. cut-off grade, metal price, etc.)
 - Known risks (legal, political, environmental, other)

Review of investor presentations (OSC, BCSC, AMF)

- Review of 130 investor presentations looking at:
 - NI 43-101 disclosure
 - Forward-looking information
 - Balanced information
 - Not overly promotional
 - Preliminary findings:
 - 75% Substantial compliance to minor non-compliance
 - 25% Major non-compliance
 - Important observation:
 - Investor presentations reviewed by a QP* were significantly more compliant
- *Presentations where the QP was named (54 of 130)

CSA Staff Notice 43-309 - Review of Website Investor Presentations by Mining Issuers is expected to be published in early April, 2015



Comparison of NI 43-101 & JORC

Main differences – General

Criteria	NI 43-101	JORC*
Legal Status	<ul style="list-style-type: none"> Force of law <ul style="list-style-type: none"> Allows dual-listed companies (Canada/USA) to report resources with the SEC 	<ul style="list-style-type: none"> No force of law <ul style="list-style-type: none"> Contract between the ASX and listed companies
Application	<ul style="list-style-type: none"> Covers both public and private mining companies making disclosure in Canada <ul style="list-style-type: none"> ~1600 mining companies 	<ul style="list-style-type: none"> Covers public mining companies listed on the ASX <ul style="list-style-type: none"> ~700 mining companies
Technical Report	<ul style="list-style-type: none"> Requirement to publicly file a technical report, when triggered, to support certain technical disclosure 	<ul style="list-style-type: none"> No requirement (limited cases) Certain technical disclosure must be supported by completing Table 1 as an appendix to a public report
Technical Staff	<ul style="list-style-type: none"> 12 P.Geo. & P.Eng. reviewers <ul style="list-style-type: none"> 7 – BCSC, OSC, AMF 5 – TSX/TSX-V/IIROC 	<ul style="list-style-type: none"> 1 Geo. reviewer <ul style="list-style-type: none"> 1 – ASIC 0 – ASX

*Based on our understanding of JORC and ASX requirements

Main differences – QP and CP

Criteria	NI 43-101	JORC*
QP/CP Experience	<ul style="list-style-type: none"> • At least five years' industry experience relevant to their degree, and • Experience relevant to the particular situation 	<ul style="list-style-type: none"> • At least five years' experience relevant to the style of deposit and activity being undertaken
QP/CP Independence	<ul style="list-style-type: none"> • Independence required in some circumstances for technical reports 	<ul style="list-style-type: none"> • No independence requirement <ul style="list-style-type: none"> • <30% of ASX estimates are independent (Mining Journal July 24, 2014)
QP/CP Responsibility	<ul style="list-style-type: none"> • Extensive and wide-ranging • All technical information: <ul style="list-style-type: none"> • Exploration results • Mineral resources • Mineral reserves • PEA, PFS, FS • Capital and operating costs, economic analysis, etc. • Site visit for a technical report 	<ul style="list-style-type: none"> • Limited in scope • Only information related to: <ul style="list-style-type: none"> • Exploration results • Mineral resources • Mineral reserves • No site visit requirement

*Based on our understanding of JORC and ASX requirements

Main differences – Targets, estimates & economics

Criteria	NI 43-101	JORC (and ASX)*
Exploration Target	<ul style="list-style-type: none"> Not defined, but the term exploration target is preferred (s. 2.3(2)) Must not be part of an economic analysis (i.e. PEA) or production forecast 	<ul style="list-style-type: none"> Defined term May be used in a scoping study (JORC Clause 38) <ul style="list-style-type: none"> May be used in production targets and forecasted financial information if it is not the determining factor (ASX 5.16)
Inferred Resource	<ul style="list-style-type: none"> Must not be used in economic analysis except in a PEA 	<ul style="list-style-type: none"> May be used in a scoping study if combined with indicated and measured resources (ASX 5.16)
Totaling Resource Categories	<ul style="list-style-type: none"> Inferred resources must not be totalled with other resources 	<ul style="list-style-type: none"> Inferred resources may be totalled with other resources
Conceptual Economic Study	<ul style="list-style-type: none"> Preliminary Economic Assessment (PEA) 	<ul style="list-style-type: none"> Scoping study

*Based on our understanding of JORC and ASX requirements

Main differences – Targets, estimates & economics

Criteria	NI 43-101	JORC (and ASX)*
Pre-Feasibility Study	<ul style="list-style-type: none"> Must only use indicated and measured resources (no inferred resources) 	<ul style="list-style-type: none"> May include inferred resources and exploration targets, if relevant proportions are disclosed (ASX 5.16)
Production Target Example: <ul style="list-style-type: none"> "Produce 1.1Moz gold providing an NPV of \$525M" 	<ul style="list-style-type: none"> Must be supported by a technical report including at least a PEA based on mineral resources Signed-off by a QP 	<ul style="list-style-type: none"> May include exploration targets and inferred resources (requires some indicated resources) No CP sign-off required (determined by the company)
Aspirational Statements Example: <ul style="list-style-type: none"> "X aims to be a 500,000 oz gold producer within 3 years" 	<ul style="list-style-type: none"> May be misleading, depending upon the company's situation May require a clarifying or retracting press release May trigger a technical report to support the statement 	<ul style="list-style-type: none"> May be misleading, depending upon the company's situation

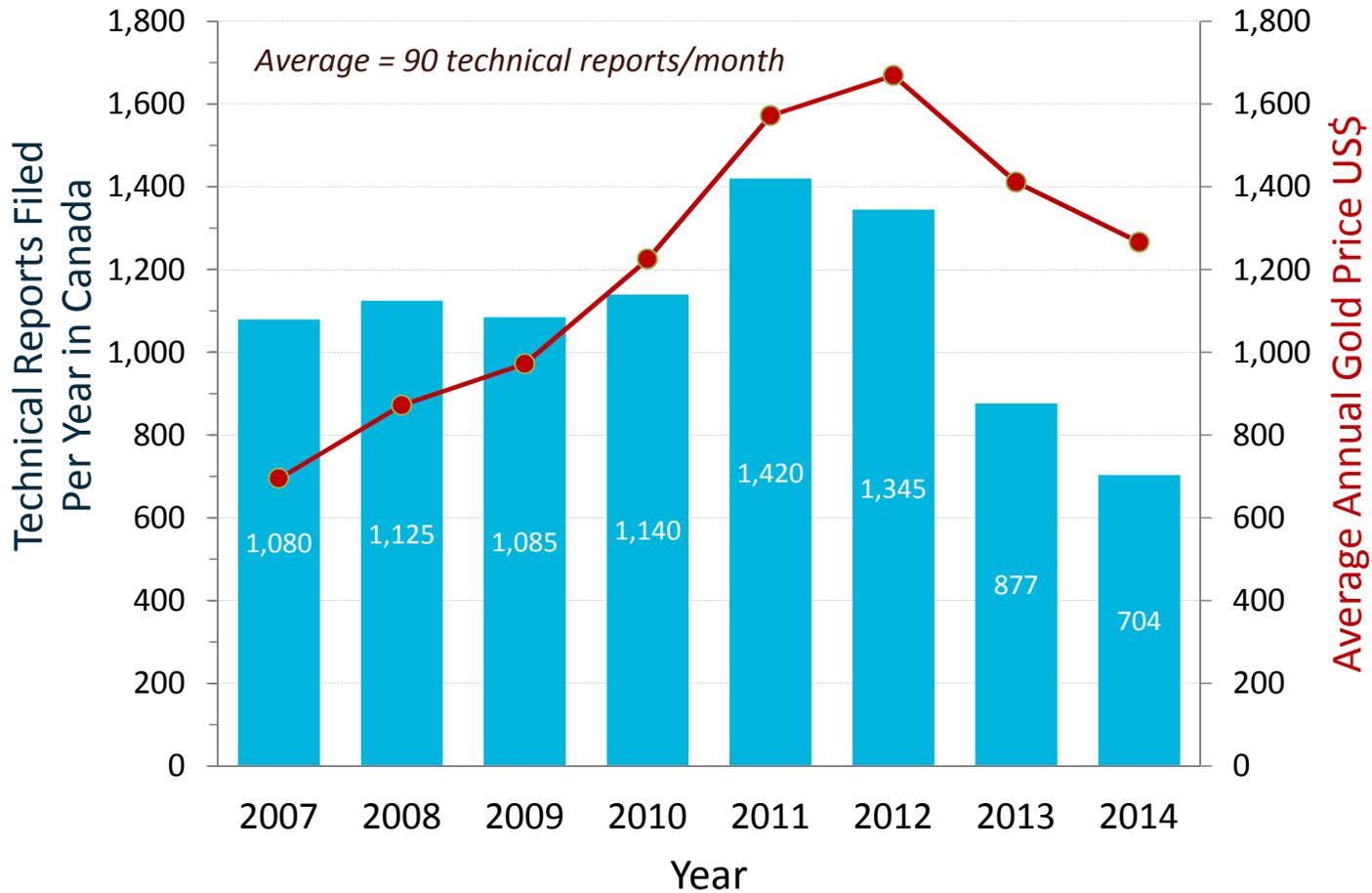
*Based on our understanding of JORC and ASX requirements



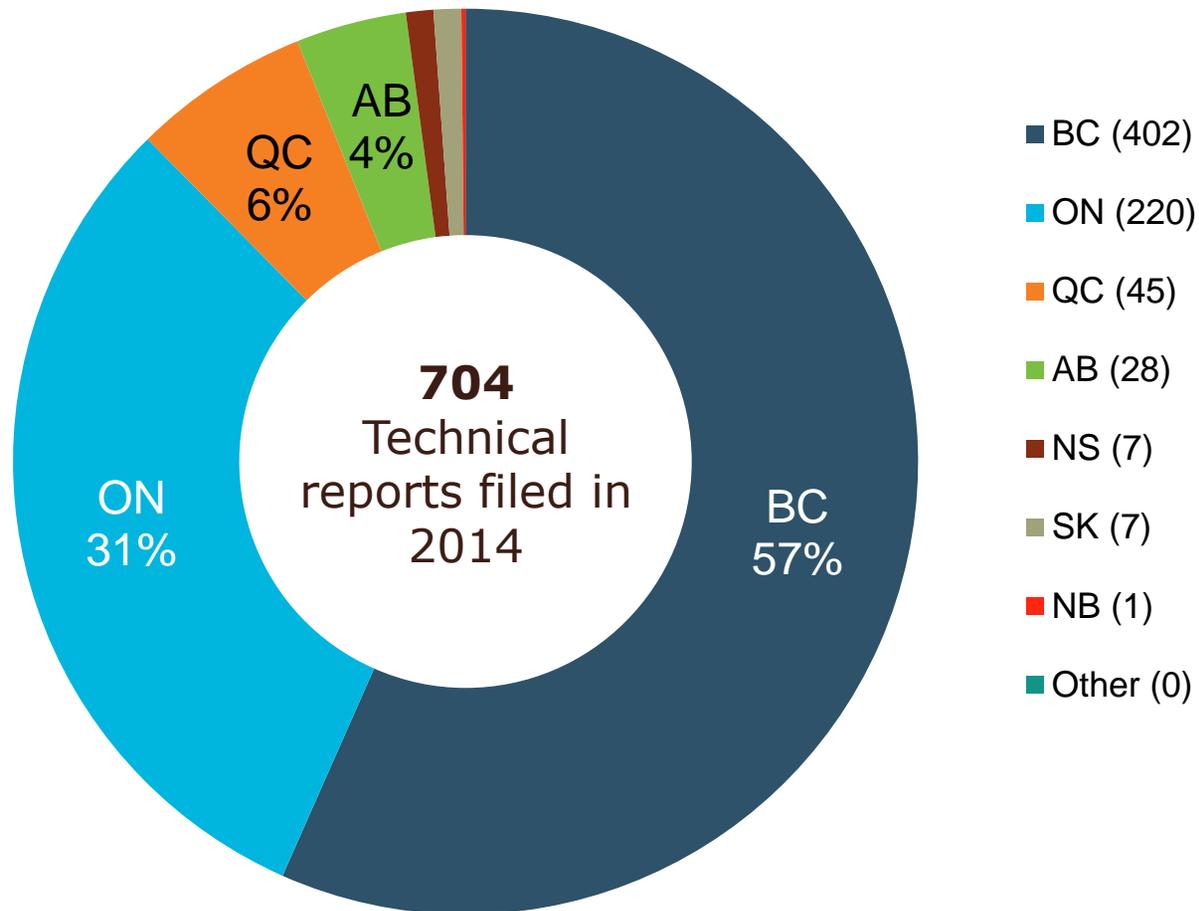
Technical Report

Basics

Technical reports filed per year (2007 – 2014)



Technical reports filed in 2014 by jurisdiction



5 "W"s (and 1 "H") of Technical Reports

WHO Prepared by QPs, often independent of the company and property

WHAT Current summary of material technical information on a material property

WHERE Triggered by milestone events and filed within a specific timeframe

WHEN Filed publically on SEDAR

WHY Supports a company's technical disclosure and assists investor's decisions

HOW Must follow prescribed Form 43-101F1 and requirements of NI 43-101

“Milestones” trigger technical reports

Property Milestones

- 1st time disclosure of:
 - Mineral resources
 - Preliminary economic assessment
 - Mineral reserves
- Material change to any of the above

“Success or revision driven triggers”

Company Milestones

- 1st time reporting in Canada
- Filing of any of the following*:
 - Preliminary (long form) prospectus
 - Preliminary short form prospectus
 - (1st time or material change to MR/PEA/MR)
 - Information or proxy circular
 - Offering memorandum
 - Rights offering circular
 - Annual information form
 - Valuation
 - TSX Venture offering document
 - Take-over bid circular

(where the material technical information is **not already supported by a technical report)*

“Event driven triggers”

Independent technical reports



s. 5.3

- **ALL** QPs must be independent if:
 - First-time reporting issuer in Canada
 - Preliminary long form prospectus
 - 1st time disclosure of a mineral resource, PEA, or mineral reserve
 - >100% change to an existing mineral resource or mineral reserve
- Exemption from independence for “producing issuers”
 - Gross revenue > \$30 million in recent fiscal year; and
 - Gross revenue > \$90 million in last three fiscal years

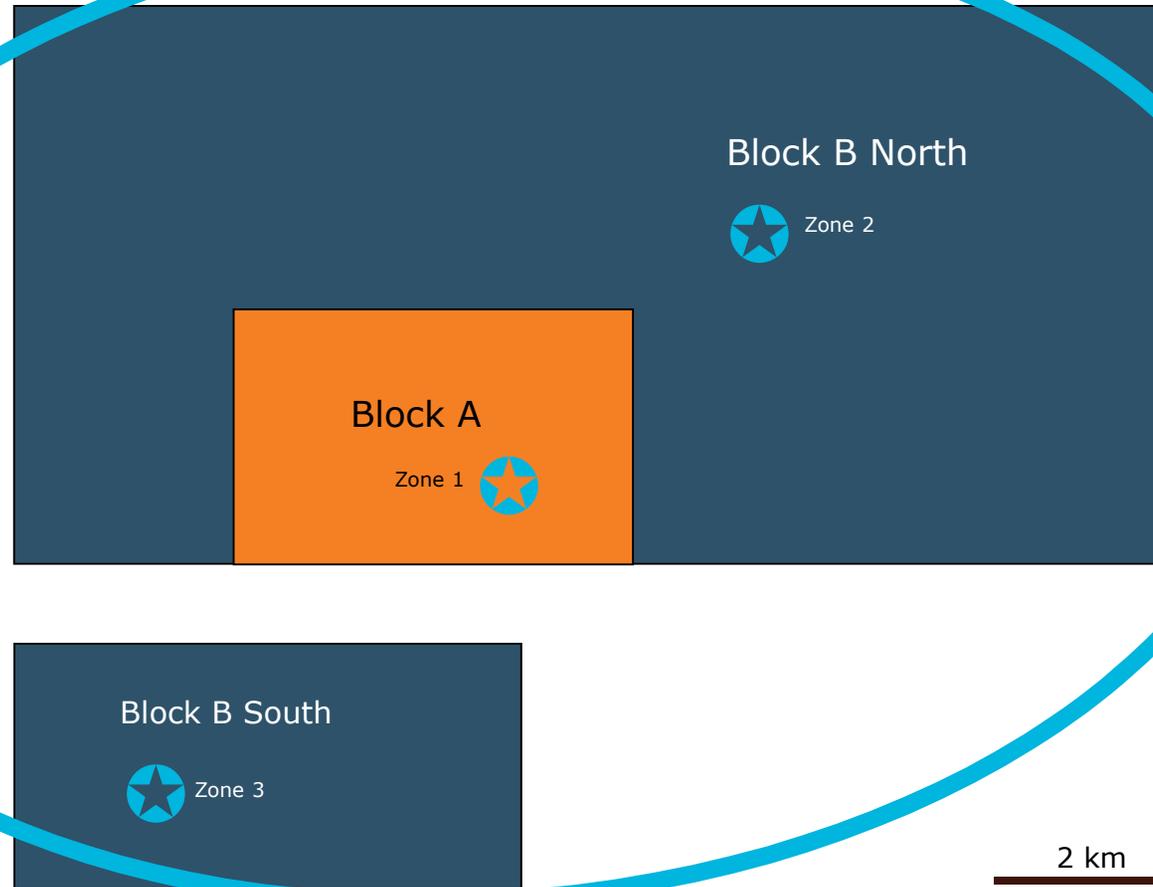
Mineral property with multiple deposits

Can a company file separate technical reports for different deposits on the same mineral property?

- **No** (generally)
- Companion Policy says:
 - 1.1(6) - a property includes claims that are contiguous or in close proximity that any underlying deposits would likely be developed using **common infrastructure**
 - 4.2(8) - a technical report when filed must be complete and current and there should only be **one current technical report** on a property at any point in time

Example: Single technical report

Technical Report





Technical Reports

Practical Tips

How big should a technical report be?

- General rule of thumb:

- Technical report provides material information at a "summary-level"
- Focus on what's important for the stage of development of the property
- Try and keep the "body" of the report (Items 2-26) to 100 - 150 pages
 - (Median = 110 pages for technical reports from last 5 years)
- Limit the number of pages of appendices
- Try to keep the file size under 10 Mb
 - (Median = 5 Mb in 2013)



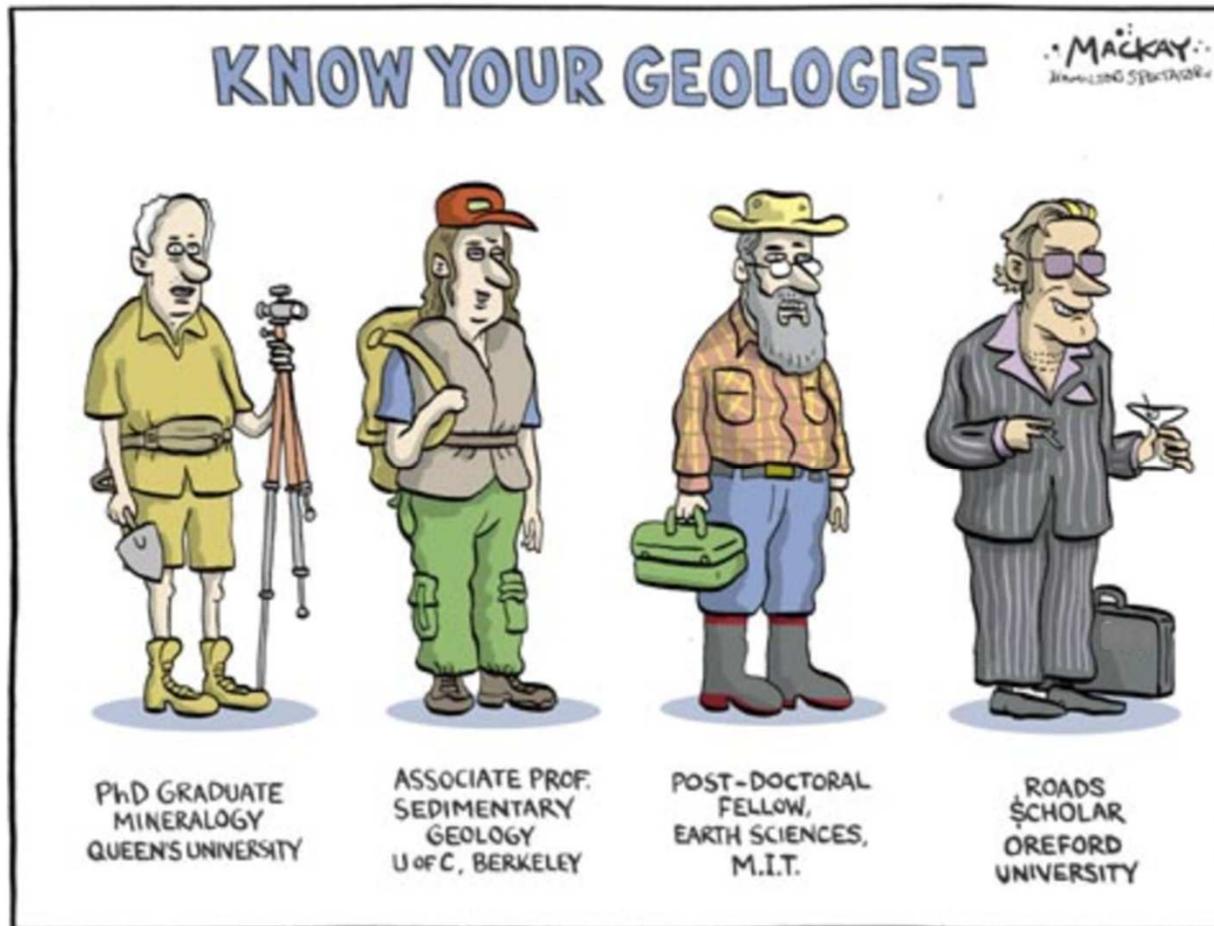
4,740 pages (report is only 54 pages)

Description	Pages ▾	Filing Date
Technical Report (NI 43 - 101)	4740	2010-11-12

Preparing technical reports – useful tips

- ✓ QP selection is important
- ✓ Know the intended purpose of the technical report (e.g. financing, internal?)
- ✓ Setup a basic template for the technical report
- ✓ Use a checklist based on the disclosure requirements
- ✓ Write a concise summary
- ✓ Clearly state the risks and uncertainties
- ✓ PEA technical reports often have disclosure problems
- ✓ Have the draft technical report peer reviewed

Did you choose an appropriate QP?



Self-assessment questions for the QP to answer

- Would the vast majority of my peers agree with my logic in defining, classifying, and reporting the mineral estimates?
- Are my assumptions for eventual economic extraction reasonable and realistic?
- Would informed investors understand the assumptions, factors, and procedures used?
- Does the project's stage of development reflect the level of confidence in the data?
- Have I considered and used all representative data, and if not, have I considered the advantages and risks in not doing so?
- Have I applied approximate mining parameters for reporting the resource estimates?
- Have I applied realistic and justifiable mining and processing factors in determining the mine plan and schedule for reporting the reserve estimates?
- Have I adequately presented the significant areas of risk and uncertainty and potential ways that these could be addressed in future work and studies?

Modified from M.A. Noppé - Xstract Mining Consultants – March 2014

Technical report review – OSC Staff Notice 43-705

OSC Staff Notice 43-705
REPORT ON STAFF'S REVIEW OF TECHNICAL REPORTS BY ONTARIO MINING ISSUERS

Publication date: June 27, 2013



Technical Reviews by the Regulator

Technical reviews by the regulator

Continuous disclosure (CD) reviews

- Website (all of it)
- News releases (past year)
- MD&A (past year)
- AIF (if filed)
- Technical reports (most recent ones)
- Social media sites (posted or linked to the company's website)
- Bullboards and chat rooms (investor reaction)

Technical reviews by the regulator

Prospectus reviews

- Prospectus
 - Technical information
 - Use of proceeds
- Documents incorporated by reference into the prospectus
 - AIF, news releases, MD&A, etc.
- Technical reports (most recent ones)
- Website (all of it)

So what if I don't comply?

NI 43-101 is enforceable under the Securities Act

- Some of the possible outcomes:
 - News release clarifying and/or retracting the disclosure
 - Refiling the technical report
 - Company placed on Refilings and Errors list
 - Company placed on Default list (can't raise new money)
 - Cease Trade Order (trading stops)
 - Enforcement order under the Act
 - Professional liability and disciplinary action (QPs)
 - Class action lawsuit under civil liability provisions of the Act
 - Securities Act charges (5 years/ \$5 million fine)
 - Criminal Code charges (up to 14 years)

Key action items for mining companies

- ✓ Understand your disclosure obligations
- ✓ Be aware of CIM standards and best practices
- ✓ Avoid the common pitfalls
- ✓ Review and discuss technical disclosure with your QP
- ✓ Peer review of technical reports may increase compliance

Don't let this happen to you!

- Missed filing deadlines
- Public retraction and clarification
- Withdrawn financings

Thank You!

Craig Waldie

Senior Geologist - OSC

416-593-8308

cwaldie@osc.gov.on.ca

Jim Whyte

Senior Geologist - OSC

416-593-2168

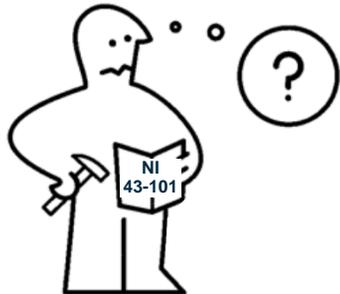
jwhyte@osc.gov.on.ca

Paul Ténrière

*Senior Manager Mining,
Compliance & Disclosure - TSX*

416-947-4447

paul.teniere@tmx.com



Graphic after IKEA

