Mining Disclosure:

Cross Country NI 43-101 Check-up

Roundup Short Course 2021

Presented by:

- British Columbia Securities Commission, BCSC
- Ontario Securities Commission, OSC
- Autorité des Marchés Financiers, AMF
- TMX Group
- Dentons

Agenda

8:30 – 9:00	**Regulatory Environment for Mining Disclosure:** Chris Collins, BCSC
9:00 – 9:30	**Exchange Policies/Listing Requirements:** Sally Gillies, TSX-V
9:30 – 10:00	**Disclosure Reviews:** Craig Waldie, OSC
10:00 – 10:15	BREAK
10:15 – 10:45	**Disclosure Path:** Luc Arsenault, TMX
10:45 – 11:15	**Technical Reports, Tips & Tricks:** Jim Whyte, OSC
11:15 – 11:45	**Current Events in Mining Disclosure:** Chris Collins, BCSC
11:45 – 1:00	LUNCH BREAK
	Panel Sessions: Moderated by Victoria Yehl, BCSC
1:00 – 1:45	**QP role & liability:** BCSC, OSC, AMF, Dentons
1:45 – 2:30	**Data Veri*fiction* & Personal Inspections:** BCSC, OSC
2:30 – 2:45	BREAK
2:45 – 3:30	**Risk Disclosure & ESG:** BCSC, OSC, TMX, TSX-V
3:30 – 4:15	**Potpourri & General Q&A:** All Presenters
4:15	**Closing Remarks:** Chris Collins, BCSC

Cautionary Statements/Terms of Use

British Columbia
Securities Commission

REGULATORY ENVIRONMENT FOR MINING DISCLOSURE

Chris Collins, B.Sc., P. Geo., MBA
Chief Mining Advisor, BC Securities Commission

What Will We Cover?

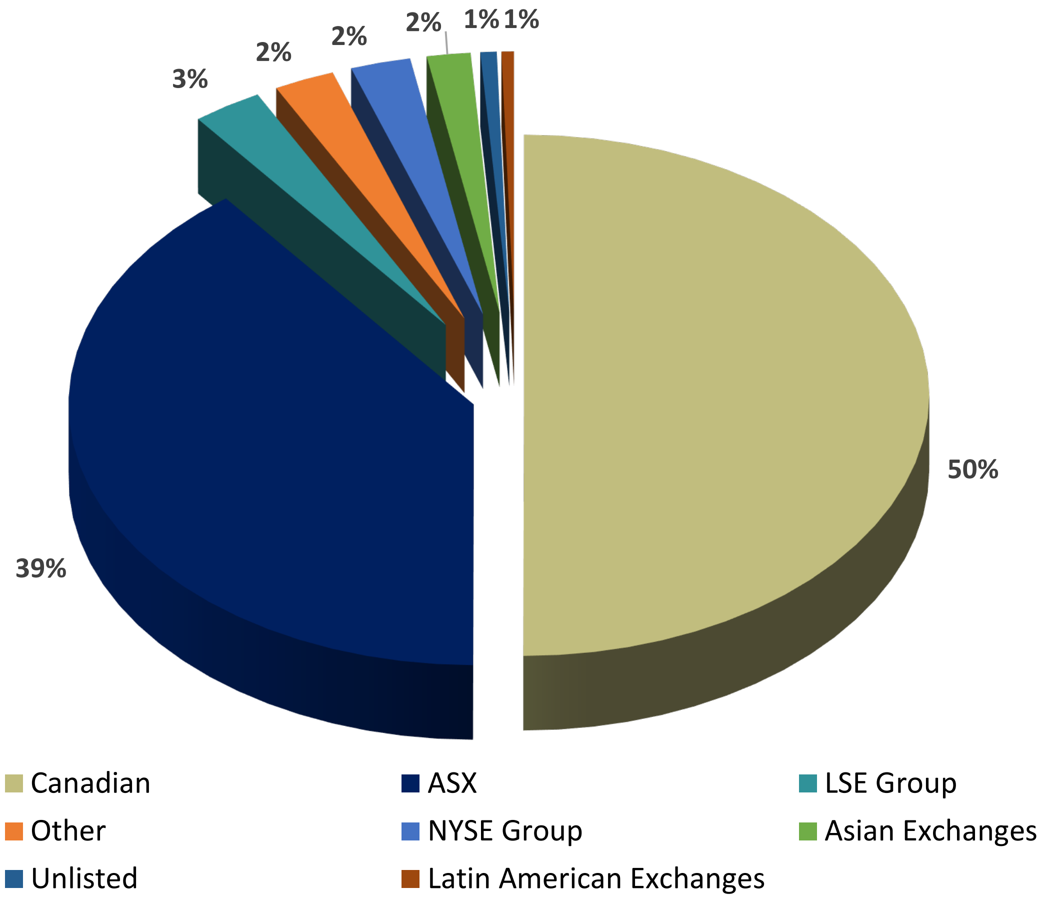
- Why regulate mining disclosure
- Canada’s role in mining capital formation
- Canadian mining securities regulatory framework
- The Core Principles of NI 43-101

Why Do We Have Mining Disclosure Rules?

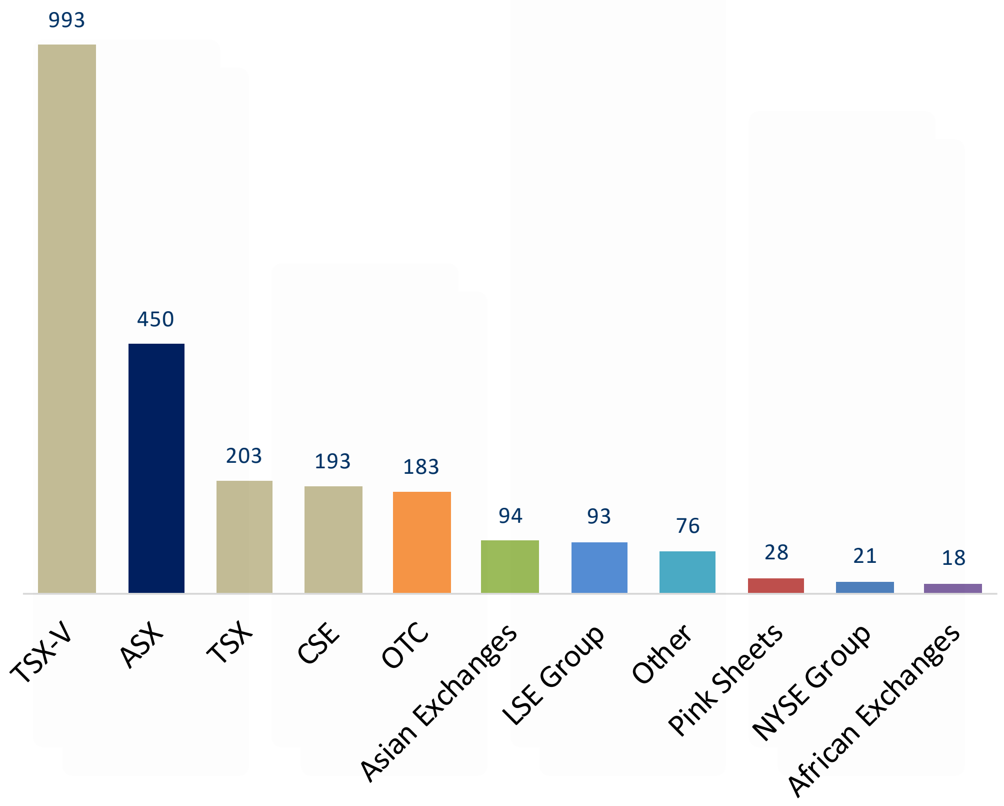
- **Mining is capital intensive and risky**
  - Companies need access to risk capital
  - Investors rely on Company information
  - Mining has numerous intrinsic risks
  - Being misled is not an acceptable risk
- **We Regulate Disclosure to:**
  - Protect investors
  - Maintain integrity of capital markets

Canada's Role in Mining Capital Formation

In 2020 CA$13.37 Billion raised (2019 CA$11.43 B)

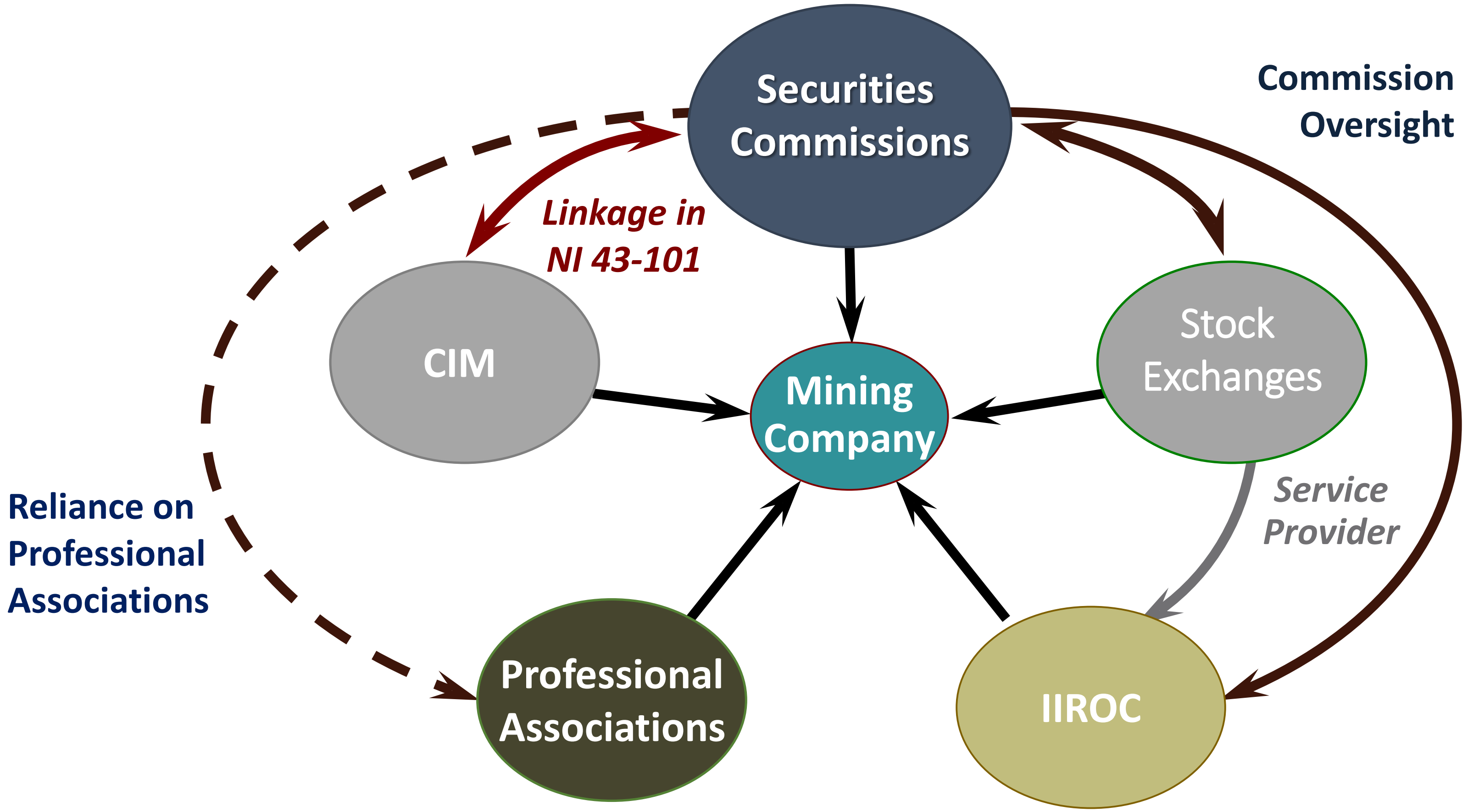


Listed Mining Issuers 2020

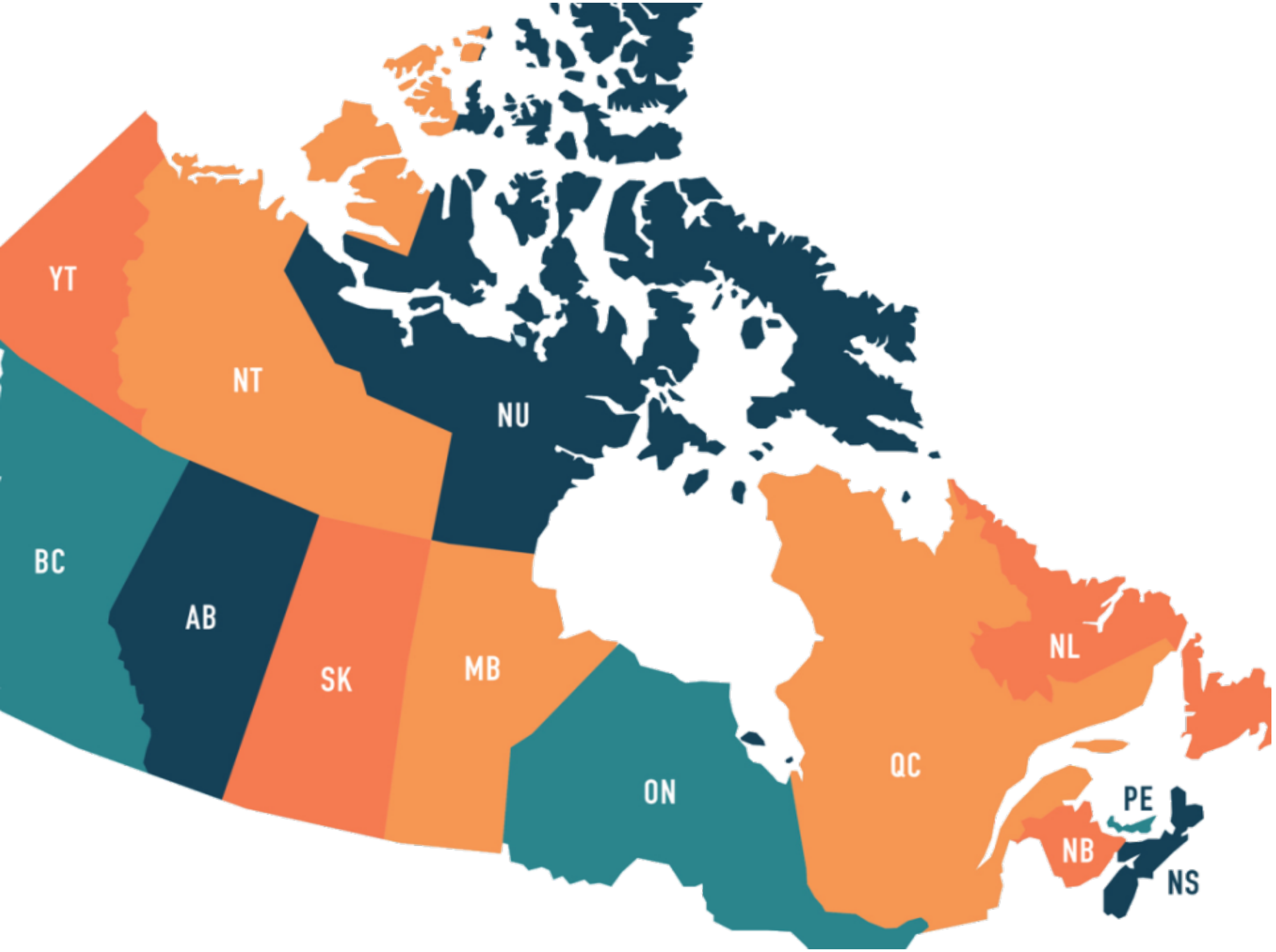


Sources: S&P Global Market Intelligence/TMX Market Intelligence Group/ Canadian Securities Exchange

Mining Securities Regulatory Framework



Canadian Securities Commissions



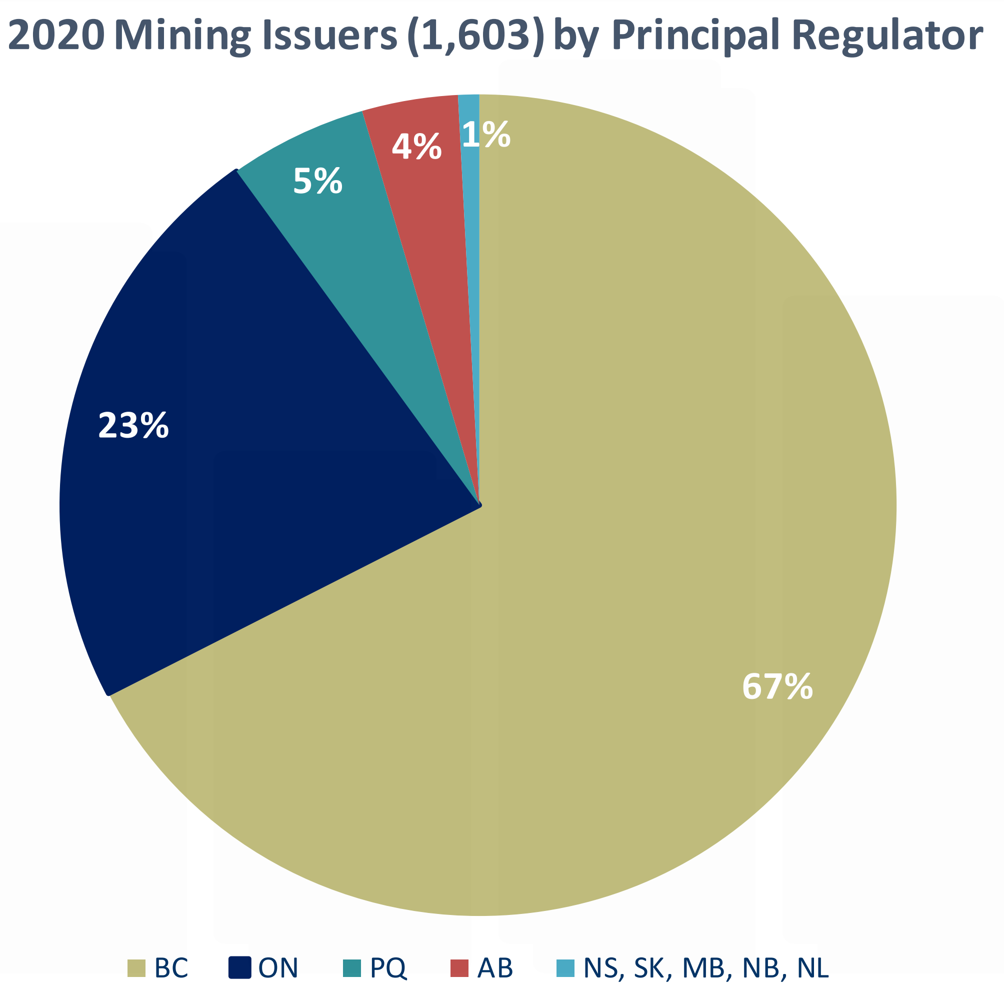
13 Provincial/Territorial Agencies

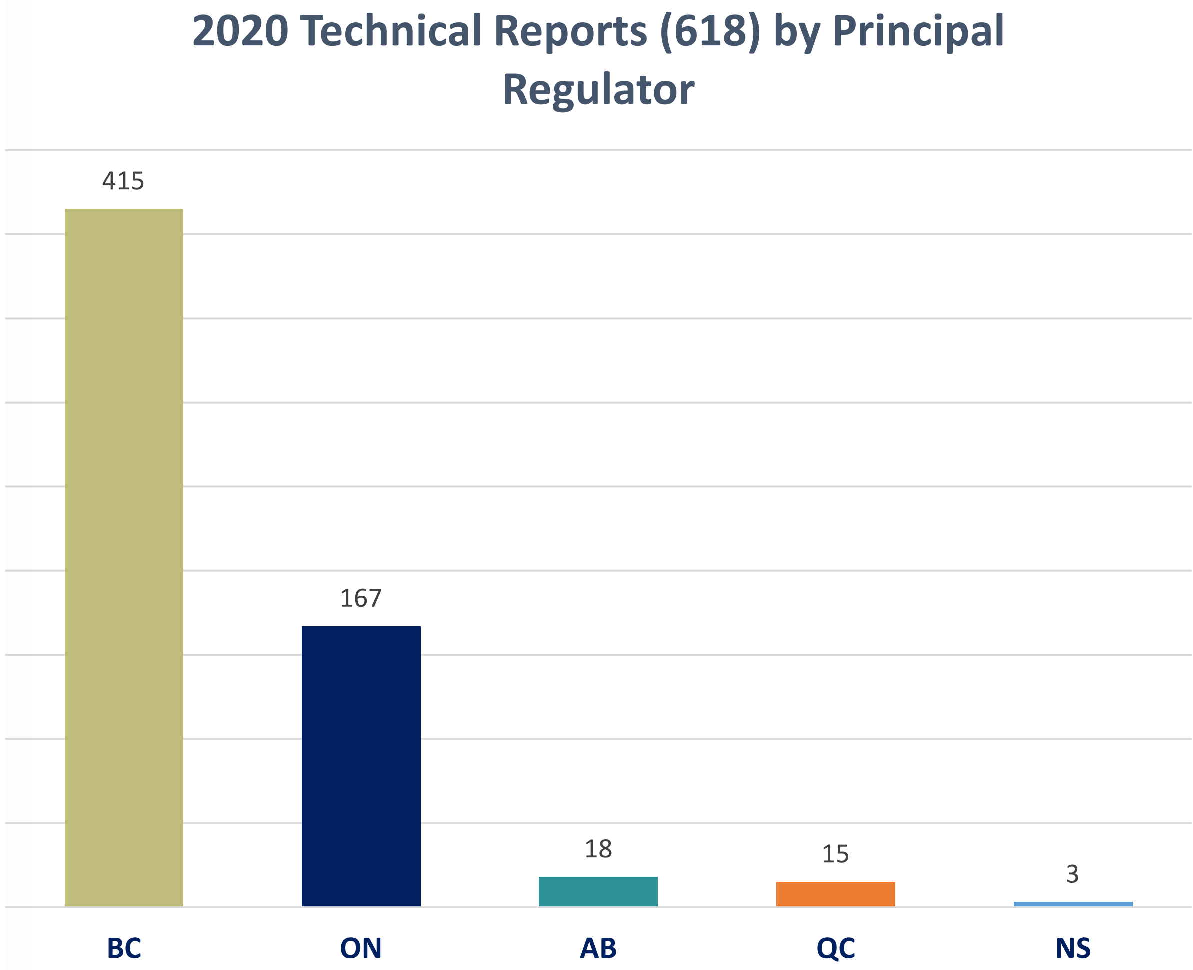
- Report to provincial or territorial governments
- Generally self-funded
- British Columbia, Alberta, Ontario, Quebec regulate majority
- Issuers have a “principal regulator”

Canadian Securities Administrators

- Umbrella organization
- Coordinates & harmonizes
- “Passport” system

BCSC’s Role in Mining Capital Formation





Important Rules

- **Distribution Rules: NI 41-101**
  - Require a prospectus to distribute securities
  - Companies become “reporting issuers”
  - Prospectus exemptions (NI 45-106)
- **Continuous Disclosure Rules: NI 51-102**
  - Required periodic disclosure
  - quarterly financial statements
  - management discussion and analysis
  - Timely disclosure of “material changes”
  - news that may affect share price
- **Industry-Specific Rules**
  - NI 43-101, Standards of Disclosure for Mineral Projects
  - NI 51-101, Standards of Disclosure for Oil and Gas Activities

The Core Principles of NI 43-101

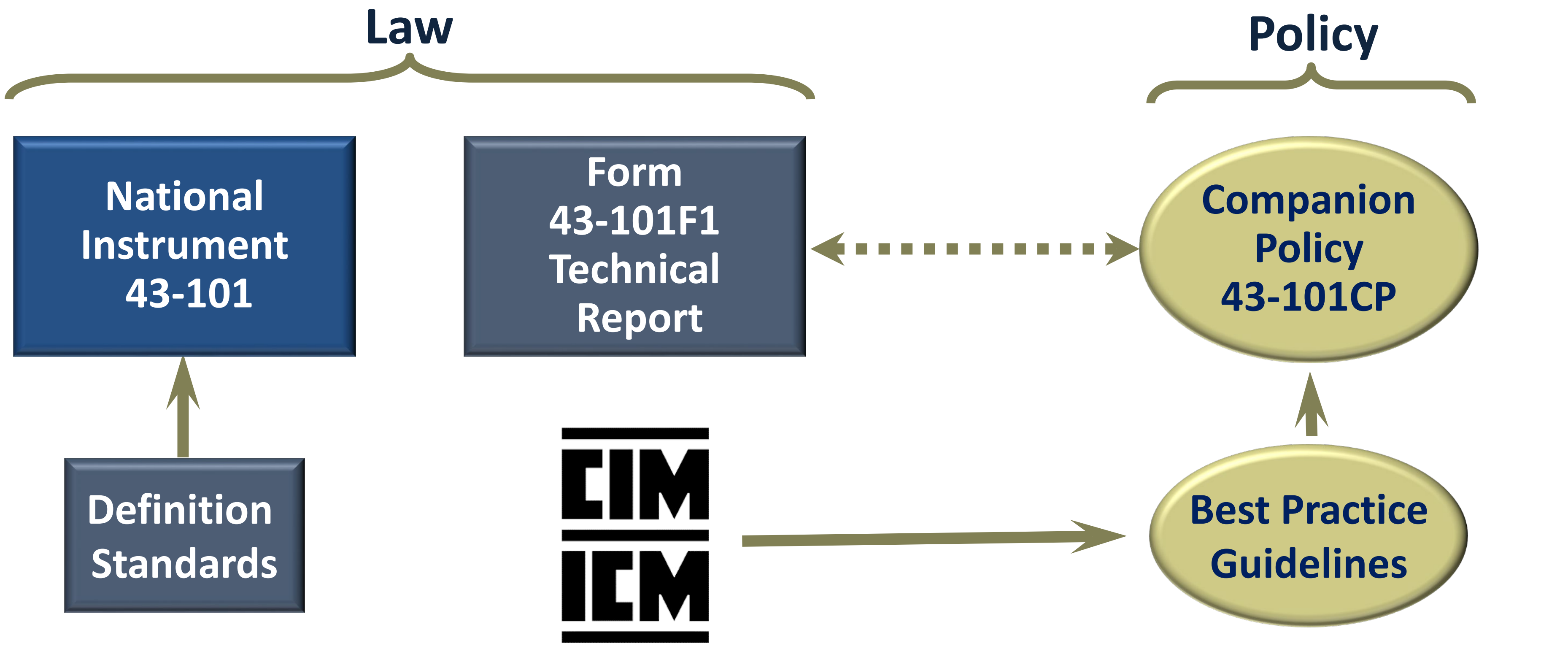
Objective:

To enhance accuracy and integrity of mining disclosure through national standards

Achieved through four principles:

1. The Qualified Person
2. Definition Standards for mineral resources and mineral reserves
3. The Technical Report (Form 43-101F1)
4. Industry best practice guidelines

National Instrument 43-101



Law *must* be followed

Policy *should* be followed

NI 43-101: What it is Meant to Be

- **Disclosure Rule**
- **Requires that public reporting of technical information is:**
  - Balanced and not misleading
  - Understandable to a reasonably informed investor
  - Consistent in its use of standardized terms and definitions
  - Based on reasonable assumptions which are clearly explained
  - Unbiased and identifies the potential risks and uncertainties
  - Signed off by a professional (QP) who takes responsibly for the information

NI 43-101: What it is Not Meant to Be

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

EXCHANGE POLICIES & LISTING REQUIREMENTS

Sally Gillies, M.Sc., P. Geo.
Senior Manager, Capital Formation Group, TSX-V

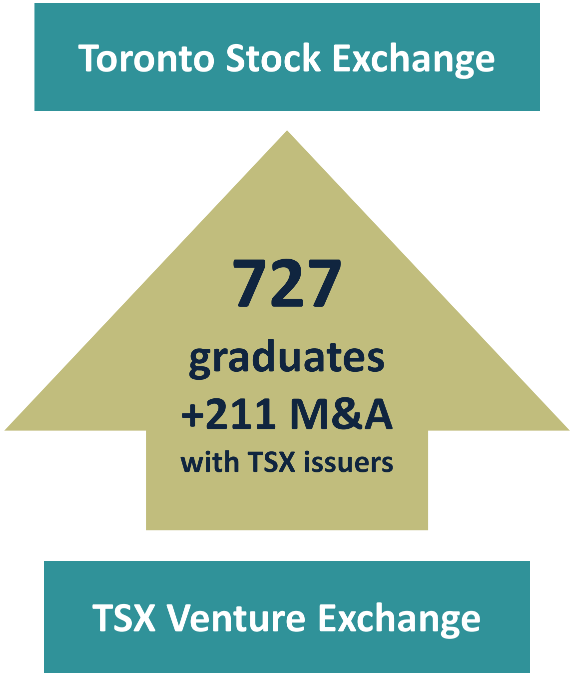
Flexible Paths to Listing

Two-Tiered Market Structure: Unique in the World

TSX Venture Exchange

1,649 Companies

- Average financing - $3.5 million
- Total market cap of $78 billion and average market cap of $47 million
- Going public activity between 100 and 300 companies per year
- Exchange mandate to mentor management of newly public companies
- Value of shares traded in 2020 - $23 billion
- Volume of shares traded in 2020 - 52 billion



Toronto Stock Exchange

1,640 Companies

- Average financing - $68million
- Total market cap of $3.4 trillion and average market cap of $2.1 billion
- 29% of TSX issuers >$500 million are interlisted on an international exchange
- Value of shares traded in 2020 - $2.3 trillion
- Volume of shares traded in 2020 - 115 billion

- **Since 2000, over 850 companies used TSX Venture as a growth platform to get to TSX**
  - 727 graduates to TSX
  - **211** companies have been merged/acquired by TSX companies
- **43** TSX-V Grads currently in S&P/TSX Composite Index (18% of companies in index)

As December 31, 2020. Total grads from January 1, 2000 – December 31, 2020

Canada’s Growth Market

The TSX-V Ecosystem Successfully Incubates Early-Stage Companies

727

TSX VENTURE COMPANIES HAVE GRADUATED TO TSX SINCE 2000

18%

OF S&P/TSX COMPOSITE INDEX CONSTITUENTS ARE GRADUATES FROM TSX-V

32%

OF ALL CURRENT CORPORATE TSX COMPANIES ARE TSX-V GRADS

67

TSX-V GRADS HAVE A MARKET CAP OVER $500M

43 GRADS OVER $1B IN MARKET CAP

35%

OF TSX TECHNOLOGY ISSUERS GRADUATED FROM TSX-V

52%

OF TSX MINING ISSUERS GRADUATED FROM TSX-V

As at December 31, 2020

New Mining Listings in 2020

	Name	Symbol	QMV(C$) @ 31-DEC-2020	Type of Listing	HQ Location
TSX	Gatos Silver, Inc.	GATO	977,704,416	IPO	USA
	Generation Mining Limited	GENM	103,166,246	Other	ON
	Newcrest Mining Limited	NCM	20,822,191,617	Other	Australia
	Talisker Resources Ltd.	TSK	71,429,846	Other	BC
	K92 Mining Inc.	KNT	1,668,112,738	TSX-V Grad	BC
	New Pacific Metals Corp.	NUAG	1,227,895,758	TSX-V Grad	BC
	Nomad Royalty Company Ltd.	NSR	587,924,930	TSX-V Grad	Quebec
	Skeena Resources Limited	SKE	745,224,885	TSX-V Grad	BC
	Victoria Gold Corp.	VGCX	756,320,919	TSX-V Grad	BC
TSX Venture	**Total: 47 New TSX-V Mining Issuers**		**Av QMV: $86.7 million**		
	Osisko Development Corp.	ODV	862,098,727	RTO from NEX	Quebec
	New Found Gold Corp.	NFG	585,996,659	IPO	BC
	Solaris Resources Inc.	SLS	544,494,546	Other	BC
	Caldas Gold Corp.	CGC	242,514,394	RTO from NEX	BC
	Nova Royalty Corp.	NOVR	215,328,652	Other	BC
	Whitehorse Gold Corp.	WHG	167,640,831	Other	BC
	Canada Nickel Company Inc.	CNC	155,241,353	Other	ON
	Fosterville South Exploration Ltd.	FSX	146,016,897	Other	BC
	Reyna Silver Corp.	RSLV	122,733,556	RTO	ON
	VOX Royalty Corp.	VOX	97,444,572	QT	Cayman Islands
	Montage Gold Corp.	MAU	96,544,804	IPO	BC
	Elemental Royalties Corp.	ELE	74,356,306	RTO from NEX	BC
	Pucara Gold Ltd.	TORO	51,372,402	QT	BC
	Clean Air Metals Inc.	AIR	51,086,501	RTO from NEX	ON

As of December 31, 2020

Initial Listing Requirements – TSX-V

Policy 2.1 of TSX-V Corporate Finance Manual and

• IPO:	Policy 2.3, NI 41-101
• CPC:	Policy 2.4, Form 3A
• QT:	Policy 2.4, Form 3B1 and 3B2
• RTO:	Policy 5.2, Form 3D1 and 3D1
• Direct Listings:	Policy 2.3, Form 2B

Original Listing Requirements - TSX

Part III of the TSX Company Manual

- TSX-V Graduations
- IPOs
- Inter-listing applications
- Backdoor Listings (aka RTOs)
- Spin-offs

Original Listing Requirements - TSX

General List for Mining Companies

- NI 43-101 Technical Report
- Minimum Property Ownership
- Exploration & Development or Producing Requirements
- Management Track Record and Experience
- Sufficient Working Capital and/or Mine Life
- Distribution, Market Capital and Public Float

Property Requirements

TSX-V – TIER 2	TSX – EXPLORATION
Minimum 50% interest in a qualifying property ($100,000 of exploration expenditures on the qualifying property in the past 3 years) Work program: $200,000	Minimum 50% interest in an advanced property (mineralization three dimensions and at economically interesting grades) Work program: $750,000
TSX-V – TIER 1	**TSX – PRODUCER**
Minimum 50% interest in a Tier 1 property (property with substantial geological merit) Work program: $500,000	Three years of proven and probable reserves Commercial production decision made or in commercial production

Financial Requirements

TSX-V – TIER 2	TSX – EXPLORATION
Adequate working capital for 12 months + $100,000 in allocated funds	$2 million in working capital Sufficient funds for 18 months $3 million in net tangible assets Appropriate capital structure
TSX-V – TIER 1	**TSX – PRODUCER**
Adequate working capital for 18 months + $200,000 in allocated funds $2 million in net tangible assets	Adequate working capital Appropriate capital structure Non exempt: $4 million in net tangible assets + likelihood of future profitability Exempt: $7.5 million in net tangible assets + pre-tax profits and cash flow

Management

- Management, including board of directors, should have adequate experience and technical expertise relevant to the company’s business and industry as well as adequate public company experience
- Management team includes qualified Chairman, CEO, CFO and Corporate Secretary
- Management and members of the board of directors must complete Personal Information Forms (PIFs) to assess suitability

Distribution & Sponsorship

TSX VENTURE EXCHANGE

- Public float of 500,000 shares (Tier 2) or 1,000,000 shares (Tier 1)
- 200 (Tier 1) or 250 (Tier 2) public board lot holders
- 20% of the issued and outstanding in the hands of public shareholders
- Sponsorship may be required

TORONTO STOCK EXCHANGE

- $4,000,000 publicly held
- 1,000,000 free trading shares
- 300 public board lot holders
- Sponsorship may be required

TSX & TSX-V Disclosure Policies

TSX Company Manual Timely Disclosure Policy (Sections 406 – 423.4)

- Appendix B: Disclosure Standards for Companies Engaged in Mineral Exploration, Development and Production

TSX-V Corporate Finance Manual

- Policy 1.1 Interpretation (Geological Report, Approved Expenditures, Tier 1 or 2 Property)
- Policy 3.3 Timely Disclosure
- Appendix 3E News Release Guidelines
- Appendix 3F Mining Standard Guidelines
- Appendix 3G Valuation Standards and Guidelines for Mineral Properties

TSX/TSX-V Compliance & Disclosure

- Timely Disclosure Policy
- Director and Officer Suitability
- Continued Listing Requirements (CLRs)
- Corporate Governance

Continued Listing Requirements

CLR	TSX-V (Policy 2.5)	TSX (Part VII)
Insolvency	✓	✓
Ongoing concern issue/shell or significantly reduced business	✓	✓
Minimum expenditure/revenue levels	$50k 1 yr. or 100k 2 yrs. exploration expenditures	$350k exploration expenditures or $3M revenue
Market capitalization and public distribution	$100k value of public float or less than 150 shareholders or less than 500,000 shares in the public float	$3M mkt cap. or $2M value of public float or less than 150 shareholders or less than 500,000 shares in the public float
Breach of TSX-V/TSX listing agreement	✓	✓
Failure to pay fees	✓	✓

If in Default with CLRs

- Remedial vs. Expedited Review
- Hearings
- Suspension
- Delisting
- Appeals

Material Information - Definitions

TSX-V Exchange Policy:

> "Material Information" is <u>any information</u> relating to the business and affairs of an Issuer that results in <u>or would reasonably be expected</u> to result in a significant change in the market price or value of any of the Issuer's Listed Shares, <u>and includes Material Facts and Material Changes</u>

(TSX-V Exchange Policy 3.3, Sec. 2.1 – emphasis added)

(TSX Company Manual Part IV, Sec. 407 – effectively same definition)

TSX-V: Events Deemed Material in Nature

TSX-V Exchange Policy lists specific events* deemed to be material in nature and <u>require</u> immediate disclosure

- Exploration results & developments (**<u>Positive or Negative</u>**)
- Significant property acquisition <u>or disposition</u>, JV agreements
- Significant litigation
- Significant labour/major contractor dispute
- Significant change in capital investment plans or corporate objectives

*Mining Related - see TSX-V Exchange Policy 3.3, Sec. 3.8 (a)-(y) for **FULL** List

TSX has list of examples of developments <u>likely</u> to require disclosure
see TSX Company Manual Sec. 410 (a)-(q)

TSX-V: Pre-Filing with IIROC

- **TSX-V pre-filing required (*Mining/Exploration Related):**
  - First time disclosure of new resource/reserve estimates
  - First time disclosure of economic analysis
    (Any operating projections – feasibility studies, PEA, etc.)
  - Major property acquisitions/dispositions
    (Qualifying Transactions, Reviewable Transactions)
  - (TSX-V Exchange Policy 3.2, Sec. 4.2 – full list)
- **TSX-V material news releases, esp. where halt required**
- **TSX-V ALWAYS wait for IIROC response prior to dissemination**
- **If in doubt contact IIROC**
- **IIROC issues comments for revision or 'no objection' -** but may be subject to further comment by Exchange or Commissions

News Release Guidelines

1. **State specific facts**
   - Convey specific and accurate facts
   - Avoid subjective terms and overly promotional language
2. **State all the facts**
   - State all relevant information about the matter being disclosed
   - Failure to state information necessary to make a statement not misleading is just as serious as making a false statement
3. **Make balanced presentation of the facts**
   - Report positive and negative results
4. **QP MUST be involved**
   - Name QP who reviewed & approved, and relationship to Company

Overly Promotional

WORLD CLASS DISCOVERY!

Word Class Deposit!

BONANZA GRADES!

Abundant Visible Gold!

Exceptionally High Grade Results!

- Avoid superlatives
- Lots of warnings issued (don’t rely on other news releases)
- CEO/President “quotes” common offender

Exploration Results

- Analytical method (ICP, AA, fire assay, etc.)
- Name and location of Laboratory
- Lab certification/accreditation or lack thereof
- Comment on QA/QC
- Note any non-standard sampling, preparation or procedures
- Provide relevant statistical details (range & distribution)
- Selective disclosure prohibited (NO “values up to…”)
- Gross metal value NOT acceptable

Analytical Results

- Source of information
- Geophysical and geochemical anomalies
(an anomaly does not mean you have found a mineral deposit)
- Sampling (provide details: type, number, location…)
- Drilling (Report results for all holes, not just the best, true width, hole locations)
- Report good and bad results
- Clearly distinguish between new and previously disclosed results

Visual Observations

- **Prohibited:**
  - Visual estimates of grade (e.g. 1% copper)
  - Visual estimates of mineralization (e.g. 5% chalcopyrite)
- **Not Prohibited:**
  - Factual observations (e.g. visible gold)
  - Photos
- **NOT RECOMMENDED (recommend waiting for assay results)**
- **Strongly recommend pre-filing with IIROC**

DO NOT Use These Phrases:

- ***"The following information is not compliant with NI 43-101…"***

  ALL disclosure MUST be compliant with NI 43-101
- ***"NI 43-101 compliant… [drilling, sampling, etc.]"***

  NI 43-101 only regulates disclosure NOT how to conduct the work
- **"This information should not be relied upon"**

  If information cannot be relied upon, it is not suitable for disclosure

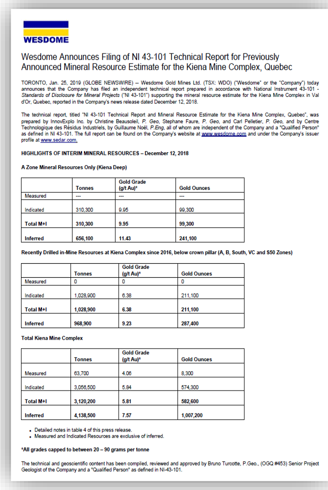
DISCLOSURE REVIEWS

Craig Waldie, P. Geo.
Senior Geologist, Ontario Securities Commission

“Disclosure” Under NI 43-101

Disclosure means:

- any oral statement or written information
- made by, or on behalf of the company
- intended to be, or reasonably likely to be, made available to the public in a jurisdiction of Canada
- whether or not filed under securities legislation … including **websites**



WESDOME

Wesdome Announces Filing of NI 43-101 Technical Report for Previously Announced Mineral Resource Estimate for the Kiena Mine Complex, Quebec

TORONTO, Jan. 25, 2019 (GLOBE NEWSWIRE) -- Wesdome Gold Mines Ltd. (TSX: WDO) ("Wesdome" or the "Company") today announces that the Company has filed an independent technical report prepared in accordance with National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101") supporting the mineral resource estimate for the Kiena Mine Complex in Val d'Or, Quebec, reported in the Company's news release dated December 12, 2018.

The technical report, titled "NI 43-101 Technical Report and Mineral Resource Estimate for the Kiena Mine Complex, Quebec", was prepared by InnovExplo Inc. by Christine Beausoleil, P. Geo, Stephane Faure, P. Geo, and Carl Pelletier, P. Geo, and by Centre Technologique des Résidus Industriels, by Guillaume Noël, P.Eng, all of whom are independent of the Company and a "Qualified Person" as defined in NI 43-101. The full report can be found on the Company's website at www.wesdome.com and under the Company's issuer profile at www.sedar.com.

HIGHLIGHTS OF INTERIM MINERAL RESOURCES – December 12, 2018

A Zone Mineral Resources Only (Kiena Deep)

	Tonnes	Gold Grade (g/t Au)*	Gold Ounces
Measured	---	---	---
Indicated	310,300	9.95	99,300
Total M+I	**310,300**	**9.95**	**99,300**
Inferred	**656,100**	**11.43**	**241,100**

Recently Drilled in-Mine Resources at Kiena Complex since 2016, below crown pillar (A, B, South, VC and S50 Zones)

	Tonnes	Gold Grade (g/t Au)*	Gold Ounces
Measured	0	0	0
Indicated	1,028,900	6.38	211,100
Total M+I	**1,028,900**	**6.38**	**211,100**
Inferred	**968,900**	**9.23**	**287,400**

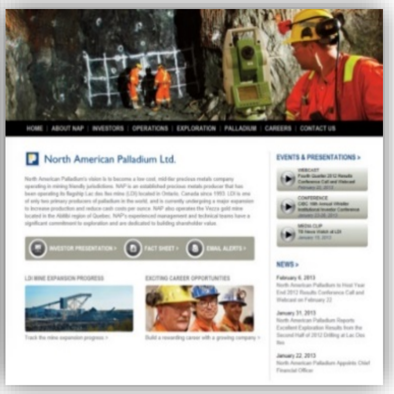
Total Kiena Mine Complex

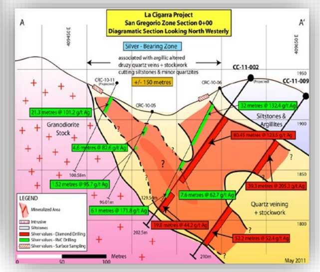
	Tonnes	Gold Grade (g/t Au)*	Gold Ounces
Measured	63,700	4.06	8,300
Indicated	3,056,500	5.84	574,300
Total M+I	**3,120,200**	**5.81**	**582,600**
Inferred	**4,138,500**	**7.57**	**1,007,200**

- Detailed notes in table 4 of this press release.
- Measured and Indicated Resources are exclusive of inferred.

***All grades capped to between 20 – 90 grams per tonne**

The technical and geoscientific content has been compiled, reviewed and approved by Bruno Turcotte, P.Geo., (OGQ #453) Senior Project Geologist of the Company and a "Qualified Person" as defined in NI-43-101.





Disclosure reviews by regulators look at many different public documents

Types of Disclosure Reviews

1) Prospectus Review

- Prospectus is a key **investor protection tool:**
  - Prospectus must provide **full, true, and plain disclosure** of all material facts
  - Officers, directors, underwriters, and experts (*i.e.* QP) may be liable for a misrepresentation
- **Forms of prospectus offerings:**
  - **<u>Long form</u> (IPO)**
    - Initial comment letter sent within 10 business days
  - **<u>Short form</u> (Company incorporates by reference previously filed documents into the prospectus)**
    - Initial comment letter sent within 3 business days

*Key: **Use of proceeds** needs to **align** with technical report **recommendations***

Types of Disclosure Reviews

2) Continuous Disclosure (CD) Review

- **Main objectives**
  - Compliance - Assess the company’s technical disclosure for compliance with the rules
  - Education - Help companies understand their disclosure obligations
- **Full review**
  - Broad in scope and based on selected risk criteria
    - Review of website, news releases, AIF, MD&A, technical reports, social media, etc.
- **Issue oriented review (IOR)**
  - Focused on a specific technical issue based on complaints, news releases, etc.
    - Example: website corporate presentations

Disclosure Review Process

Formal comment letter is sent electronically to the company

- Outlines specific disclosure concerns identified by staff
- Requests the company explain, clarify, or retract disclosure, or other corrective action

  Staff will typically comment on issues such as:
    - Non-compliance with NI 43-101 or disclosure not based on industry best practices
    - Website disclosure that includes economic projections unsupported by a technical report
    - Technical reports that do not comply with Form 43-101F1
- Company is generally requested to respond in writing in 5-10 business days
- Disclosure review process may involve multiple comment & response letters
- Staff may also conclude that the company is in "**default**" of a specific filing obligation

Sample Comment Letter

Ontario Securities Commission | Commission des valeurs mobilières de l'Ontario | 22nd Floor 20 Queen Street West Toronto ON M5H 3S8 | 22e étage 20, rue queen ouest Toronto ON M5H 3S8

December 4, 2020

The Corporate Finance branch of the Ontario Securities Commission has recently selected the Company for an issue oriented review of its continuous disclosure record.

Our review is being conducted under section 20.1 of the Securities Act (Ontario). On the basis of this review, OSC staff has concluded that the Company is in default (the Default) of certain NI 43-101 continuous disclosure obligations under Ontario securities law.

Failure to file a technical report
As noted in CSA Staff Notice 43-309, disclosure on the Company's website of potential economic projections and outcomes may trigger the filing of a technical report to support the economic analysis disclosure. Examples of the economic analysis on the Company's website not supported by a technical report include:

September 2020 investor presentation on the Golden Hope project which discloses:

- Annual gold production (82,000 ounces per year)
- Mine life (12 years)
- Initial capital costs ($540 million)
- NPV and IRR ($300 million and 25%)
- Payback (3 years)

<u>Immediate action required</u>
By December 18, 2020, the Company should do one of the following:

a) Remedy the Default, or

b) Advise us that it does not intend to dispute staff's conclusions regarding the Default and provide a detailed timeframe as to when the Company intends to remedy the Default, or

c) Advise us that it intends to dispute staff's conclusions regarding the Default.

Dealing with the Regulator

Do's

- ✓ Read the rules before you call the regulator or respond to staff comments
- ✓ Address the regulator's concerns – cooperation isn't necessarily capitulation
- ✓ Provide proposed solutions to deal with the disclosure issues – we may agree
- ✓ Remember that NI 43-101 applies to all written disclosure, not just formal filings

Do not's

- ✗ Assume that a strong offence will be a good defense
- ✗ Justify your disclosure because someone else did it that way
- ✗ Think that your situation is unique, and compliance is not required
- ✗ Take the position that capital and operating costs & economic analysis are not "scientific and technical information"

Top 5 Deficiencies: NI 43-101 (Rule)

2.4 Disclosure of historical estimates

- Lack of source and date, main assumptions if known, cautionary language

3.3 Requirements for written disclosure of exploration information

- Missing assay procedures, name of lab, QA/QC, true widths, higher grade intervals

2.3 Restricted disclosure

- Omitting PEA caution for inferred, exploration target ranges and cautionary language

2.2 All disclosure of mineral resources or mineral reserves

- No resource and reserve categories, only reporting contained metal, adding inferred

3.1 Written disclosure to include name of qualified person

- Lack of providing the QP's name and relationship to the company with all disclosure

Top 5 Deficiencies: Technical Report (Form 43-101F1)

Item 3: Reliance on other experts

- Must be limited to reliance on legal, political, environmental, or tax (not technical)

Item 12: Data verification

- Lack of data verification by the QP, and lack of QP's opinion on adequacy of the data

Item 11: Sample preparation, analyses and security

- Missing QA/QC info., assay & analytical procedures, name of lab, sample preparation

Item 10: Drilling

- Missing location, azimuth, and dip of drill holes, true widths, higher grade intervals

Item 14: Mineral resource estimates

- Lack of key assumptions, parameters, methods, and no discussion of material risks

So What if the Disclosure Doesn't Comply?

NI 43-101 is enforceable under the Securities Act

- **Possible outcomes:**
  - News release clarifying and/or retracting previous disclosure
  - Amending and refiling a technical report
  - Filing a technical report that should have been filed earlier
  - Company placed on the default list
  - Cease trade order or management cease trade order
  - Referred to enforcement for further investigation
- **Other possible outcomes:**
  - Class action lawsuit filed under civil liability provisions of the Securities Act
  - Complaint forwarded to the QP's professional association

Example: Global "Unconstrained" Resource

"New Mineral Resource of 130 million tonnes @ 1.06 g/t gold for 4.4 million ounces using a 0.5 g/t gold cut-off grade"

Longitudinal section covering the 7 km mineralized trend and related zones

Note: The global resource model follows a bulk gold scenario and is <u>not constrained by a pit shell</u>

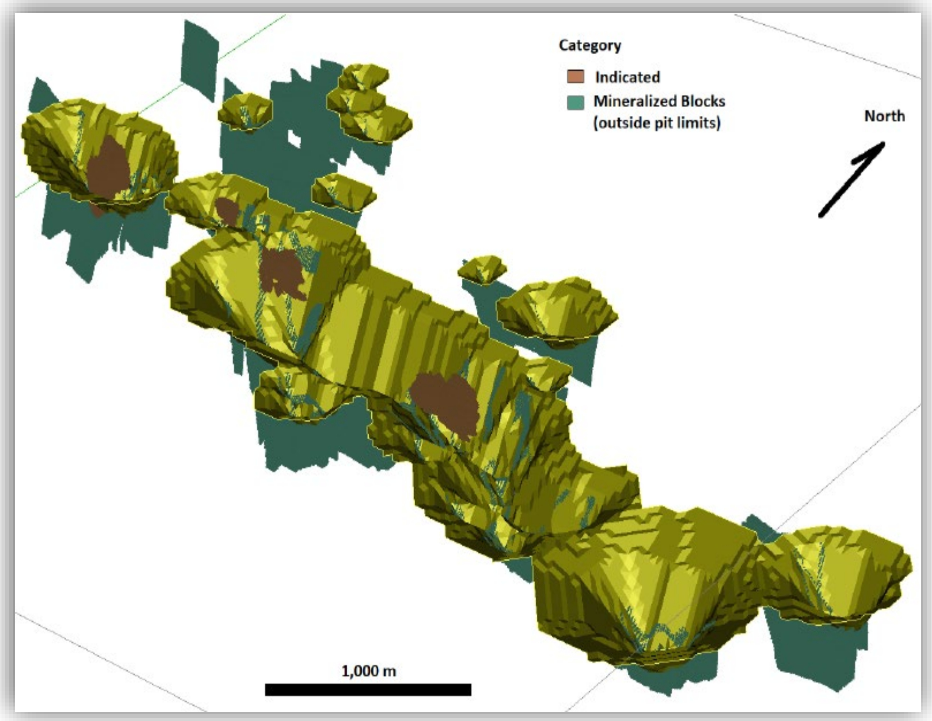
Clarification: Revised "Pit Constrained" Resource

"In-Pit" Mineral Resource of 83 million tonnes @ 1.05 g/t gold for 2.8 million ounces using a 0.5 g/t gold cut-off grade

Based on a review by staff of the securities commission, the Company has revised the previously disclosed resource estimate by applying reasonable technical and economic parameters in accordance with the CIM Definition Standards

*The Company is therefore providing a revised **"In-Pit"** mineral resource estimate which **reduces the contained gold ounces by 36%***

Investors are advised not to rely on the previous global resource estimate



Spotting Bad (~~Science~~) Disclosure

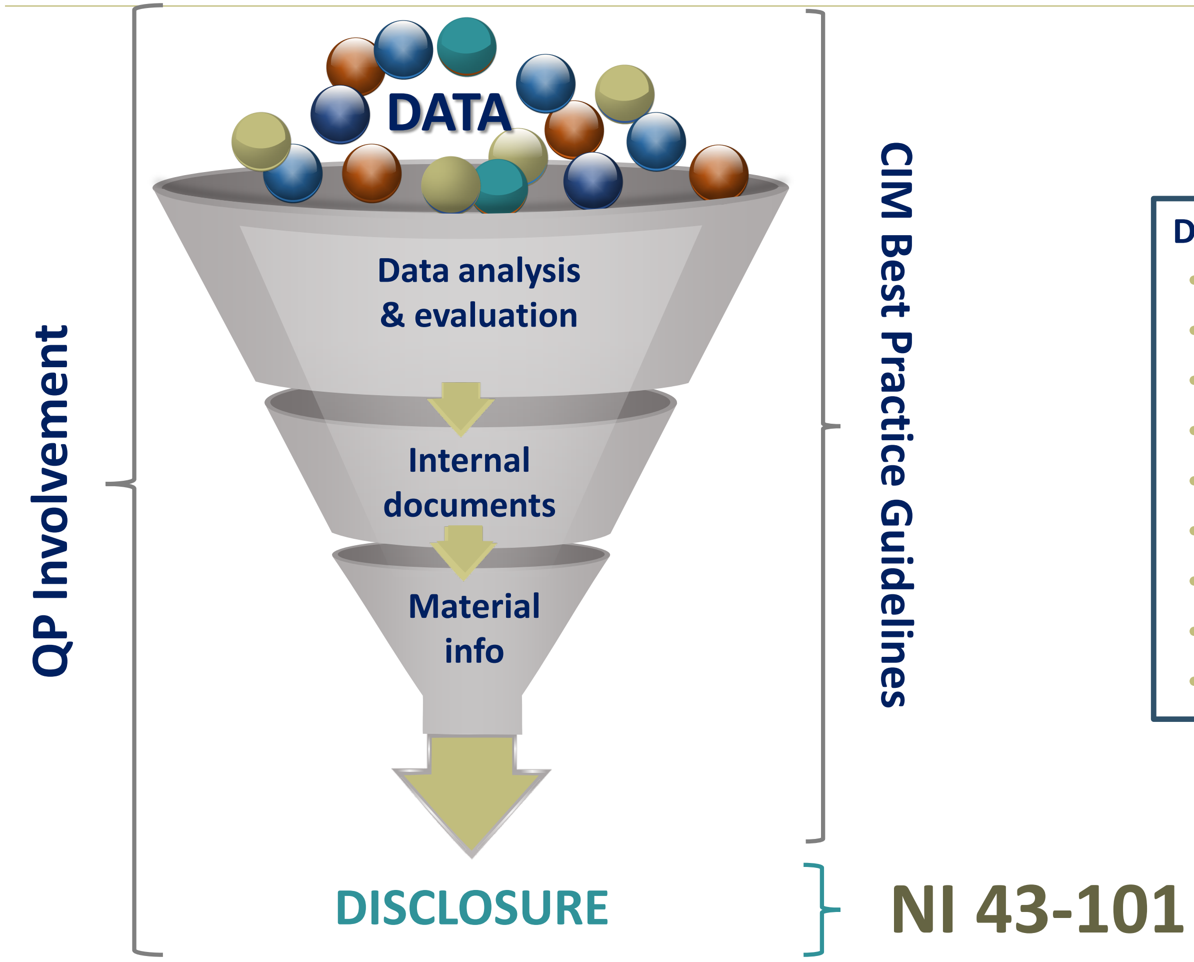
1. Sensationalized headlines
2. Misinterpreted results
3. Conflict of interest
4. Correlation vs. causation
5. Speculative language
6. Sample size too small
7. Unrepresentative samples
8. No control group used
9. No blind testing used
10. ‘Cherry-picked’ results
11. Unrepeatable results
12. No peer review

BREAK

DISCLOSURE PATH

Luc Arsenault, P. Geo.
Senior Manager – Mining, Toronto Stock Exchange

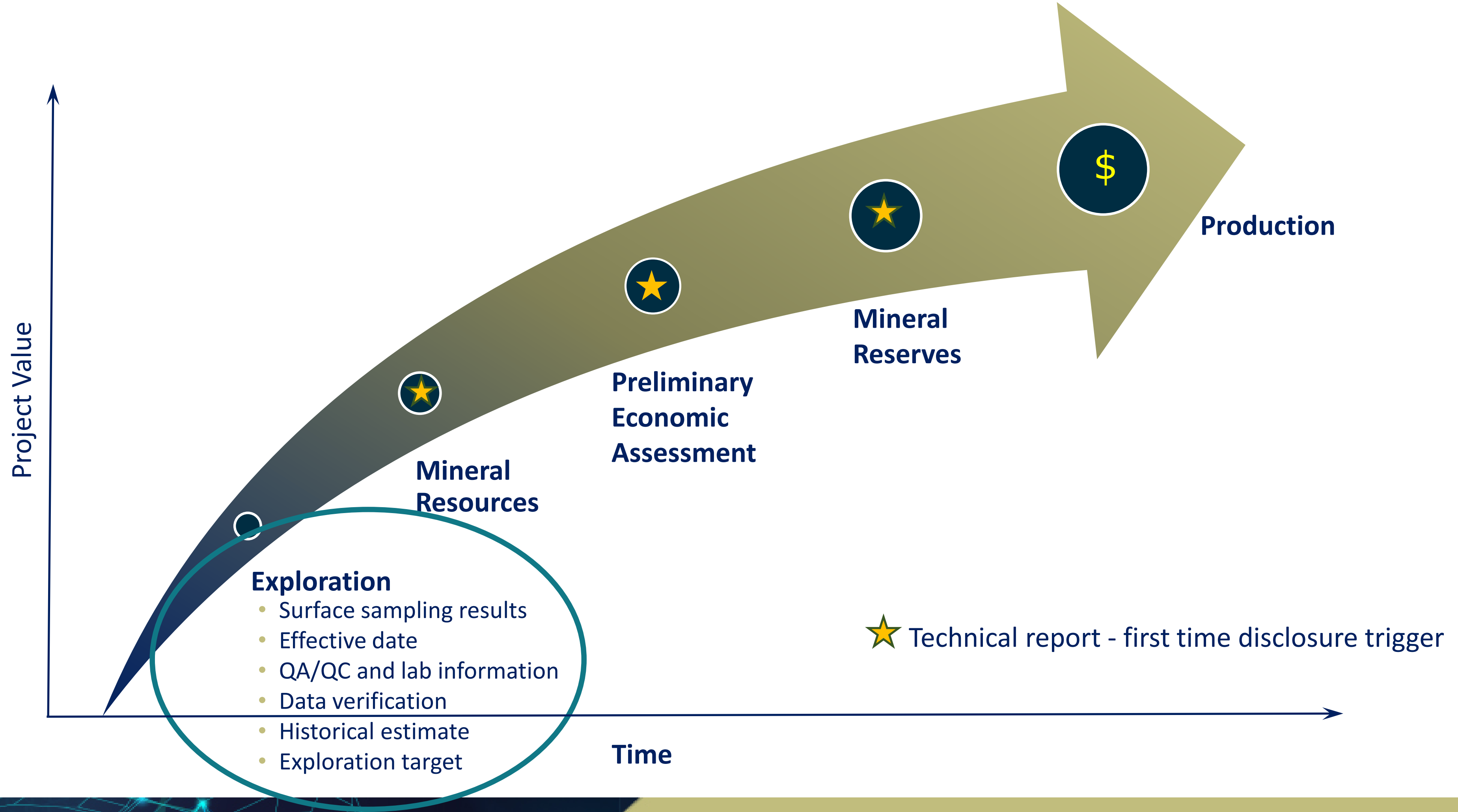
Process: From Data to Disclosure



Data
- Surface sampling
- Geochemistry
- Geophysics
- Drilling
- Assays
- Metallurgy
- Density
- Economic factors
- etc.

Disclosure
- New release
- MD&A
- AIF
- Offering document
- Website
- Presentation
- Social media
- Technical report
- etc.

Mineral Project Stage — Exploration



Exploration Information

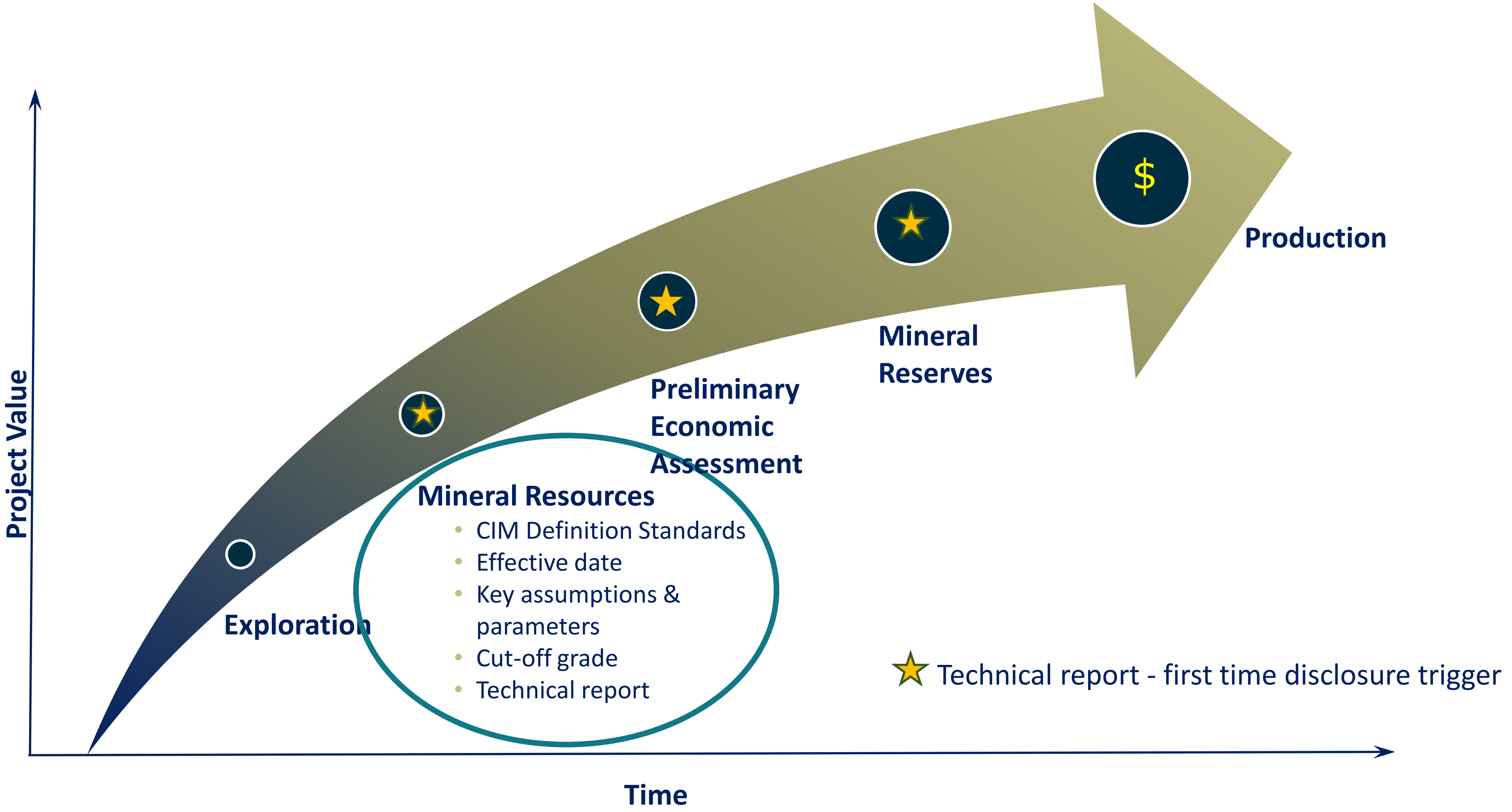
Do's

- ✓ Describe the type of samples
- ✓ Include drill hole location information
- ✓ Report higher grade zone within interval
- ✓ Report all the results - good and bad
- ✓ Provide the name and location of the lab, analytical method, and comment on the QA/QC procedure
- ✓ Report historical estimates and exploration targets correctly, including cautionary language

Do not's

- ✗ Report visual estimates of grade
- ✗ Selectively reporting "up to" results
- ✗ Omit stating true widths of drill intervals
- ✗ Stretch assay results beyond support
- ✗ Misrepresent a geophysical or geochemical anomaly as a deposit
- ✗ Report gross metal values
- ✗ Report economics on an historical estimate or exploration target

Mineral Project Stage — Mineral Resource



Mineral Resource

- **Definition of a Mineral Resource** [CIM Definition Standards - May 2014]
  - 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

Additional Guidance:

- *Tonnes & grade figures are not precise calculations and should be referred to as "estimates"*
- *Round-off the estimate to a reasonable number of significant figures (i.e. 2 to 3)*

Mineral Resources

Disclosing Mineral Resources [s. 2.2] and [s. 3.4]

- When disclosing Mineral Resources include:
    - CIM categories of mineral resources (inferred, indicated, and measured)
    - Quantity and grade of each resource category
    - Inferred resources reported separately from other categories
    - Tonnes and grade for each category if the contained metal is disclosed
    - Effective date of the resource estimate
    - Key assumptions, parameters, and methods used
    - Any known risks that could materially affect potential development
    - Statement that "*mineral resources that are not mineral reserves do not have demonstrated economic viability*" if results of an economic analysis of resources is disclosed

Mineral Resource Estimates

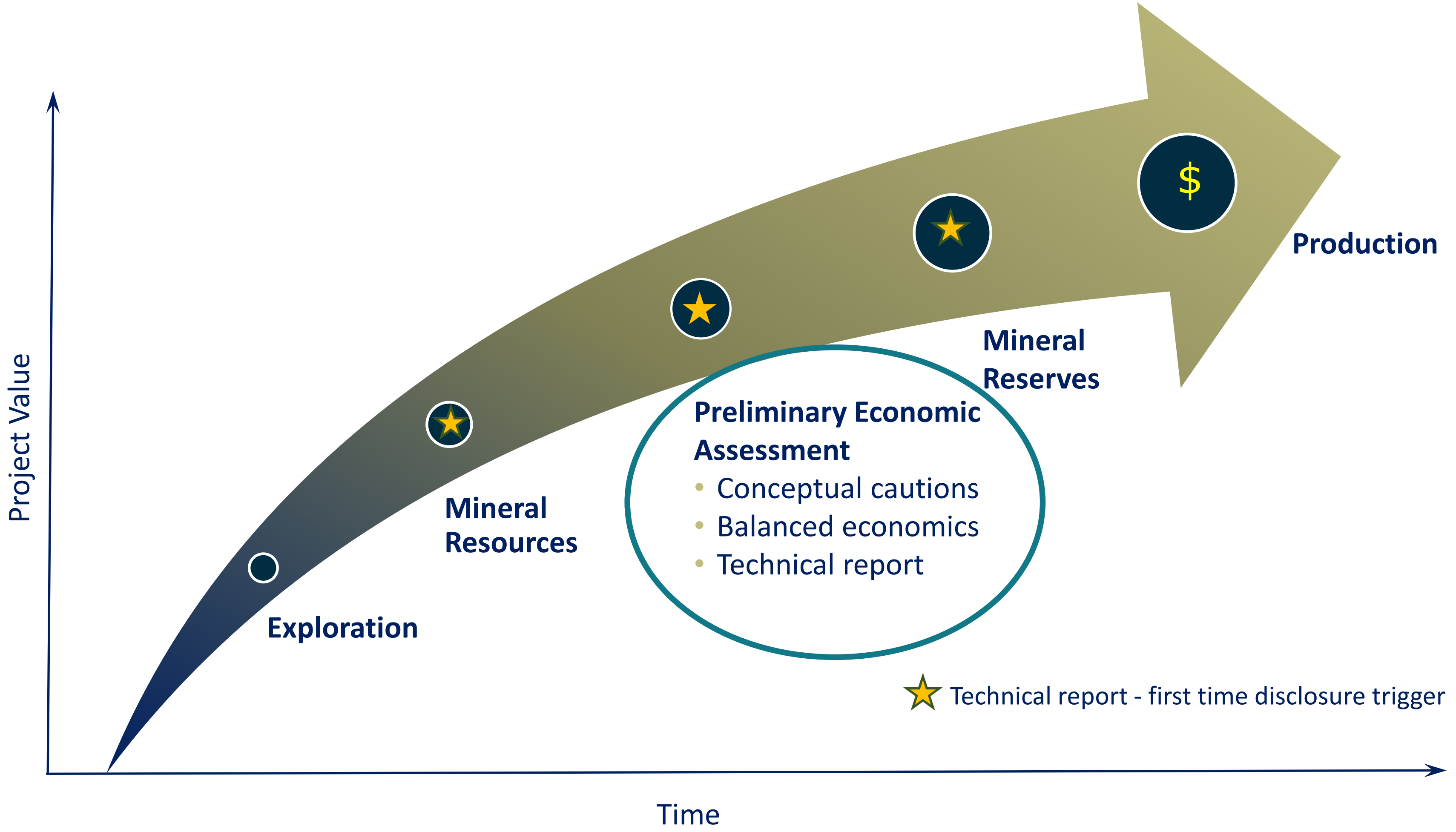
Do’s

- ✓ Provide the effective date
- ✓ Report both tonnes and grade
- ✓ Provide key assumptions, parameters, and methods
- ✓ Constrain the resource estimate
- ✓ State how equivalent grades were calculated
- ✓ Make use of section 3.5 of NI 43-101

Do not’s

- ✗ Reporting only contained metal
- ✗ Reporting gross metal values
- ✗ Using non-compliant resource modifiers, or reporting estimates without categories
- ✗ Misuse of the term “ore”
- ✗ Adding inferred resources to other categories of resources
- ✗ Ignoring CIM Definition Standards and CIM Best Practice Guidelines

Mineral Project Stage — Preliminary Economic Assessment (PEA)



Preliminary Economic Assessment

- **Definition of a "preliminary economic assessment" [s. 1.1]**
  - Means a study, other than a prefeasibility (PFS) or feasibility study (FS), that includes an economic analysis of the potential viability of mineral resources

- **Appropriate uses of a PEA**
  - Road map for planning and strategic decision making
  - Preparing for a prefeasibility study
  - Public disclosure to raise capital and advance the mineral project

Preliminary Economic Assessment

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 prefeasibility or feasibility study*

Limitations of a PEA

- Underestimates the costs and complexities of the project
- Sets expectations for NPV, IRR, etc. that may not be achieved in PFS/FS
- Often uses overly optimistic metal recoveries and metal price assumptions
- Over reliance on converting inferred resources to indicated resources
- Early permitting process may restrict changes to the mine design
- May be misleading if the PEA treats inferred resources as mineral reserves (e.g.. inappropriate PEA after mineral reserves)
- High risk of project failure if the PEA is used as the basis for making a production decision

Production Decision Without Mineral Reserves

- **Guidance [s. 4.2(6) of Companion Policy 43-101CP]**
  - Decision is the responsibility of the issuer and its management and board
  - Doesn’t trigger a technical report to support the production decision
  - Decision 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 issuer may be misleading investors
- **Quarterly MD&A**
  - Disclose that the production decision is not based on a technical report supporting mineral reserves

How do you avoid making misleading disclosure?

- Clearly state the <u>risks</u>:
  - *Production decision is not based on demonstrated economic viability (i.e. reserves)*
  - *Such projects have a much higher risk of economic or technical failure*
  - *Project failure may adversely impact the issuer’s future profitability*

Caution About Production Decisions based on 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."

Preliminary Economic Assessment

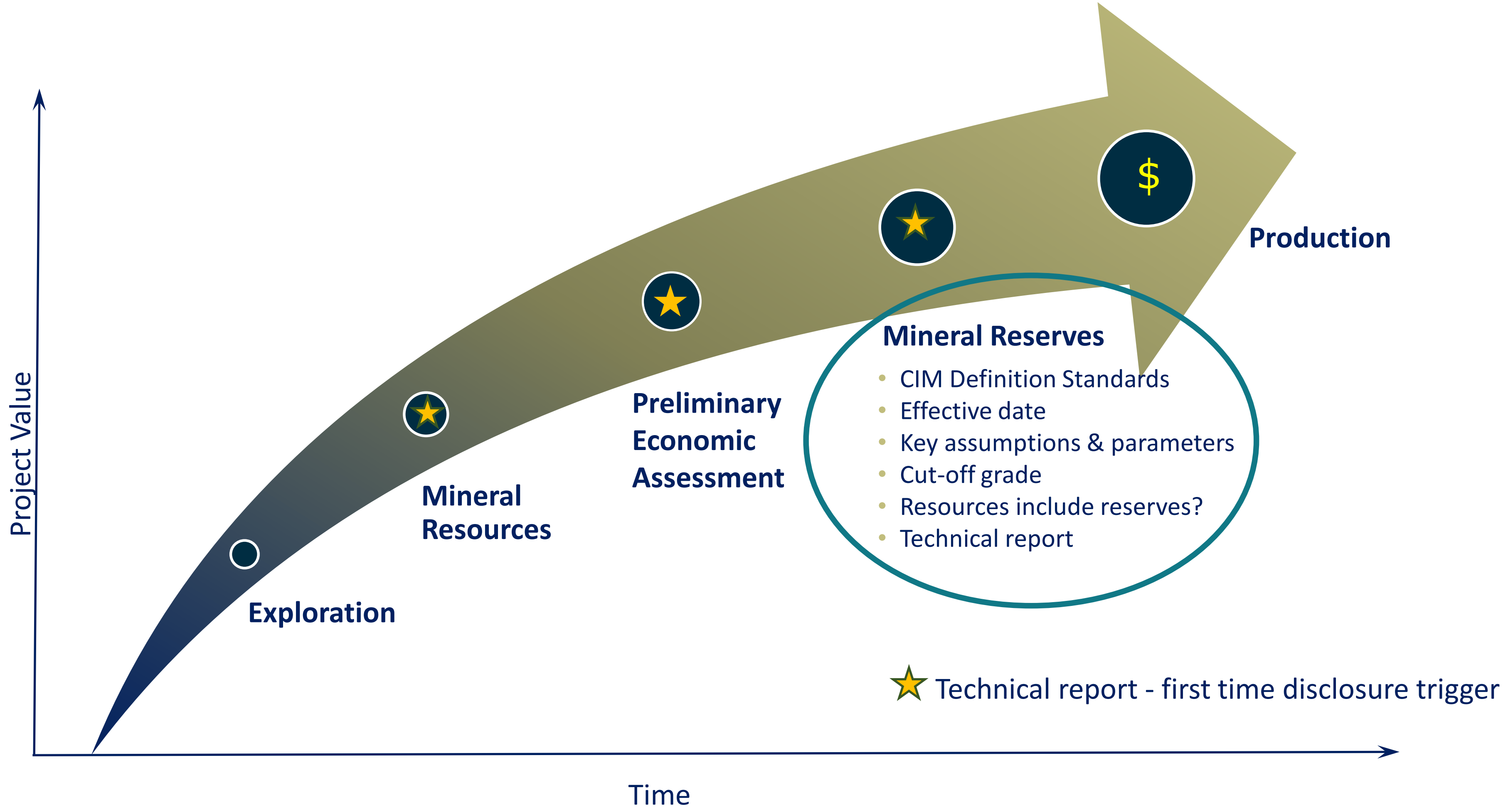
Do's

- ✓ Provide a clear statement of the main assumptions
- ✓ Prepare analysis on a 100% equity basis
- ✓ Include required cautionary language (2.3(3)(a) and 3.4(e))
- ✓ Use a reasonable range for the sensitivity analyses
- ✓ Use the correct terms (PEA, PFS, FS) for the type of mining study

Do not's

- ✗ Disclosure an economic analysis on an exportation target or historical estimate
- ✗ Report only pre-tax values
- ✗ Use an unrealistic discount rate
- ✗ Combine the outcomes of a PEA with the outcomes based on mineral reserves
- ✗ Misuse the PEA-level study
- ✗ Omit risks related to mining from mineral resources instead of reserves

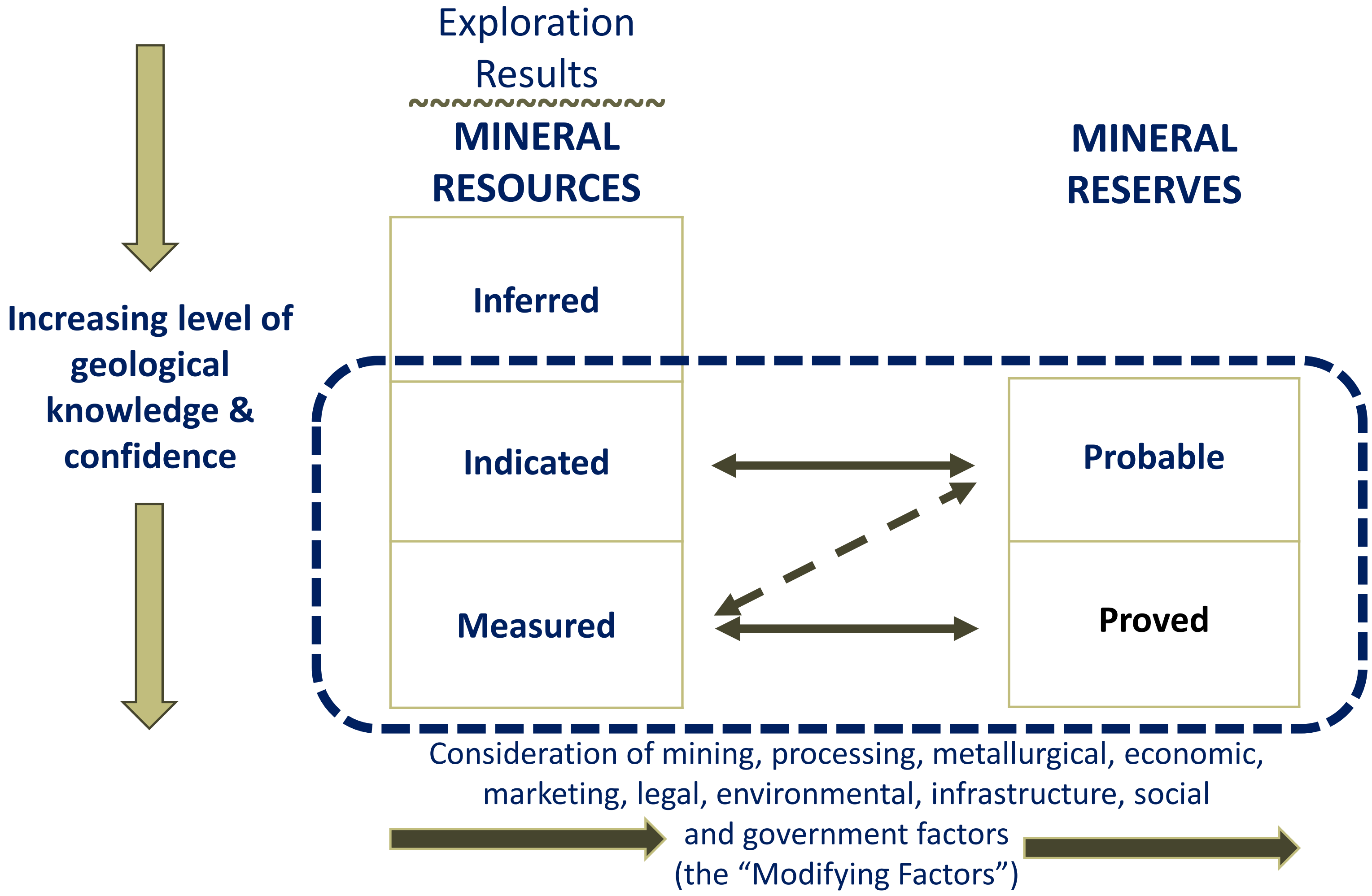
Mineral Project Stage — Mineral Resource



Mineral Reserves

- **Definition of a mineral reserve** [CIM Definition Standards - May 2014]
  - Economically mineable part of a measured and/or indicated mineral resource after taking account of all relevant **Modifying Factors**
  - Includes diluting materials and allowances for losses which may occur during mining
  - Reserves are defined by studies at prefeasibility (PFS) or feasibility (FS) level that demonstrate at the time of reporting extraction could be justified

Relationship between Resources & Reserves

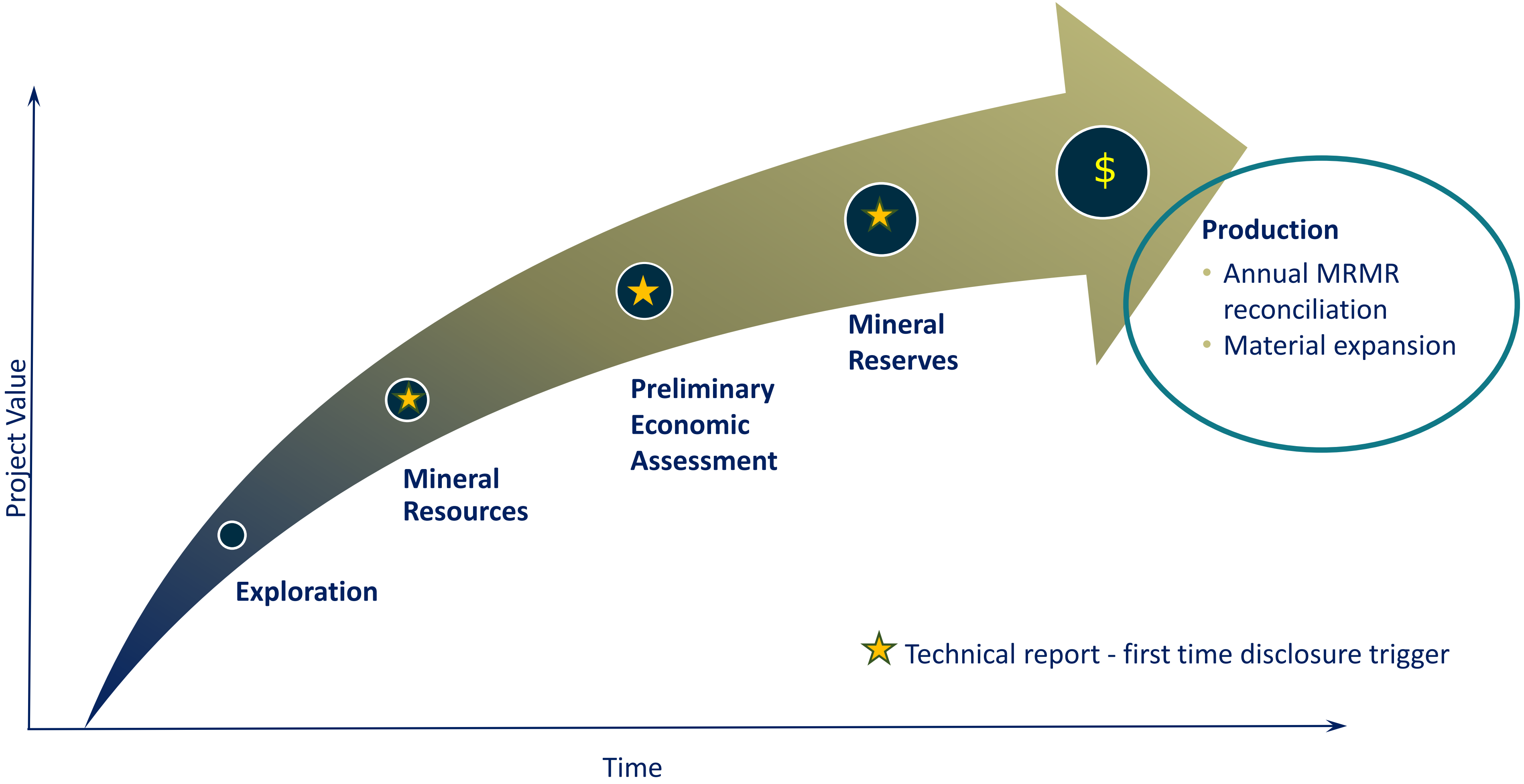


Mineral Reserves

Disclosing Mineral Reserves [s. 2.2] and [s. 3.4]

- When disclosing Mineral Reserves include:
  - CIM categories of mineral reserves (proven and probable reserves)
  - Quantity and grade of each reserve category
  - Effective date of the reserve estimate
  - Key assumptions, parameters, and methods used
  - Any known risks that could materially affect potential development
  - Statement whether reserves are included or excluded from resources
  - Statement that *"mineral resources that are not mineral reserves do not have demonstrated economic viability"* if results of an economic analysis of resources is disclosed

Mineral Project Stage — Production



Annual Resource & Reserve Estimates — Updates and Reconciliation

Annual Information Form (AIF) requires disclosure of mineral resource and mineral reserve estimates as of the company's <u>financial year end</u>

- **Projects <u>in production</u>**
  - Provide an annual update of resource and reserve estimates
  - Good disclosure should also include reconciliation to the previous year's estimates
  - Annual estimates from a producing mine do not trigger a new technical report [see 43-101CP s. 4.2(10)]
- **Projects not in production**
  - AIF discloses the most recent resource and reserve estimates with effective dates

Production Results - Additional Disclosure

Production Cost Reporting

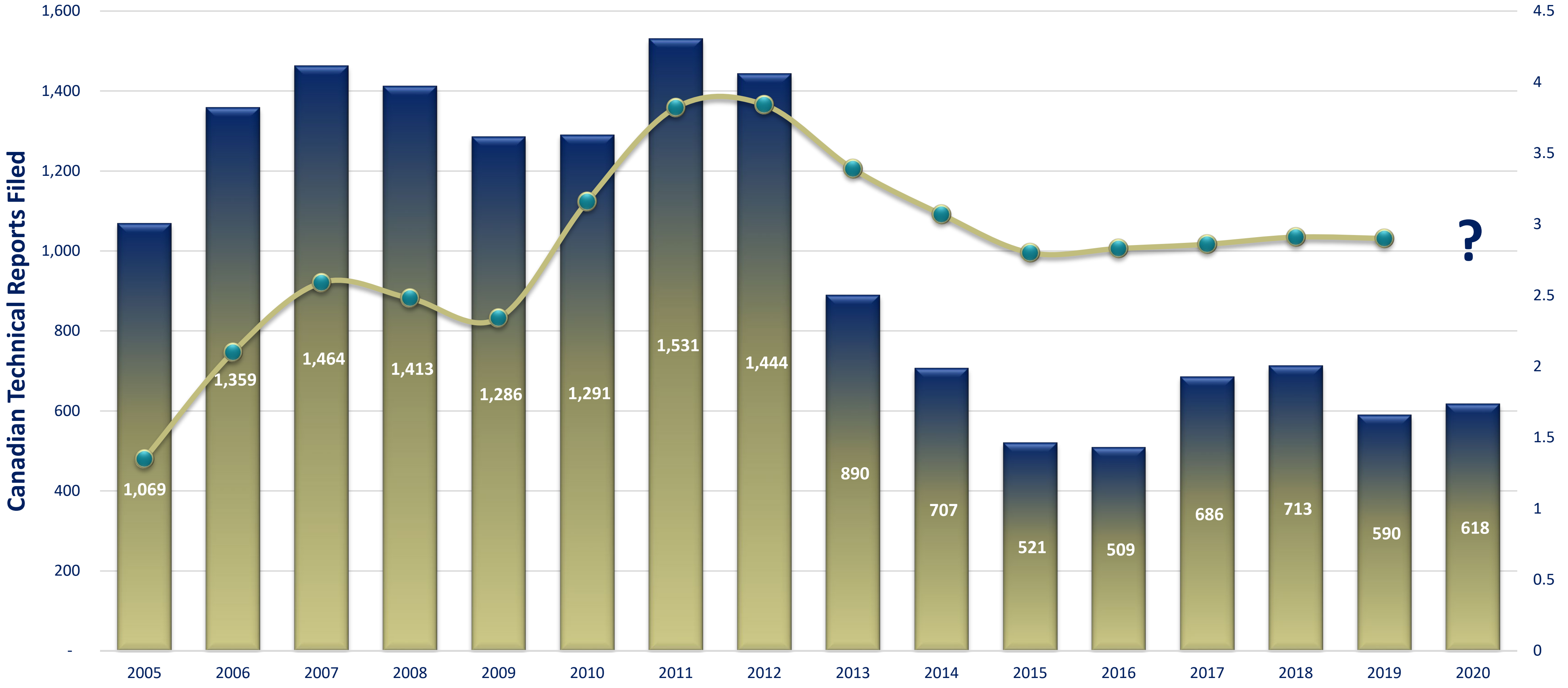
- Must clearly set out what costs are and are not included in the calculation. This provides investors with the ability to compare results of different companies which use different calculations
- Gold producers should follow the World Gold Council Production Cost Standard to provide further transparency into the costs associated with producing gold
- All-In Sustaining Costs (AISC) and All-In Costs – used by most major Canadian gold producers

OSC ONTARIO SECURITIES COMMISSION

TECHNICAL REPORTS

Jim Whyte, P. Geo.
Senior Geologist, Ontario Securities Commission

Technical Reports Filed Per Year (2005 to 2020)



Source: CSA plus S&P annual indexed metals price (Au, Ag, Cu, Ni, Co, Pt, Mo, Zn) N.B. 1996 = 1

Not All Technical Reports are Created Equal

- The quality of the technical report all comes down to the integrity, honesty, competence and experience of the QPs preparing the technical report

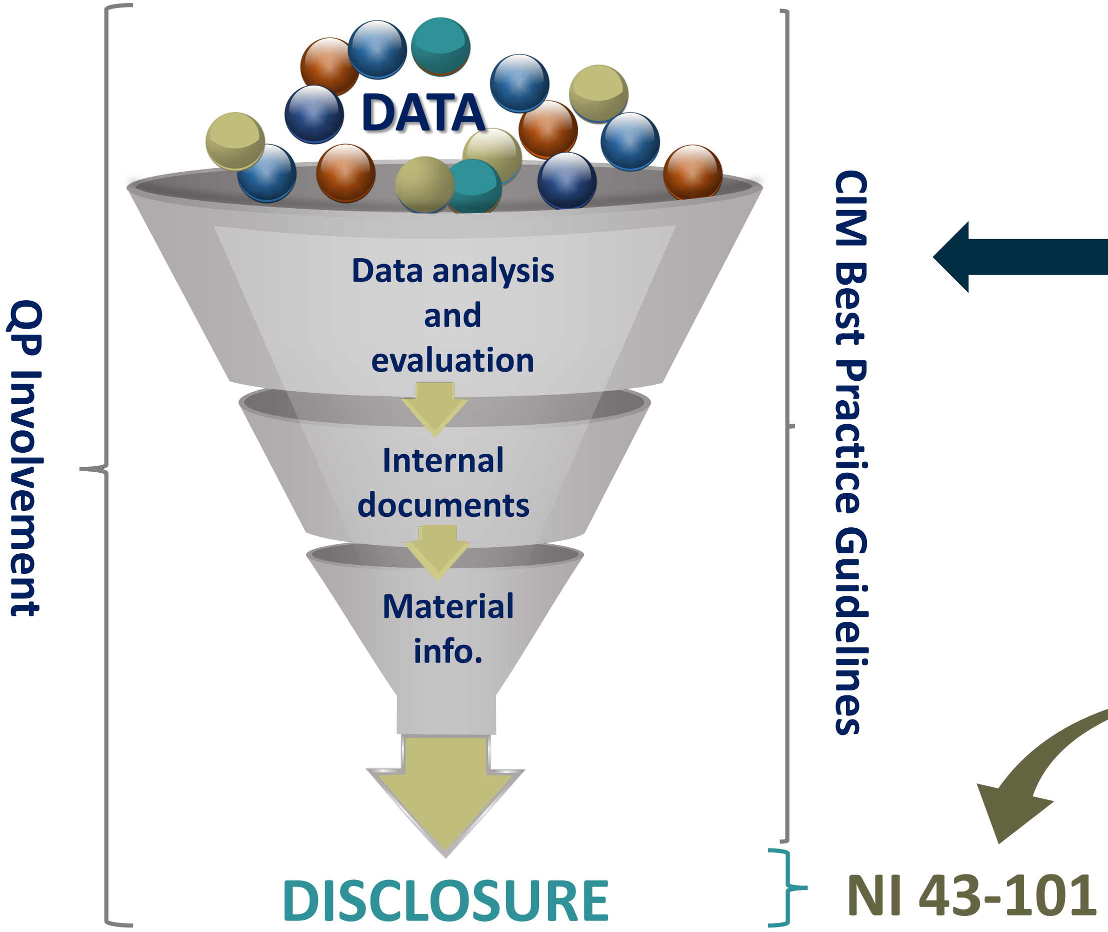
Misconceptions About Technical Reports

- Technical reports are “approved” by the regulator before being publically filed on SEDAR
- The company has a “43-101” report, so it must be a good property
- The technical report is over 500 pages long so it must be an advanced property and close to being in production
- How could the project fail? – it had a “43-101” technical report!

Remember:

- *NI 43-101 sets standards for <u>disclosure</u> of technical information*
- *The <u>QP</u> is responsible for the methods, assumptions, and judgements used for verifying, interpreting, and reporting of the technical information*

Assessing the Sources of Project Failure



❶ **IF** a problem occurs up here with the state of practice, such as:

- Data quality issues
- Misinterpretation of information
- Not following best practice guidelines
- Unrealistic assumptions
- Resource estimation issues
- Overly optimistic mining study forecasts

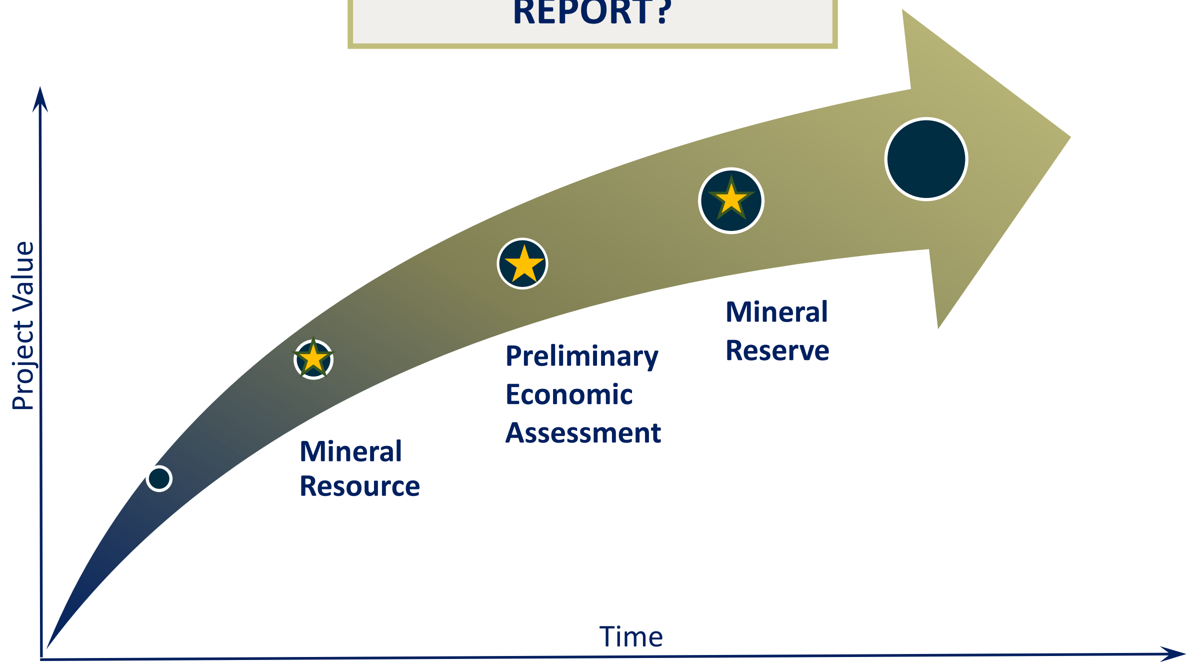
❷ **THEN**, the problem shows up down here in the technical report

❸ **BUT**, NI 43-101 can't fix problems with the state of practice – these problems need to be addressed by the QP before the disclosure is made

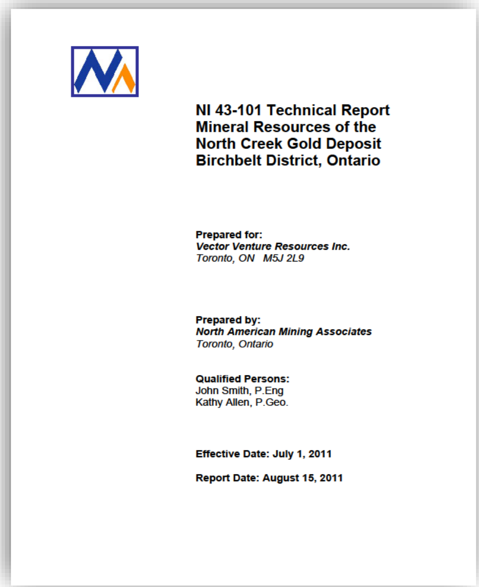
Process: Disclosure to Technical Report

DISCLOSURE → **DOES THE DISCLOSURE TRIGGER A TECHNICAL REPORT?** → **IF YES**

- News release
- MD&A
- AIF
- Offering document
- Website
- Presentation
- Social media
- etc.



“Milestones”



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

Prepared for:
Vector Venture Resources Inc.
Toronto, ON M5J 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

*Remember: disclosure **triggers** the report but it does not **govern** the report’s contents!*

"Milestones" Trigger Technical Reports

- **OSC SME Institute**

Property Milestones

- **First time disclosure of:**
  - Mineral resource
  - Preliminary economic assessment
  - Mineral reserve
- **Material change to any of the above**

Company Milestones

- **First time reporting in Canada**
- Filing of any of the following where the material technical information is not already supported by a current technical report:
  - 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

“All Material Information”

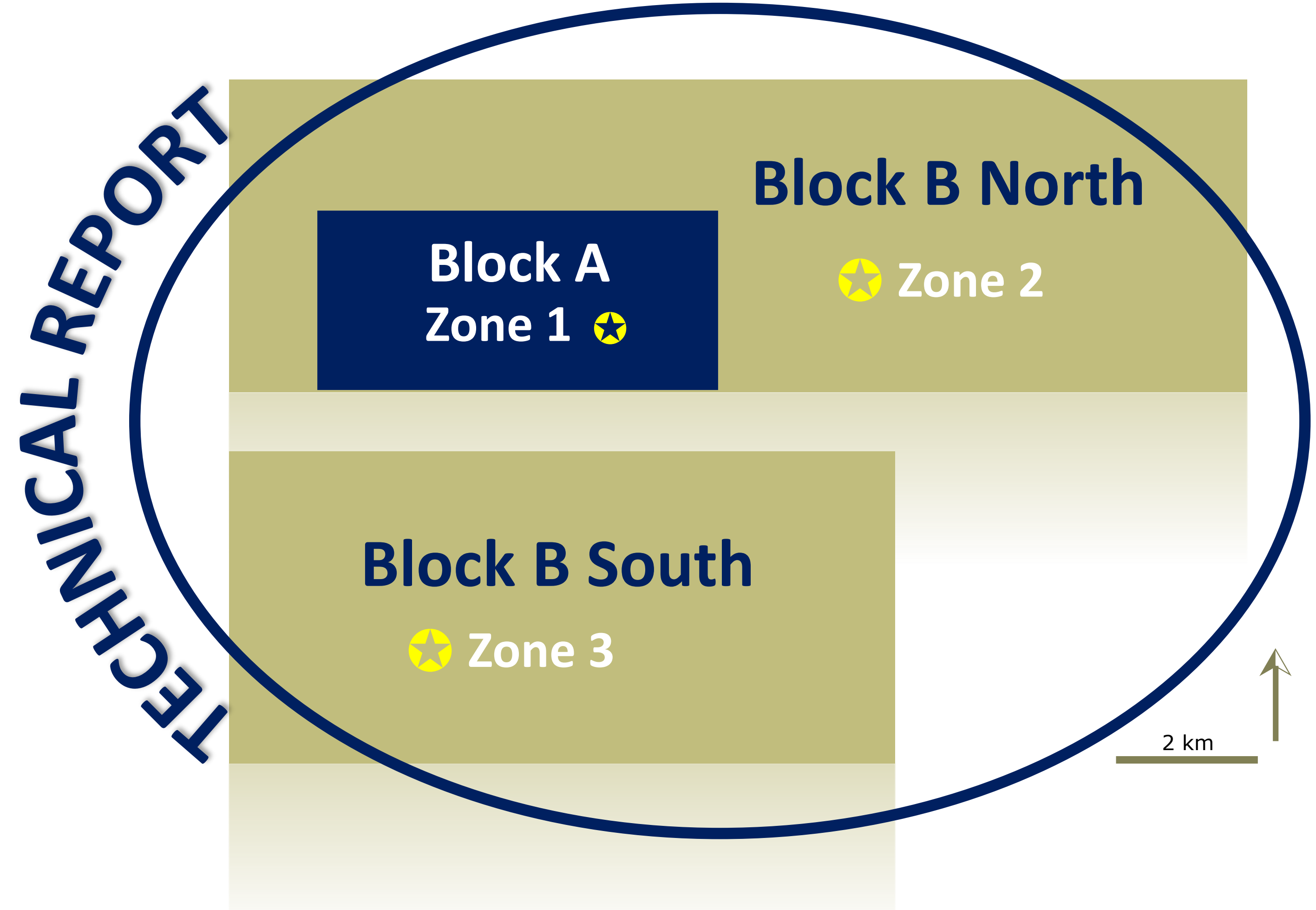
What does that really mean?

- **Even though a particular event (a resource estimate, for instance) *triggers* the report, it’s not the only piece of information the report must support**
- **It means the report must be a full description of what’s really going on at the property**
- **It also means there is no mechanism for a previous technical report to be “incorporated by reference” or relied on for disclosure of previous events**
- **The Instrument says:**
  - 1.1 – the definition of “technical report” says it “includes, in summary form, all material information” about the property
  - 8.1 (2) (i) – the QP’s certificate must state that the report “contains all material information” needed to ensure it’s not misleading…you have to mean it when you sign it

Mineral Property with Multiple Deposits

- **Can an issuer file separate technical reports for different deposits on the same mineral property?**
- **No – unless there is clearly a reason for the two deposits to be developed separately (for example, infrastructure, permitting, or patchwork ownership)**
- **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 <u>common infrastructure</u>
  - 4.2(8) - a technical report when filed must be complete and current and there should only be <u>one current technical report</u> on a property at any point in time

Example: Single Technical Report



Independent Technical Reports

Section 5.3

- **ALL QPs signing the technical report must be independent for the following triggers:**
  - First-time reporting issuer in Canada
  - Filing a preliminary long form prospectus
  - First time disclosure of a mineral resource, PEA, or mineral reserve
  - >100% change to an existing mineral resource or mineral reserve
- **Exemption from independence for a "producing issuer"**
  - **Gross revenue >$30 million in recent fiscal year; and**
  - **Gross revenue >$90 million in last three fiscal years**

Some Misconceptions about Independence

- **QPs have to be independent for all disclosure**
  - The independence requirement in s. 5.3 applies only to technical reports, not to routine disclosure
- **All technical reports need independent authors**
  - Section 5.3 spells out the times the authors must be independent
- **You cannot have a mixture of independent and non-independent authors**
  - If a report does not require independent authors, any mixture is acceptable
  - But…if it does require independent authors under s. 5.3, they all must be independent

Self-Assessment Questions for the QP

- 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?
- Have I considered approximate mining parameters and costs for reporting the resource estimates?
- Would informed investors understand the assumptions, factors, procedures used?
- Does the project's stage of development reflect the level of confidence in the underlying data?
- Have I considered and used all representative data, and if not, have I considered the advantages & risks in not doing so?
- 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 Mark Noppé - Xstract Mining Consultants - March 2014

Form 43-101F1

Item 1: Summary

Item 2: Introduction

Item 3: Reliance on Other Experts

Item 4: Property Description and Location

Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography

Item 6: History

Item 7: Geological Setting and Mineralization

Item 8: Deposit Types

Item 9: Exploration

Item 10: Drilling

Item 11: Sample Prep., Analyses and Security

Item 12: Data Verification

Item 13: Mineral Processing and Metallurgical Testing

Item 14: Mineral Resource Estimates

Item 15: Mineral Reserve Estimates

Item 16: Mining Methods

Item 17: Recovery Methods

Item 18: Project Infrastructure

Item 19: Market Studies and Contracts

Item 20: Environmental Studies, Permitting and Social or Community Impact

Item 21: Capital and Operating Costs

Item 22: Economic Analysis

Item 23: Adjacent Properties

Item 24: Other Relevant Data and Information

Item 25: Interpretation and Conclusions

Item 26: Recommendations

Item 27: References

Note: Items 15-22 are required for a technical report on an advanced property and may be relevant even if the property is not

When All Else Fails, Read the Instructions

1. Objective of a technical report is to provide a summary of the material information about the mineral property
2. Look at NI 43-101 definitions and rules
3. Report should be understandable to a reasonable investor
4. Items 1 to 14 and 23 to 27 for all properties plus 15 to 22 for "advanced properties"
5. Each report replaces the previous report, may summarize existing information, but QP still takes responsibility
6. QP determines the level of detail necessary for the report
7. Limited disclaimers allowed for information by non-QP experts
8. Appendices may be used - but keep them short
9. Remember to file the QP certificates and consents

Technical Reports – Practical Tips for QPs

Do's

- ✓ Make sure you have relevant experience
- ✓ Remember the purpose of the report
- ✓ Provide in summary form the material technical information about the property
- ✓ Use the 2014 CIM Definition Standards
- ✓ Follow the 2019 CIM Best Practice Guidelines
- ✓ Describe the risks and uncertainties
- ✓ Have the draft report peer reviewed

Do not's

- ✗ Assume all technical reports are reviewed by regulators when filed
- ✗ Forget the audience reading the report
- ✗ Use the technical report as a data dump
- ✗ Forget that there is only one current technical report at a point in time
- ✗ Neglect a proper summary section
- ✗ Ignore QP independence requirements
- ✗ Disclaim responsibility for technical data

British Columbia
Securities Commission

CURRENT EVENTS IN MINING DISCLOSURE

Chris Collins, B.Sc., P. Geo., MBA
Chief Mining Advisor, BC Securities Commission

What is Developing in Disclosure

- Review of Mineral Resource Estimates in Technical Reports CSA Staff Notice 43-311
- COVID-19 and Current Personal Inspections
- Securities Exchange Commission S-K 1300
- JORC under Review

CSA Staff Notice 43-311

CSA ACVM Canadian Securities Administrators Autorités canadiennes en valeurs mobilières

CSA Staff Notice 43-311

Review of Mineral Resource Estimates in Technical Reports

June 4, 2020

https://www.bcsc.bc.ca/securities-law/law-and-policy/instruments-and-policies/4-distribution-requirements/current/43-311/43-311-csa-staff-notice-june-4-2020

CSA Staff Notice 43-311

Why focus on MRE disclosure

- MRE disclosure is a significant mineral project milestone
- Several '*recent*' high profile MRE re-statements (downgrades) by companies with market profile
- MRE failure has direct investor harm and broader implications for industry integrity and confidence in capital markets
- CSA Staff are conscious of the wide variance in the '*quality of disclosure*' of MRE disclosure in technical reports

CSA Staff Notice 43-311

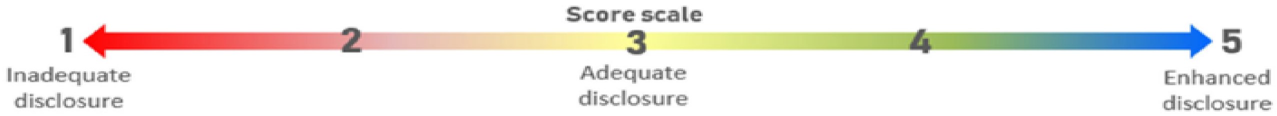
Purpose of the review

- Review compliance of MRE disclosure in technical reports
- Compare practice documented in the report against CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines*
- Provide guidance to ease the reporting burden for companies and QP's – provide clarity on regulator's expectations
- Identify potential improvements for consideration in future policy projects

******The 2003 CIM Best Practice Guidelines were used for this review. Subsequent to the review, an updated version of CIM Best Practice Guidelines was adopted by CIM Council on Nov. 28, 2019*

CSA Staff Notice 43-311

- **Scope and methodology**
- **Randomly selected 86 reports, disclosing initial or updated MRE**
  - Current property report at the time of the review
  - Filed subsequent to 2014 update to the CIM Definition Standards
  - Not an ‘advanced property’ report
- **Developed a ‘measurement system’ to evaluate 33 disclosure elements in 7 key disclosure ‘themes’**
- **Consulted with CIM MR/MR Committee & CSA Mining Technical Advisory & Monitoring Committee (MTAMC)**
- **Used a five-point scale to rate compliance, ‘quality & clarity’**



CSA Staff Notice 43-311

- 7 key ‘Themes’ used to assess disclosure
- QP’s relevant experience and technical report purpose
- Data verification and adequacy of data for use in an MRE
- Geological model and mineralization controls
- Data analysis
- Estimation and resource classification
- Reasonable prospects for eventual economic extraction
- Reporting results, sensitivities, risks and uncertainties in the estimate

CSA Staff Notice 43-311

Key Outcomes - Inadequate Disclosure:

- **Reasonable Prospects for Eventual Economic Extraction**
  - Disclosure of assumed mining & mineral processing methods and costs, metal recoveries, & constraints applied to the estimate
- **Data Verification**
  - Failure to verify or to disclose how data was verified; more problematic for data collected prior to the current owner
- **Risk Factors**
  - Ever project has unique set of risks; all projects have common risks - ‘boilerplate’ risk disclosure
  - Disclosure is potentially misleading if it omits meaningful known project specific risks
- **Sensitivities to Cut-off Grade**
  - Variations to the cut-off grade provide indication of the relative robustness of the estimate
  - All sensitivity cases must meet the test of reasonable prospects for eventual economic extraction
- **Qualified Persons Relevant Experience**
  - QP Certificate gives relevant experience; requires experience relevant to subject matter of project & report
  - Certificate must demonstrate the QP has sufficient relevant experience in resource estimation for the commodity, deposit type & situation

CSA Staff Notice 43-311

Example:

Reasonable Prospects for Eventual Economic Extraction (“RPE3”)

- Reasonably informed readers need complete disclosure of the assumptions used to understand how the deposit is an MRE with demonstrated RPE3, and not just a mineral inventory
- *To assess RPE3, the qualified person prepared an optimized open pit shell using the general technical and economic parameters listed below to constrain the estimated mineral resource blocks:*

Gold Price	US$ 1500.00 / oz.	Mining Cost	CAD$ 15.00 / tonne
Silver Price	US$ 18.00 / oz.	Processing Cost	CAD$ 2.50 / tonne
Gold Recovery	85%	G & A Cost	CAD$ 2.00 / tonne
Silver Recovery	45%	Pit Slope	45 degrees
Exchange Rate	US$ 1.00 = CAD$ 1.32		

- *For early stage projects QP’s can demonstrate RPE3 by comparing the subject deposit to analogous mine operations QP’s using analogy should:*
  - *Disclose the specific analogue(s) and why they apply to the property*
  - *Compare the key attributes of the subject deposit with the analogue*
  - *Adjust the cut-off grade of the MRE to reflect differences from the analogue*

CSA Staff Notice 43-311

Data Verification

Items 12 (a) to (c) of Form 43-101F1 requires the QP(s) describe the **procedures and steps taken <u>by the QP</u>** to verify the data used in the technical report ***(This applies to all QP's and all data)***

QP's must disclose their opinion on the adequacy of the data for the purposes used in the report

- *It is critical that QP's verify the integrity of data collected prior to the involvement of the current property owner/operator. In particular, if drill core, sampling and analytical information and QA/QC data acquired before the current owners involvement is no longer available*
- *QP's should understand the distinction between quality assurance programs and quality control data collected by the Company and their own independent data verification*
- *Although not a requirement, CSA Staff consider the current personal inspection an indispensable component of the data verification process; Staff think the QP responsible for the MRE should conduct a current personal inspection*

CSA Staff Notice 43-311

Example:

Qualified Persons’ Relevant Experience

Section 8.1(2) (c) of NI 43-101 requires a QP disclose a **brief summary of relevant experience.**

The Certificate of the QP responsible for the MRE should provide clear evidence demonstrating sufficient relevant experience in resource estimation including for the commodity, type of mineral deposit (or comparable) and the particular situation in the report.

Deficient Example:

“I have practiced as a professional geologist continuously since my graduation in 2004”

Better Example:

“My relevant experience is 36 years since graduation, including 22 years as a mine geologist and chief mine geologist in several mining operations in Canada, West Africa, Peru, Chile and Mexico. I have 14 years experience as a geological consultant in mineral project assessment, specializing in mineral resource estimation. I have experience relevant to mineral resource estimation of metal deposits. I have estimated mineral resources for greenstone-hosted gold deposits, epithermal gold deposits, porphyry copper-gold deposits, volcanogenic massive sulphide deposits and shear zone-hosted gold deposits located in Canada, Africa, USA and Mexico. Shear zone-hosted gold is the deposit model applicable to this mineral project and technical report”

CSA Staff Notice 43-311

Key Outcomes – Disclosure Strengths:

- **QA/QC Results and Analysis**
  - Disclosure of sample preparation & analysis and QA/QC protocols and results
- **Data Analysis and Statistical Methodologies**
  - Disclosure of data analysis support, compositing, treatment of outliers, variography & bulk density
- **Block model parameters and validation**
  - Disclosure of estimation method and the validation methods
- **Mineralization Controls and Geological Modelling**
  - Disclosure of geological & analytical datasets, geological setting, mineralization controls, & geological modelling methodology
- **Regulatory Outcomes from the Review**
  - Six technical reports required revision and refiling to add required supporting disclosure
  - Four reports required revisions to the MRE as result of professional practice issues:
    - One resulted in a downgraded resource category
    - One resulted in a reduced estimate of tonnage and grade
    - One complete re-estimation of resources with additional verification of data required
    - One retraction of the mineral resource estimate

COVID-19 and Current Personal Inspections

CSA ACVM Canadian Securities Administrators Autorités canadiennes en valeurs mobilières

CSA Staff Notice 51-360 (Updated)

Frequently asked questions regarding filing extension relief granted by way of a blanket order in response to COVID-19

First Published April 3, 2020; Updated April 16, 2020, May 1, 2020 and May 13, 2020

- All blanket orders granting filing extension relief in response to COVID-19 expired on August 31, 2020
- The CSA blanket orders provided extensions of time (an additional 45 days) to file technical reports
- Orders did not provide specific relief from NI 43-101 section 6.2 Current Personal Inspection
- However, Staff still hold out the guidance provided in the notice regarding Current Personal Inspections while still in a pandemic

COVID-19 and Current Personal Inspections

- Relief from the current personal inspection requirement in section 6.2 of NI 43-101 can only be made available through a formal application in accordance with **National Policy 11-203 *Process for Exemptive Relief Applications in Multiple Jurisdictions***
- CSA Staff do not think it is appropriate under any circumstance to consider exemptive relief from subsection 6.2(1) of NI 43-101 for a technical report that discloses:
    - An estimate of current mineral resources
    - A preliminary economic assessment
    - An estimate of current mineral reserves

  The current personal inspection is a critical path item for mineral resources & mineral reserves
- A current personal inspection need not always be completed by an independent Qualified Person
    - "Producing Issuers" are exempt from independence requirements
    - Companies that are not 'producing issuers' should carefully consider if the report requires independence
        - An update to mineral resources, PEA, or mineral reserves may not trigger independence requirements
        - Companies may be able to have internal qualified persons participate as a technical report author

COVID-19 and Current Personal Inspections

- For ***Early Stage Exploration Property*** (as defined in NI 43-101), s. 6.2(2) permits companies to file a report that defers the current personal inspection due to ***seasonal weather conditions*** only
- Legally, seasonal weather conditions ≠ pandemic related travel restrictions
- However, for Companies with an 'early stage exploration property' or a pre-resource stage property, that is not an 'early stage exploration property' , exemptive relief **may** be possible
- Since expiry of the COVID-19 relief orders, CSA Staff find that issuers are meeting their regulatory requirements in the current business environment
- Companies should reach out to their principal regulator

Qualified Persons' and Issuers do not have delegated regulatory authority to self-exempt

Ask for permission, if applicable, as opposed to 'begging for forgiveness"

Securities & Exchange Commission S-K 1300

History:

- June 2016; United States Securities & Exchange Commissions ("SEC") proposed rule S-K 1300
  - Feedback from public consultation - **'unnecessarily inconsistent'** with CRIRSCO and NI 43-101
- October 2018; SEC released final version of S-K 1300
  - Kept some of the consistent parts, revised or eliminated many others
  - Feedback - **'significant improvement'** over rule proposed in 2016
  - Two year phase-in period with required compliance effective January 1, 2021
  - SEC Industry Guide 7 - is no more!

Securities & Exchange Commission S-K 1300

- S-K 1300 sets out the disclosure requirements SEC registrants **<u>must</u>** follow in their 'core' documents filed with the SEC
- The rule refers to alignment with CRIRSCO but **does not** specifically reference the 2017 SME Guide

66344 **Federal Register** / Vol. 83, No. 246 / Wednesday, December 26, 2018 / Rules and Regulations

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 229, 230, 239, and 249

[Release Nos. 33–10570; 34–84509; File No. S7–10–16]

RIN 3235–AL81

Modernization of Property Disclosures for Mining Registrants

AGENCY: Securities and Exchange Commission.

ACTION: Final rule.

SUMMARY: We are adopting amendments to modernize the property disclosure requirements for mining registrants, and related guidance, currently set forth in Item 102 of Regulation S–K under the Securities Act of 1933 and the Securities Exchange Act of 1934 and in Industry Guide 7. The amendments are intended to provide investors with a more comprehensive understanding of a registrant's mining properties, which should help them make more informed investment decisions. The amendments also will more closely align the Commission's disclosure requirements and policies for mining properties with current industry and global regulatory practices and standards. In addition, we are rescinding Industry Guide 7 and relocating the Commission's mining property disclosure requirements to a new subpart of Regulation S–K.

DATES: *Effective date:* The final rule amendments are effective February 25, 2019, except for the amendments to 17 CFR 229.801(g) and 229.802(g), which will be effective on January 1, 2021.

Compliance date: Registrants engaged in mining operations must comply with the final rule amendments for the first fiscal year beginning on or after January 1, 2021. Industry Guide 7 will remain effective until all registrants are required to comply with the final rules, at which time Industry Guide 7 will be rescinded.

FOR FURTHER INFORMATION CONTACT: Elliot Staffin, Special Counsel, in the Division of Corporation Finance, at (202) 551–3430, U.S. Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549.

SUPPLEMENTARY INFORMATION: We are amending 17 CFR 229.102 ("Item 102 of Regulation S–K") under the Securities Act of 1933 ("Securities Act")[1] and the Securities Exchange Act of 1934 ("Exchange Act"),[2] adding new exhibit (96) to 17 CFR 229.601(b) ("Item 601 of Regulation S–K"), adding new 17 CFR part 229, subpart 229.1300 ("subpart 1300 of Regulation S–K"), amending 17 CFR 230.436 under the Securities Act, amending Form 1–A,[3] amending Form 20–F,[4] and rescinding 17 CFR 229.801(g) and 229.802(g) under the Securities Act and Exchange Act.

Table of Contents

I. Introduction

On June 16, 2016, the Commission proposed revisions to its disclosure requirements and related guidance under the Securities Act and Exchange Act for properties owned or operated by mining companies to provide investors with a more comprehensive understanding of a registrant's mining properties to help them make more informed investment decisions.[5] The Commission also proposed to modernize its disclosure requirements and policies for mining properties by more closely aligning them with current industry and global regulatory practices and standards.[6] The Commission's disclosure requirements are currently

[1] 15 U.S.C. 77a *et seq.*

[2] 15 U.S.C. 78a *et seq.*

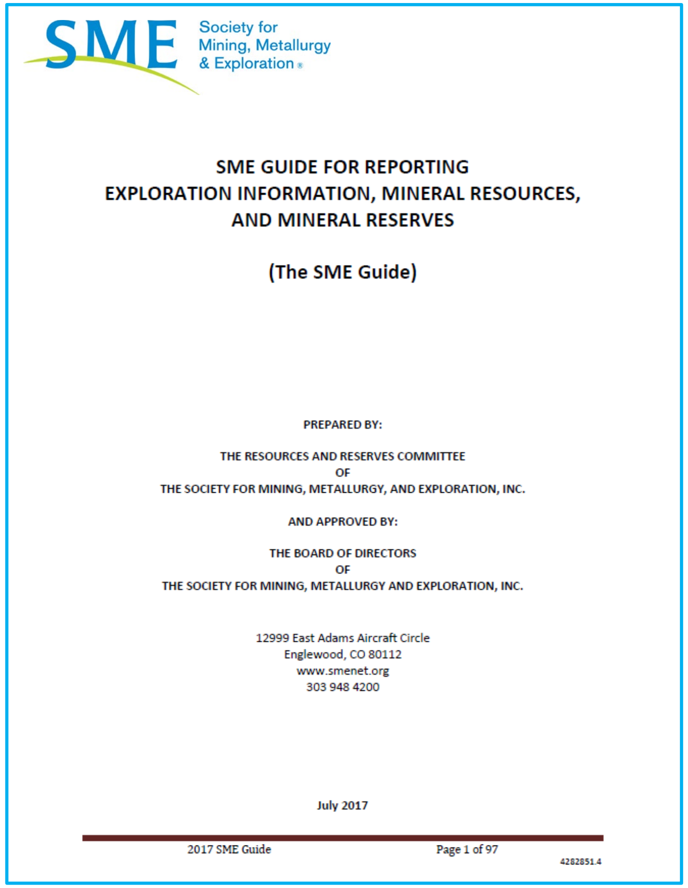
[3] 17 CFR 239.90.

[4] 17 CFR 249.220f.

[5] *See* Modernization of Property Disclosures for Mining Registrants, Securities Act Release No. 33–10098 (June 16, 2016) [81 FR 41651] ("Proposing Release").

[6] We proposed to modernize our disclosure requirements for mining properties following a request by some industry participants to revise Guide 7. *See* Petition for Rulemaking from Society for Mining, Metallurgy and Exploration, Inc. to Elizabeth M. Murphy, Secretary, U.S. Securities & Exchange Commission (Oct. 1, 2012), ("SME Petition for Rulemaking"), *http://www.sec.gov/rules/petitions/2012/petn4-654.pdf.* In accordance with 17 CFR 201.192 (Rule 192 of the Commission's Rules of Practice), the Secretary of the Commission will notify the petitioners of the action taken by the Commission following the publication of this release in the **Federal Register**.

≠



SME Society for Mining, Metallurgy & Exploration

SME GUIDE FOR REPORTING
EXPLORATION INFORMATION, MINERAL RESOURCES, AND MINERAL RESERVES

(The SME Guide)

PREPARED BY:

THE RESOURCES AND RESERVES COMMITTEE
OF
THE SOCIETY FOR MINING, METALLURGY, AND EXPLORATION, INC.

AND APPROVED BY:

THE BOARD OF DIRECTORS
OF
THE SOCIETY FOR MINING, METALLURGY AND EXPLORATION, INC.

12999 East Adams Aircraft Circle
Englewood, CO 80112
www.smenet.org
303 948 4200

July 2017

2017 SME Guide — Page 1 of 97

4282851.4

Securities & Exchange Commission S-K 1300

S-K 1300 does check many of the NI 43-101 ‘boxes’

- ☑ Qualified person
- ☑ Materiality standard
- ☑ Exploration information
- ☑ Exploration target
- ☑ Historical estimate
- ☑ Reasonable metal price
- ☑ Mineral resource
- ☑ Inferred in an economic analysis
- ☑ Prefeasibility study
- ☑ Mineral reserve
- ☑ Technical report summary

ONLY *Multi-jurisdictional Disclosure System (MJDS) eligible companies are* ***exempt*** *from S-K 1300 requirements*

(approx. 30-40 “seasoned” Canadian mining companies)

Securities & Exchange Commission S-K 1300

Scope of S-K 1300 versus NI 43-101

- **S-K 1300**
  - Applies only to SEC registrants
  - Applies only to certain SEC filings – 10-K, 20-F, S-3, S-4, F-1, F-3, Reg. A
  - Excludes disclosure in websites, press releases, corporate presentations and other marketing materials
  - Only Technical Report Summaries must be attributed to a qualified person
  - MJDS exemptions for eligible Canadian companies
- **NI 43-101**
  - Applies to all ‘issuers’ including private companies
  - All technical disclosure must comply, including websites, social media etc.
  - All technical disclosure must be attributed to a qualified person
  - MJDS exemption for eligible US companies

Securities & Exchange Commission S-K 1300

Question:

Would a qualified person under S-K 1300 be '*acceptable*' under NI 43-101?

It is possible, however . . . .

- No independence requirement under S-K 1300
- No specific academic degree requirements under S-K 1300 (defers to professional associations)
- No list of acceptable professional associations
- No requirement to name the qualified person, except in certain circumstances

Cross-listed companies will need to make sure their QP's meet all the specific requirements and designations under NI 43-101

Securities & Exchange Commission S-K 1300

Question:

Would mineral resources reports under S-K 1300 be 'acceptable' under NI 43-101?

Yes, however…

- MRE's require an 'initial assessment' under S-K 1300
    - "Initial Assessment is a preliminary economic and technical study to support the disclosure of a mineral resource. It is a basically a "*PEA" without reporting the DCF metrics*
- Disclosure of an initial assessment with an economic analysis is permitted
    - May include inferred resources but must also report excluding inferred resources

CSA Staff Observations:

1) It 'appears' that more rigor is required for estimating resources
2) Economic analysis disclosure may trigger a technical report under NI 43-101 for cross-listed companies

Securities & Exchange Commission S-K 1300

Question:

Would a Technical Report Summary prepared under S-K 1300 be '*acceptable*' under NI 43-101?

It may be possible, however…

- Table of contents is different, but in general the disclosure items are similar.
- No qualified person certificates are required.
- Filing is only required annually, with the Annual Report (Form-20F)

CSA Staff have yet to review many 'Technical Report Summaries'. Proceed with caution.

Securities & Exchange Commission S-K 1300

S-K 1300 Technical Report Summary versus NI 43-101, Form 43-101F1 Technical Report

SEC Table of Contents (229.601)		NI 43-101F1 Table of Contents		
1	Executive Summary	1	Summary	All Properties
2	Introduction	2	Introduction	
3	Property Description	4	Property Description and Location	
4	Accessibility, Climate, Local Resources, Infrastructure and Physiography	5	Accessibility, Climate, Local Resources, Infrastructure and Physiography	
5	History	6	History	
6	Geological Setting, Mineralization, and Deposit	7	Geological Setting and Mineralization	
		8	Deposit Types	
7	Exploration	9	Exploration	
		10	Drilling	
8	Sample Preparation, Analyses, and Security	11	Sample Preparation, Analyses and Security	
9	Data Verification	12	Data Verification	
10	Mineral Processing and Metallurgical Testing	13	Mineral Processing and Metallurgical Testing	
11	Mineral Resource Estimates	14	Mineral Resource Estimates	
12	Mineral Reserve Estimates	15	Mineral Reserve Estimates	"Advanced Property" (Reserves (based on a PFS or FS), or Resources (a PEA))
13	Mining Methods	16	Mining Methods	
14	Processing and Recovery Methods	17	Recovery Methods	
15	Infrastructure	18	Project Infrastructure	
16	Market Studies	19	Market Studies and Contracts	
17	Environmental Studies, Permitting, and Plans, Negotiations, or Agreements with Local Individuals or Groups	20	Environmental Studies, Permitting and Social or Community Impact	
18	Capital and Operating Costs	21	Capital and Operating Costs	
19	Economic Analysis	22	Economic Analysis	
20	Adjacent Properties	23	Adjacent Properties	All Properties
21	Other Relevant Data and Information	24	Other Relevant Data and Information	
22	Interpretation and Conclusions	25	Interpretation and Conclusions	
23	Recommendations	26	Recommendations	
24	References	27	References	
25	Reliance on Information Provided by the Registrant	3	Reliance on Other Experts	

JORC Update 2021

Australasian Joint Ore Reserves Committee (JORC) news release December 4, 2020

JORC Chair: Mr Steve Hunt
www.jorc.org
Secretariat c/- AusIMM
Phone +61 3 9658 6100
PO Box 660 Carlton South VIC 3053
Email: contact@jorc.org

Online Survey seeking comment for the 2021 review and update of the JORC Code released for public submissions

The Australasian Joint Ore Reserves Committee (JORC) has today released for public submission an online survey seeking comment ahead of the 2021 review and update of the JORC Code.

Submissions are open online at http://www.jorc.org/code-update.asp until 12th February 2021.

The survey is the next step of the review process and will be followed by a summary issues paper to be circulated at the end of April 2021. Further industry feedback will then be sought before finalisation of the updated code.

LUNCH BREAK

British Columbia
Securities Commission

MODERATED PANEL SESSIONS: INSIGHT, QUESTIONS, DISCUSSION

Moderator: Victoria Yehl, M.Sc., P. Geo.
Senior Geologist, BC Securities Commission

PANEL SESSION 1:
THE QUALIFIED PERSON & LIABILITY

Dentons, BCSC, AMF

PROFESSIONAL GOVERNANCE & RECENT CASES

Brian Abraham, Q.C., P. Geo.
Dentons Canada LLP

Professional Governance Act

- Sets standards for ethics, duties, responsibilities and governance structures
- Proposed Code of Ethics 7:
  - "Provide professional opinions that distinguish between facts, assumptions and opinions."
- Engineering and Geoscience firms are regulated
- Mandatory continuing education, 60 hours on a three year rolling average
- Annual area of practice verification

Recent Cases

Glen Macdonald, P. Geo.

- Disclosure of information regarding “reserves” contrary to Section 2.2(a) of NI 43-101
- News release failing to properly describe inferred resource
- Negligent by not maintaining competence in relation to NI 43-101
- Result: four months’ suspension, requirement to pass the exam, costs of $5,000, not to act as a QP

Recent Cases

Vivian Park, P. Geo.

- Alleged unprofessional conduct, incompetence or negligence in the preparation of a technical report, resource estimation when not qualified, misrepresented prior technical information
- Result: three month suspension, probation for one year as a QP, act on resources and reserves only under QP supervision a qualified person, complete course on mineral project reporting under NI 43-101

Recent Cases

Robert Unger, P. Eng.

- Hearing for failing to respond to a practice review questionnaire
- Result: a $5,000 fine, Association costs of $10,969.64 (60% of its actual costs) and completion of a practice review questionnaire prior to reinstatement

David Howard Drover

- Drover sent unprofessional emails in tone and content and acted in an abusive, harassing and vulgar manner during an AGM and published blogs that were unprofessional in tone and content
- The Alberta Professional Engineers and Geologists cancelled his registration as did Engineers and Geoscientists BC

大成 DENTONS

SECONDARY MARKET LIABILITY

Kimberly E. Burns, Partner
Dentons Canada LLP

Secondary Market Liability

- **What is secondary market liability?**
  - Defined terms for misrepresentation, expert
- **Why do we have this concept in Canada?**
- **What is the process for the public, the issuer, and the expert when there is a misrepresentation?**
- **How to protect yourself:**
  - Defences
  - Tools to consider for your practice

Thank you

Dentons Canada LLP
250 Howe Street
20th Floor
Vancouver, British Columbia V6C 3R8
Canada

Dentons is the world's largest law firm, delivering quality and value to clients around the globe. Dentons is a leader on the Acritas Global Elite Brand Index, a BTI Client Service 30 Award winner and recognized by prominent business and legal publications for its innovations in client service, including founding Nextlaw Labs and the Nextlaw Global Referral Network. Dentons' polycentric approach and world-class talent challenge the status quo to advance client interests in the communities in which we live and work.
www.dentons.com

大成 DENTONS

British Columbia Securities Commission

OSC ONTARIO SECURITIES COMMISSION

AUTORITÉ DES MARCHÉS FINANCIERS

PANEL SESSION 2:
DATA VERI*FICTION* & PERSONAL INSPECTIONS

BCSC, OSC, AMF

Item 12: Data Verification

- **The level of data verification needs to reflect what the data supports**
  - (e.g. No data verification = No mineral resource estimate)

- **Describe the data verification by the QP**
  - Steps taken by the QP to verify the data used in the technical report
  - Any limitations on data verification, or failure to verify, and reasons why
  - QP's opinion on the adequacy of the data for the purposes used in the technical report

- **Example: QP's opinion on data verification:**
  - "Based on the data verification performed, it is the QP's opinion that the collar coordinates, downhole surveys, lithologies, and assay results are considered suitable to support the mineral resource estimation"

Example: Types of Data Verification

Visit due diligence

- Drill collar locations
- Logging and sampling facilities
- Core storage
- Inspection of drill core recovery and mineralization
- Independent sampling, if appropriate
- Laboratory visit, if appropriate

- Drill collar coordinates
- Down-hole deviations
- Lithology and alteration
- Assay data
- Error checks

"Assume nothing … check everything … trust no one."

Harry Parker, AMEC - May 10, 2004

Data Verification

- **Item 12: Data Verification**
  - Item 12(a) to (c) in Form 43-101F1 requires a description of the procedures and steps taken by the QP to verify the data used in the technical report, including any reasons for limitations or failures to verify data, and provide the QP's opinion on the adequacy of the data for the purposes used in the technical report
  - Historical Data: A key issue is how the QP deals with verifying the integrity of data collected before the current owner, especially if the historical sampling, analytical, and QA/QC data is missing, or historical core is not available for resampling
- **Important link between data verification and the current personal inspection**
  - Item 2(d) in Form 43-101F1 (Introduction) requires a description of the details of the personal inspection on the property by each qualified person (at least one QP)
    - While not a requirement, the QP responsible for the resource estimate should perform a site visit

Example: QP's Opinion on Data Verification

- *Drill collar locations*
- *Collar downhole surveys*
- *Drilling protocols*
- *Logging protocols*
- *Sampling protocols*
- *QA/QC protocols*
- *Assay data validation*
- *Bulk density*
- *Interpretation methodology*

- "The qualified person visited the Property on July 13, 2019. The site visit was complemented by a review of digital documents and databases both before and after the visit. The purpose of this site visit was to get an overview of the Property, complete independent check sampling of drill core, assess the compliance of the work being conducted, and provide guidelines, if needed, to ensure the project was ready for an initial mineral resource estimate prepared under NI 43-101"
- "A drilling program was underway at the time of the site visit. Special emphasis was placed on the following items: …"
- "Overall, the qualified person is of the opinion that the site visit and subsequent data verification exercises and check sampling described above demonstrated that the database is of sufficient quality to be used for the mineral resource estimate."

BREAK

PANEL SESSION 3: RISK DISCLOSURE, INCLUDING ESG

BCSC, OSC, TMX, TSX-V

Example: Specific Risk Factors

“There are several known risks which would materially affect the potential development of the Project including the risk of not being able to secure the necessary government permits for development and operation of the Project.

Following a change in the government, demonstrations and road blockades of mining projects occurred sporadically throughout the country, including the Company’s Project. Access to the Project has been limited since March 2019, and key water-use permits from the government have been declined.

Table XXX provides a risk factor matrix in which environmental and social risk elements were considered. The most significant risks arising from the lack of government permits will impact the project schedule, mining operations, water management, infrastructure, and capital cost escalation.”

PANEL SESSION 4:
POTPOURRI AND GENERAL Q&A

All Presenters

Thank you for attending!