Overview of NI 43-101 and Mining Disclosure Basics

Standards of Disclosure for Mineral Projects

Craig Waldie, P.Geo., Senior Geologist, Corporate Finance
Jim Whyte, P.Geo., Senior Geologist, Corporate Finance

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## Presentation outline

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Questions and Answers
Canadian Regulators

“Better the devil you know ...”
Canadian Securities Administrators

- **Every Province & Territory has its own Securities Act**
  - Independent agencies reporting to finance ministers
  - Self funded through market participation fees
  - Protect investing public from unfair, improper and fraudulent practices

- **Canadian Securities Administrators (CSA)**
  - Umbrella organization
  - Role is to coordinate & harmonize capital market regulation
  - Develops National Instruments which are securities rules that have been adopted by all provincial & territorial securities commissions
Provincial oversight of mining companies

~1,455 mining companies in 2020

ON 22%
BC 67%
QC 6%
AB 5%

11 Technical review staff
- BCSC - 3
- OSC - 2
- AMF - 1
- TSX - 1
- TSX-V - 3
- IIROC - 1

TSX, TSXV, NEX, CSE
Canadian regulatory landscape for mining companies

Securities Commissions (OSC, BCSC, …)

Stock Exchanges (TSX, TSX-V, …)

Securities Commission oversight of Exchanges

Strong linkage in NI 43-101

CIM Definitions Standards & Best Practices

Professional Associations (APGO, PEO, …)

Exchanges retain IIROC to carry out timely disclosure rules

IIROC

Securities Commission

Mining Company

Reliance on professional association’s ethics and disciplinary powers for qualified person oversight
CIM Definition Standards (May 2014)

- CIM Definition Standards for Mineral Resources & Mineral Reserves
  - Definitions and guidance for resources, reserves, and mining studies used in Canada

CIM Definition Standards are incorporated by reference directly into NI 43-101
CIM Best Practice Guidelines

Exploration

**Principle-based guidance**
- It's not a cookbook!
- Does not provide prescriptive solutions to specific situations
- But, significantly updates and modernizes previous guidance
- Many more topics covered

What does NI 43-101 say about using best practice guidelines?

- **General Guidance (6) of Companion Policy 43-101CP**
  - Qualified person is **not** specifically required to follow best practice guidelines
  - **However**, a qualified person acting as a “professional”, will generally respect best practices as established by CIM or similar organizations in other jurisdictions
  - Companies that disclose technical information not conforming to best practices could be making **misleading disclosure**
  - Misleading disclosure is an **offence** under securities legislation

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**Note:**
*Regulators may challenge a company’s disclosure if it appears to deviate from published industry best practice guidelines*
NI 43-101 and the Role of the Qualified Person
Nothing happens without money and confidence

- All mining companies require money to survive
- Companies with no revenue from production require money from investors through the capital markets
- Investors need to have confidence in the information reported by companies, and confidence that the capital markets are fair
- Confidence comes from:
  - Quality work by knowledgeable, experienced, and ethical professionals (qualified person)
  - Level playing field based on a clear set of rules, definitions, and best practices (NI 43-101 and CIM)
  - Transparent public reporting (technical report)

Once public confidence is lost it is very hard to get it back
Role of NI 43-101 Disclosure

- Requires that public disclosure of technical information is:
  - Based on reliable and verified data
  - Based on reasonable assumptions which are defendable and clearly explained
  - Based on professional opinions which consider industry best practices
  - Consistent in the use of standard industry terms and definitions
  - Balanced in the way it conveys material issues and potential risks
  - Reported in a manner which is understandable to a reasonable investor
  - Signed off by a qualified person who is responsible for the information

NI 43-101 sets minimum standards for “Disclosure” of technical information
It does NOT set standards for “professional practice” by the qualified person
NI 43-101: What it’s not

• **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
NI 43-101 – CSA and CIM partnership

**Law**
- National Instrument 43-101
- Form 43-101F1 Technical Report

**Policy**
- Companion Policy 43-101CP
- CIM Best Practice Guidelines

**Set by regulators (CSA)**
- CIM Definition Standards

**Set by industry (CIM)**
- Must be followed
- Should be followed
What are the core principles of NI 43-101?

QP’s role as a “gatekeeper”:
• QPs play a critical “gatekeeper” role in public protection and maintaining confidence in public markets
• NI 43-101 can only function as intended if QPs understand their role in upholding the public interest
3 “E”s of a Qualified Person (plus 1)

+ **Experience**
Geoscientist or engineer with a university degree related to exploration or mining.
At least 5 years experience in exploration or mining, and relevant experience in the subject matter.

**Education**
Geoscientist or engineer with a university degree related to exploration or mining.

**Ethics**
Professional association recognized by law in Canada, or a foreign association listed in NI 43-101.

**Expertise**
Proficiency with the disclosure obligations of NI 43-101 and awareness of the CIM best practice guidelines.
Professional practice vs. disclosure

1. IF a problem occurs here related to professional practice and the QP’s “professional judgment”
   - Data quality and verification
   - Misinterpretation of geological info.
   - Not following best practice guidelines
   - Unrealistic assumptions
   - Resource estimation issues
   - Overly optimistic mining study forecasts

2. THEN, problems shows up in the disclosure required by NI 43-101

3. BUT, NI 43-101 can’t fix problems with professional practice – the QP needs to address these problems before the disclosure is made
Disclosure from Exploration to Production

Dos & Don'ts
Mineral project stages

- Exploration
- Mineral Resource
- Preliminary Economic Assessment
- Mineral Reserve
- Production

Time

Project Value

Technical Report Trigger
Exploration stage

**Dos**
- ✓ 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

**Don’ts**
- × Report visual estimates of grade
- × Selectively reporting “up to” results
- × Omit stating true widths of drill intervals
- × Smear 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 resource stage

**Dos**
- ✓ 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

**Don’ts**
- ✗ 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
Preliminary economic assessment stage

**Dos**
- ✓ 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

**Don’ts**
- ✗ Disclosure an economic analysis on an exploration 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 reserve stage

**Dos**
- ✓ Provide the effective date
- ✓ Report both tonnes and grade
- ✓ Provide key assumptions, parameters, and methods
- ✓ Account for all the modifying factors
- ✓ Note if resources are reported inclusive or exclusive of reserves
- ✓ Make use of section 3.5 of NI 43-101

**Don’ts**
- ✗ Report only contained metal
- ✗ Report gross metal values
- ✗ Use non-compliant reserve modifiers, or report estimates without categories
- ✗ Report combined resources and reserves
- ✗ Convert inferred resource to reserves
- ✗ Ignore CIM Definition Standards and CIM Best Practice Guidelines
Technical Reports:

*Basics*
Technical reports filed/year (2001 to 2020 est)

Commodity Super Cycle
Capital Crisis

S&P annual indexed metals price
(Au, Ag, Cu, Ni, Co, Pt, Mo, Zn)
Annual nonferrous exploration budgets (1996-2020)

Source: COVID restrictions push exploration budgets down 11% in 2020 (Sep 25, 2020)
Misconceptions about technical reports

✖ Technical reports are “approved” by the regulator before being filed on SEDAR
✖ The company said their technical report was “43-101 compliant”, so it must be, right?
✖ The technical report is over 300 pages, 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 minimum standards for disclosure, not standards for professional practice by the QP
• The QP is responsible for the methods, assumptions, and judgements used for verifying, interpreting, and estimating the technical information
“Milestones” trigger technical reports

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 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

"Property success or revision triggers"
"Company event triggers"
Format of a technical report

Early stage property (exploration / resources)
• Use Items 1-14 and 23-27

Advanced stage property (PEA on resources / reserves / production)
• Use all Items 1-27 including:
  15. Mineral Reserves
  16. Mining Methods
  17. Recovery Methods
  18. Project Infrastructure
  19. Market Studies and Contracts
  20. Environmental Studies, Permitting and Social or Community Impact
  21. Capital and Operating Costs
  22. Economic Analysis

Instruction for Items 16 to 22
• PEA, PFS, and FS generally analyze and assess the same geological, engineering, and economic factors with increasing detail and precision
Top 5 deficiencies: technical report (Form F1)

• **Item 3: Reliance on other experts**
  • Must be limited to legal, political, environmental, or tax experts (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 and 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
Additional Topics
Website disclosure – Pitfalls (% non-compliance)

- **Exploration target** (79%)
  - Failing to express the target as a range of tonnes and grade
  - Missing cautionary language

- **Historical estimate** (60%)
  - Lack of information about the source and date of the historical estimate
  - Missing cautionary language

- **Naming the QP** (58%)
  - QP needs to be named and their relationship to the company

- **PEA** (56%)
  - Lack of information about taxes
  - Missing cautionary language about the use of inferred resources
  - Unknowingly triggering a technical report

- **Mineral resource and mineral reserve** (50%)
  - No information about metal price assumptions and cut-off grades
  - Unclear if mineral resources include or exclude mineral reserves

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**CSA Staff Notice 43-309**
Review of Website Investor Presentations by Mining Issuers (April 9, 2015)
Regulatory burden report – November 19, 2019

107 recommendations!

- Mining disclosure prospectus pre-file review
  - Review of previously filed technical disclosure
  - Helps increase deal certainty and reduce risk of technical disclosure wrecking a short form prospectus offering
    - OSC Staff Notice 43-706 (June 6, 2019)

- Confidential pre-file review of prospectuses
  - Modelled after the SEC quite filing process
  - Review of all documents required with the prospectus filing
  - Provides issuers and dealers with greater control over the prospectus offering
    - CSA Notice 43-310 (March 5, 2020)
Review of mineral resource estimates in technical reports – June 4, 2020

Stay tuned for details in the next webinar!

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Thank You!

Craig Waldie  
*Senior Geologist*  
416-593-8308  
cwaldie@osc.gov.on.ca

Jim Whyte  
*Senior Geologist*  
416-593-2168  
jwhyte@osc.gov.on.ca