Environmental, Regulatory and Stakeholders Affairs for Exploration Properties

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Nunavut Mining Symposium 2014

OBJECTIVES

- To share a few insights into non- technical factors that may influence decisions on acquisitions
- To encourage you to compile and centralize non-technical information as part of your workplan and be better prepared to package this information
- To provide sources of information that are in the public domain (free)
- (Total of 29 slides)

Why Pay Attention To Non-technical Aspects Of An Exploration Project?

- Nothing replaces good geology
- More than ever, this is a competitive global investment environment
  - Non-technical aspects of a project are becoming increasingly part of risk-based decision making process
  - More cautious approach to investment with less tolerance for risks
  - A more comprehensive and detailed attention is paid to potentials costs, issues and risks : DE-RISKING your project
- A comprehensive risk analysis will often be done by specialized and experienced professionals and they will each have a list of specific questions or concerns.

How Much And What To Do? Who May Be Interested?

Global company? International investor? How much context is needed? Think in terms of costs, risks and opportunities.

- Don’t assume that the reader of your information package knows what is obvious to you
- A suggestion: Info mine provides news bulletin on a commodity or region: for example Gold News Digest or Africa News Digest
- Increasingly, these news digest highlights non-technical issues
- A good way to become informed of risks related to other regions

A Few Comments About a Risk-based Approach

Look at your project with the eyes of a potential developer even at an early stage of exploration

- Risk discussion: context, severity, frequency, likelihood, cause and relevant stakeholder, external or internal risk control, mitigation
- Data or knowledge that reduces uncertainty provide more clarity and usually reduces the perception of risk: DE-RISKING
- Context: can provide a framework to discuss risk and provide perspective

An Example of a Checklist…

- Geological resources, metallurgy, processing
- Data that may be relevant or useful to Mine design: geotechnical data (groundwater and permafrost), overburden characterization
- First Nations and Inuit Associations
- Logistics and access
- Infrastructure, power supply, sources of water
- Human resources and suppliers
- Regulatory regime
- Exploration permits and licenses
- Development permits and licenses
- Environmental context and red flags: work completed to date
- Legal and reputational issues
- Legacy from previous transactions
- Stakeholders: communities, communication records

Prepare a list of questions and answers

- Be ready to answer routine and difficult questions with facts
- Example:

  Q: *We hear that it is costly and difficult to complete an IBA with First Nations in Ontario/Quebec/BC/NWT*.

  Part of your answer could be: “Based on NRCAN information, X numbers of MOU and X number of IBA have been completed with the exploration and mining companies. Here is a copy of a successful IBA completed in 201X. “

  Q: *We hear that it is difficult to permit a mine in BC/Ontario/ Quebec/NWT/Nunavut.*

  Part of your answer could be: “Since 2000, X number of mines Certificates and Water Licenses have been issued. Here is a copy of the process with timelines as set by the permitting agency. The agencies are experienced and the process quite clearly defined.”

- Security- a Canadian advantage
- Political Context-a Canadian advantage
- Private land owner compensation/expropriation: an increasingly challenging issue in other jurisdictions
- Tax exemptions/ incentives
- Regulatory Regime- a Canadian Advantage in terms of corruption, well defined process and demonstrated success
- Manpower, energy (power), service providers, suppliers and skilled labor usually available and dependable

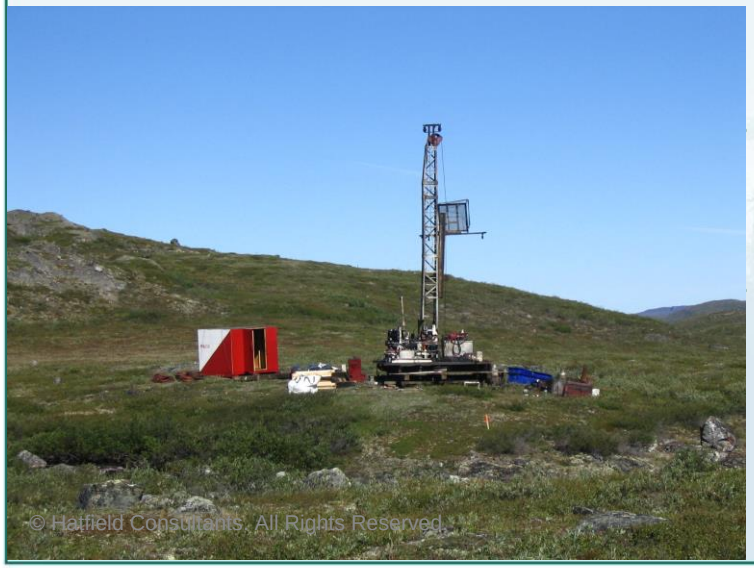
Packaging information

Packaging Your Technical Data And Material

- Data archives and project history
- Organization of pre-digital era data, reports and map
- Reconciliation of map projections and software
- Archive/data storage architecture - intuitive and logical
- File naming procedures (include “old” documents that have been scanned)
- Summary and overviews to document decisions and strategies
- Secure data storage
- If possible, adopt a professional and specific format and templates for your own products

Geological Data- Planning Ahead

- Geotechnical and structural information: core / samples relevant to pit design/underground: modeling of overburden (FS a good source of information or examples)
- Information relevant to rock competency or structural geology (pit wall stability and pit design)
- Groundwater information: related to pit dewatering and water treatment
- ARD and ML: data from tests or samples preserved appropriate (to in a locations where they may be available



Permafrost : thermistor installation in deep holes

Confirmation drilling: no ore located under proposed infrastructure (PEA and PFS projects)

Packaging your Non-Technical Data Material

- Create a list of non-technical topics relevant for your project
- Plan to have answers/documentation ready to handle the questions from a global company or international investor
- Identify sources of information specific to your jurisdiction
- Start compiling material and routinely check your sources for updates and new information
- Collect hard copies of “free” material or pdf of reference material (NIRB Guides for example, AADNC Land Use Permit, Nunavut Water Board or Planning Commission, Inuit Association, NLUC)
- Set up a “ Binder” or folder for each non-technical topic with a Table of Contents and an overview /summary for each section

Human Resources and Logistics

- Organizational chart of your team with title or position, qualifications for internal and external human resources (employees, contractors, consultants, community or aboriginal resources), salaries/fees may be requested
- Average mobilization costs, points of hire and general camp operation information
- Suppliers and service providers, range of costs and availability, possibly copies of the contracts (drillers, helicopter contracts, internet/phone, power, catering, and others)
- Hiring strategy if you have one, agencies or programs that may be involved with hiring: Economic Development Officer, hiring incentive programs for example
- Relevant Legislations for your jurisdiction (O. H. S. legislation for example as this affect crew rotation)
- Health and Safety Plan, Emergency Response Plan, H&S statistics
- Remote sites: provide context in terms of other similar projects
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Land Tenure and Land Uses

- Land Tenure maps, surface and subsurface rights maps, contact and context.
- Other users and land use status (residences, forestry, oil and gas, fishing lodges, trap lines for example)
- Do make a statement about land owner/residential relocation even is none is expected (this is a significant issue in some countries and becoming increasingly challenging)
- Land Use Plans from First Nations or Inuit Regions, regional land uses plans, wildlife management plans (EAs and DEIS/FEIS provide good overviews and references)
- A map showing an area larger than your claim area is helpful to provide context

Permits and Licenses

- Overview Table with permit names and number, issuing agencies, duration and renewal dates, forecasted costs of renewal, possible data needed for renewals or if it is a “routine” process, compliance requirements
- Copies of all permits and licenses organized logically by agencies and chronologically
- Information about who supported your team if relevant (legal team or consultant)
- Copies or information about legislations that apply (websites or copies i.e. Land Use Guidelines, Waters Act , Metal Mines Effluent Regulations)
- Compliance reports and audit reports, inspection reports
- Sometimes photographs are helpful (water withdrawal site, incinerators for example)

Environmental and Regulatory Aspects
Sources of information

- All regulatory agencies have websites showing review process diagrams, brochures or guides for proponents and for the public: collect copies or pdf files. Collect hard copies at events such as this one: they provide information and also highlight the degree of sophistication and maturity of our Canadian agencies (NIRB guidelines, AADNC guidelines for example).
- Websites for First Nations, Metis Organizations, Inuit Associations provide a wealth of information and documents: build a library
- Land Use Plans (Sahtu FN, Kivallik Inuit Association, Nunavut Land Use Plan for example)
- Specific Engagement Protocols (Kluane Lake FN for example)
- Information exchange/data sharing with other companies operating in your area

Sources of Information

- Preliminary Economic Assessment, Pre-Feasibility and Feasibility Reports, 43-101 reports
- Public Registry for Nunavut Impact Review Board, Nunavut Water Board, YESAB, YWB, BC EAO and others
- NIRB regular updates (subscribe to receive) and others
- Regional Land Use Plans usually provide overview and main areas of concerns and red flags
- NRCAN, Environment Canada, Renewable Resources Departments have extensive list of publications, climate data, hydrology data (Water Survey Branch)
- Linked In: Follow Companies of interest, join Groups of interest

Public Registries for Project under Review or Approved

- *A lot of information has likely been compiled for other projects in near yours and most of the information is in the public domain*
- Previous application for Environmental Certificate and Water Licenses are posted on public registries- do provide references
  - Regulatory overview section with schedule examples
  - Tables listing permits and licenses needed in each jurisdiction
  - Lists of federal, provincial, territorial Acts, regulations, and responsible authorities
  - Useful references including websites for spatial information
  - Taxes, closure-related expectations: reclamation bonding expectations

Environmental Assessment (EA) Documents

- An EA – or a Environmental Impact Statement in Nunavut (DEIS or FEIS) contains significant amount of environmental, regulatory and community information, maps and tables.
- Regional overviews provide a high level context
  - Overview of the regulatory process for the jurisdiction of interest
  - List of permits and licenses needed for a development project
  - List of Acts and Regulations that applies to their project
  - Baseline data for both physical and socio economic environments
  - Consultation overviews and consultation reports (BC)

EA or EIS Baseline Sections

- Climate Data: annual and monthly temperature and precipitation, wind information (from Environment Canada or project specific climate station)
- Terrain hazards, permafrost and general surficial geology (AADNC, Geoscience Offices, Geological Survey of Canada, NRCan)
- Watershed map, hydrology and surface water data
- Fisheries data
- High Level Habitat Maps and Species of Interest: potential habitat of high value presence or absence (caribou for example- calving grounds, migration routes, proximity of parks, conservation areas, etc.)
- Listed Species – rare, endangered or protected

EA/EIS as Sources Of Information

- Community profiles, maps, statistics, regional and local summaries and overviews, services and population statistics
- Overview of socio-economic context and potential issues
- Chapters on consultation, documentation process and documentation of issues
- Regional maps, regional scale summaries and overviews and possibly area-specific information if near your project
- First Nation or Inuit communities overview, history and information
- Other Sources: Statistics Canada, Community website, Chamber of Commerce website

Advanced Projects: IBAs and MOU

- Natural Resources Canada publications and website
- Aboriginal Participation in Mining Information Products
- Interactive Map of Aboriginal Mining Agreements developed in partnership with Aboriginal Affairs and Northern Development Canada, shows where agreements are taking place across the country and provides specific information on exploration projects and mines, Aboriginal communities, and the types of agreements signed between communities and mining companies: hundreds of success stories
- Copies of recent IBAs in the public domain for example the IIBA between the Qikiqtani Inuit Association (QIA) and Baffinland Iron Mines Corporation (Baffinland) with the proposed Mary River mine in September 2013

"BC exploration companies have spend an average of 26% of their budget on consultation related costs"

"Financial Post - Dec. 2012: 170 legal victories empower First Nations in fight over resource development"

- If 26% is the average, what are the factors that favored the lower range of these costs and the upper range?

Staying informed about risks and opportunities

No Surprises should be your motto

- Chamber of Mines newsletters, Chamber of Commerce newsletter, key stakeholders, communities and other companies Facebook sites, local media relevant to your project
- Google local and national media routinely with key words relevant to your project: save relevant articles routinely in a folder or binder, particularly related to law suits and document success stories, follow companies on Linked in, possibly receive news digests for Infomine (global perspective)
- Subscribe or follow local papers, follow projects regulatory agency such as NIRB, relevant NGOs, First Nations or Inuit Associations

A Few Tips

Do your stakeholders have a website or Facebook site? Follow them, copy and keep relevant pages/postings.

There should be an alignment between messages to shareholders and stakeholders: managing expectations

Do you have an internal communication and external communication plan?

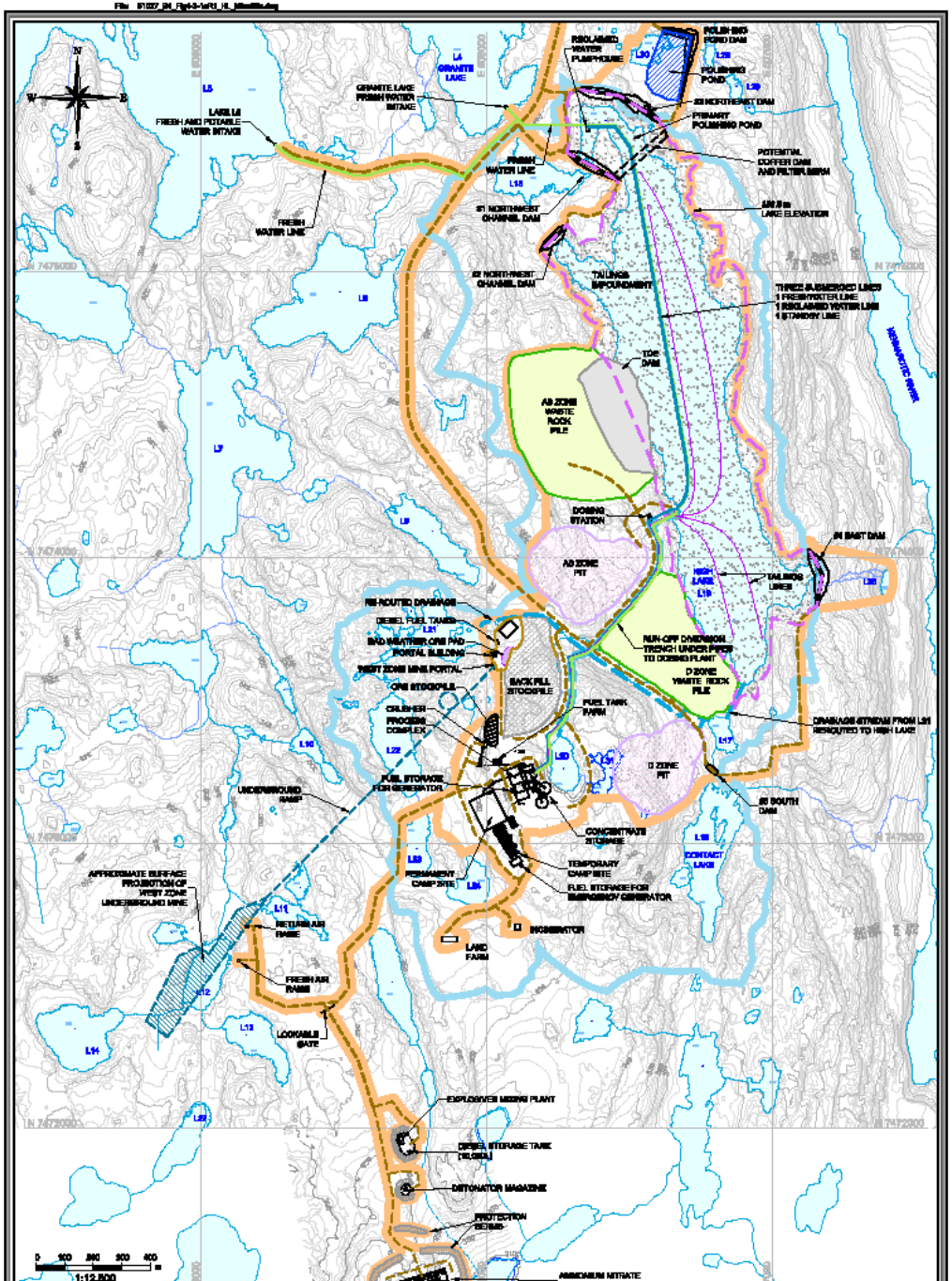
Have you considered training at least one person on your team for such a role?

- Document phone calls, meetings, discussions, track action items, develop a standard form to record who, what, when and where, any topic agreed upon or issue to follow up. Track Action Items. Keep your promises.
- Maintain a current contact list of stakeholders and a folder or binder with all records of contact, meeting minutes, action items
- Include this topic in your regular meeting agenda at all levels to ensure an consistent approach to external communication

- Social media and Facebook and others: do you have a policy? Do you employees or contractors know the risks around posting potentially damaging photos or comments (what is “funny” can also be “risky”)?
- Do you have a Facebook site or Linked in Company account? Do you need one?
- Keep up with events in the communities, Inuit Associations and First Nations near your project: elections (new Chief and Council members, position statements, MOU or IBA signed, other project approval (new power line in NE BC for example will likely improve the attractiveness of advanced exploration projects
- Look for modest and manageable opportunities to contribute to and build up your reputation with communities, Inuit Association and First Nations (sponsor a Science Fair award for example, offer to give a public talk or school talk in a community nearby)

Early Site-Specific Environmental Baseline Data Collection

- The first consideration for baseline programs should be the those that require multi-years of data or that are related to high profile issues
- A desk top study can provide a solid starting point and identify high profile issues (wintering caribou habitat, calving ground location)
- A watershed map is usually one of the first planning tool (can be done internally)
- Multi-year data: water quality sampling, hydrology data and climate data
- Field programs that are very footprint specific (archaeology) can usually wait until a PEA or PFS is completed.
- Taking advantage of drilling programs: geotechnical and overburden characterization, groundwater and in some cases permafrost investigations (thermistors), sampling needs and preservation of samples for ARD and ML


GRANITE LAKE
GRANITE LAKE FRESH WATER INTAKE
LAKE LII
FRESH AND POTABLE WATER INTAKE
FRESH WATER LINE
RECLAIMED WATER PUMPHOUSE
POLISHING POND DAM
POLISHING POND
SE NORTHEAST DAM
PRIMARY POLISHING POND
POTENTIAL COFFER DAM AND FILTER BERM
PRIMARY WATER LINE
SE NORTHWEST CHANNEL DAM
NE NORTHWEST CHANNEL DAM
TAILINGS IMPOUNDMENT
THREE (3) BURIED LINES
1 FRESH WATER LINE
1 RECLAIMED WATER LINE
1 STANDBY LINE
TOE DAM
AB ZONE WASTE ROCK PILE
DOSING STATION
AB ZONE PIT
NE EAST DAM
TAILINGS LINES
RUN-OFF DIVERSION TRENCH UNDER PIPE TO DOSING PLANT
D ZONE WASTE ROCK PILE
RE-ROUTED DRAINAGE
DIESEL FUEL TANKS
MAIN WAREHOUSE PAD
PORTAL BUILDING
WEST ZONE MINE PORTAL
ORE STOCKPILE
BACK FILL STOCKPILE
CRUSHER
PROCESS COMPLEX
FUEL TANK FARM
DRAINAGE STREAM FROM LIII RESOUTED TO HIGH LAKE
D ZONE PIT
FUEL STORAGE FOR GENERATOR
UNDERGROUND RAMP
SE SOUTH DAM
CONCENTRATE STORAGE
CONTACT LAKE
TEMPORARY CAMP SITE
PERMANENT CAMP SITE
FUEL STORAGE FOR EMERGENCY GENERATOR
APPROXIMATE SURFACE PROJECTION OF WEST ZONE UNDERGROUND MINE
INCINERATOR
LAND FARM
RETURN AIR RAISE
FRESH AIR RAISE
LOCKABLE GATE
EXPLOSIVES MIXING PLANT
DIESEL STORAGE TANK (TYP.)
DETONATOR MAGAZINE
PROTECTION BERMS
AMMONIUM NITRATE
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1:12,500

Thank you for your time during this busy week enjoy the res of your time in Iqaluit.

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