

Proudly presents...

# Board Risk Oversight

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## Agenda

- Objectives of Board Risk Oversight
- Two companies: Cameco and SGI
- Description of SGI's journey to board risk oversight
- Discussion of Cameco's board and committee oversight of risk
- Questions and discussion



# Objectives of Board Risk Oversight

## Ensure:

- **Management thinks about risk in a systematic way**
  - in developing strategy and business plans
  - in conducting operations
- **The corporation has a “risk aware” culture**
  - recognition that reward comes with risk
  - conscious decision to take risk
- **Understanding of significant risks**
  - mitigation strategies and status of work
- **Verification**

# ► How to Meet Objectives?

- Understand and approve the system to identify, mitigate and monitor risks
- Ensure process is supported and resourced
  - buy-in from the top
- Oversee significant risks
  - collateral benefit – better understanding of the business
- Receive verification

## ► Different Companies – Different Risks

Cameco	SGI
- Nuclear business	- Insurance business
- Many countries	- Inherent in business
- Mining risks	- Investment portfolio

# SGI Prior to ERM Program

- Risk Register – how did it function?
- What involvement did the board take?
- Who controlled the process?
- Was it effective?
- Board concerns?

# The Decision

- What drove the discussion?
- Why is it important?
- What regulations impacted the organization?
- Was it necessary to get a consultants report?
- How important was Board buy in? Senior Management?

# ERM Implementation

1. To Have a Risk Committee, or Not?
  - Why put the spotlight on risk?
  - How is it working out?
  
2. How is the Committee Structured? Terms of Reference?
  - What does the committee want/expect from Sr. Mgmt at the meetings?



# ERM Implementation Con't

3. Fulfill or Governance and Oversight Responsibilities?
  - Role of Board vs. role of Management?
4. A Risk Manager? CRO? Reporting Structure?
  - President as CRO; CFO responsible for ERM process
  - Single risk owners; annual process

# Other Questions You May Want to Ask Yourself

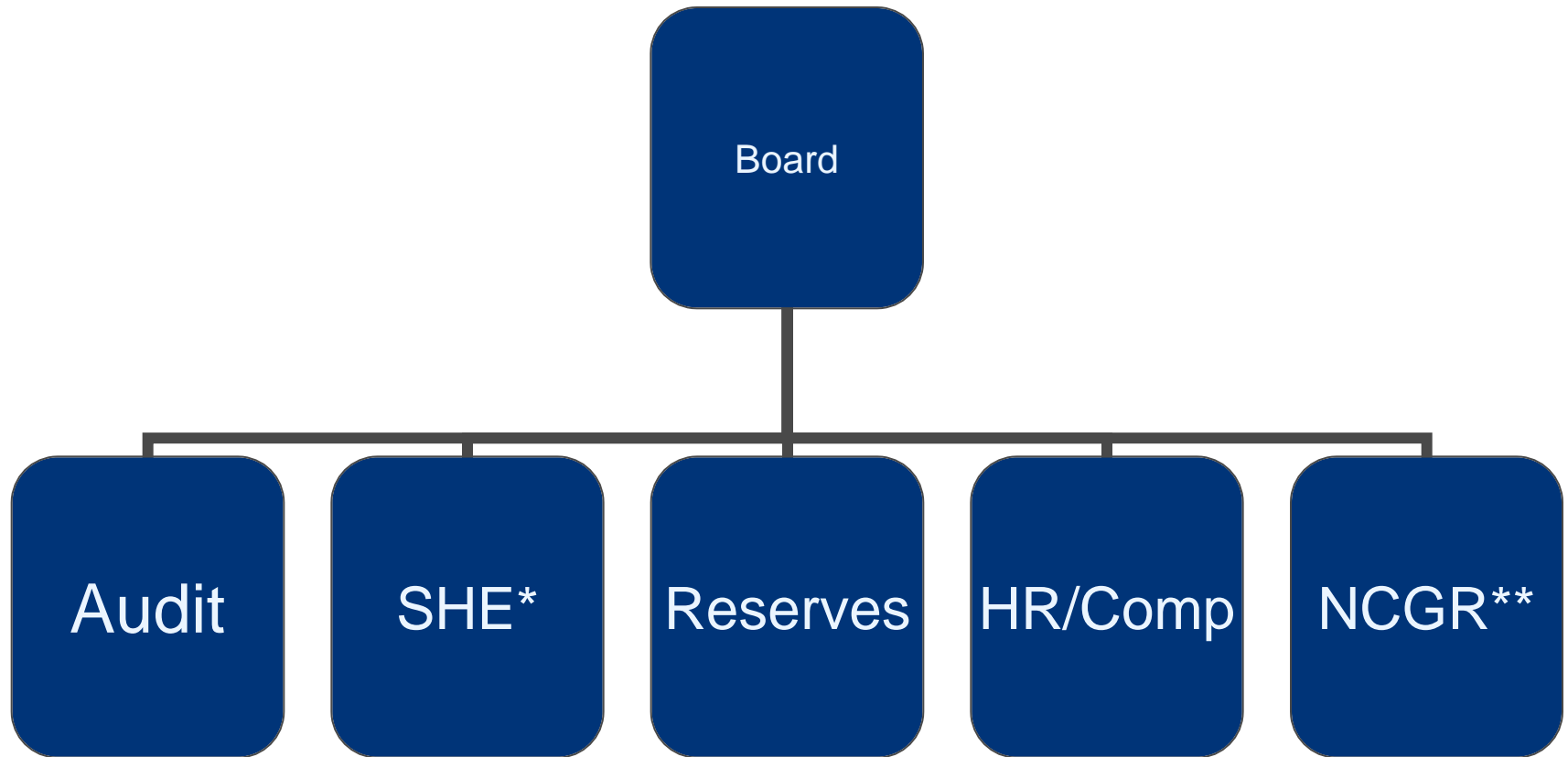
- Where does the Risk Manager fit in within the organization?
- How does internal Audit fit within the process?
- How is the committee structured? Terms of reference?
- How do we structure the Meetings?
- How does the internal reporting work?
- Is enough emphasis being placed on upside risk?

# Other Questions You May Want to Ask Yourself Con't

- Support for the Department?
- How do we change culture?
- Fulfill or governance and oversight responsibilities?
- Training of the committee members?
- Structure within the organization?
- Does this align with strategy?
- What mitigation strategies are important?  
How does this fit within the reporting structure?



# Cameco Governance



\*Safety, Health and Environment

\*\*Nominating, Corporate Governance and Risk

- Includes most (but not all) committee chairs
- Responsible for risk oversight process

# ► Why NCGR?

- **Audit committee is overloaded**

- Then:
  - ◆ SOX
    - certification
    - internal controls
- Now: IFRS

- **Right people**

- Audit
  - financial experts
- Risk
  - broader expertise

# Risk Management at Cameco

- **ERM process under VP, Risk and Audit**
  - with internal audit and SHEQ\* audit
- **ERM – oversight and coordination of risk management throughout Cameco**
  - Risk policy and corporate risk program
- **SHEQ Audit**
  - SHEQ operational audits
  - supports operations in implementation of ERM
- **Internal Audit**
  - internal controls (financial and non-financial)

\*Safety, Health, Environment & Quality

## Risk Matrix

Frequency		Consequences					
5	<b>Very Likely</b> Expected to occur more than once a year (≥ 1:1 or 100% chances of occurrence/year)	5	10	20		40	60
4	<b>Quite Likely</b> Expected to occur several times during lifetime of facility (1:3 or 10% to 30 % chances of occurrence/year)	4	8	16		32	48
3	<b>Somewhat Likely</b> Expected to occur once during lifetime of facility (≤1:10 or 1% to 10% chances of occurrence/year)	3	6	12		24	36
2	<b>Unlikely</b> Not expected to occur once during lifetime of facility (1:1000 or 0.1% to 1% chances of occurrence/year)	2	4	8		16	24
1	<b>Extremely Unlikely</b> Extremely unlikely to occur once during lifetime of facility (≤1:1000 or <0.1% chances of occurrence/year)	1	2	4		8	12
		<b>1 Insignificant</b>	<b>2 Minor</b>	<b>4 Moderate</b>		<b>8 Major</b>	<b>12 Catastrophic</b>
<b>Measures of Success</b>	Safe, Healthy and Rewarding Workplace	First-aid injury, area radiation level exceeds administrative level	Medical-aid injury, radiation dose exceeds administrative level	Lost-time injury with recovery, radiation dose exceeds action level		Fatality, permanent disability, radiation exceeds dose limit	Multiple fatalities, exceeding emergency dose limits
	Clean Environment	Negligible	Incident exceeds company standard and/or internal administrative level	Reportable incident, regulatory action limit exceeded		Localized or reversible environmental damage	Wide spread environmental contamination
	Financial Performance	\$10k to < \$100k	\$100k to < \$1M	\$1M to < \$10M		\$10M to < \$100M	>\$100M
	Supportive Communities	Negligible impact on reputation and support of stakeholders; legal action threatened; regulatory warning.	Brief local negative attention; somewhat unsupportive stakeholders; civil action commenced; regulatory directive.	Brief regional negative attention; unsupportive stakeholders; criminal action threatened; regulatory stop work order; temporary operational shutdown.		Brief international negative media attention; prolonged regional negative attention; overtly unsupportive stakeholders with public expression of lack of support; criminal lawsuit commenced against organization/or officers/directors; regulatory charge; operational shutdown for extended period of time.	Prolonged international negative attention; stakeholders lose faith in Cameco; license withdrawn; jail term for director or officer.

# **ERM Process**

- **Identification of risks**

- Integrated top-down and bottom-up process
- coaching provided by ERM group
- consider inherent risks (before mitigation) and residual risks (after mitigation)

- **Top risks and emerging risks**

- voted by management from top residual risks
  - ◆ Currently 47 risks on register
- dynamic process
  - ◆ Risks removed/added as situations change



# **ERM Process**

- **Aligned with Strategic Planning Process**
- **Three tier risk register**
  - top risks – board/committee oversight
  - mid risks – senior management oversight
  - lowest risks – site management oversight

# ERM Process

## ● Continuous improvement

- Development of risk policy for entire organization
  - ◆ Adopted ISO 31000 in 2010
- Linkage to business continuity planning
- Tiered risk register
- Awareness, coaching and education
- Linkage between internal audit and risk validation
- Every 5 years – external review and benchmark
  - ◆ Occurring in 2012
- Research and lessons learned (e.g. Fukushima, BP)

# ► Board Oversight

- Oversight of process delegated to NCGR committee
  - How do sites respond to requests?
  - What processes assist in rich understanding?
  - What worked last year (and what didn't work)?
  - How is senior management involved?

Tone at the Top Matters!

# ► **Process Oversight (to NCGR)**

- **Quarterly report**

- Status of risk management program
- Status of annual cycle
  - e.g. this quarter coaching/awareness/education to operations and corporate departments on ERM
- Buy-in at all levels

- **Annual review May - July of each year**

- Reported to Q3 meeting

# Board Oversight

- **Oversight of specific top risks**
  - allocated to appropriate committees
    - ◆ E.g. Water inflow risk reported to SHE
  - what is the risk (in the context of the heat map)
  - what is the remediation plan?
  - status of implementation of remediation plan - dashboard

# ► Board Oversight

- **Committee chair or board chair can elevate to full board**
- **Committee chairs meet annually to review process and consider improvements**



# Board Oversight Allocation of Risks to Committees of the Board

Allocation to the Board Committees							
Residual Risk Rating	Board*	Audit	HR/Comp	NCGR	Reserves Oversight	SHE	Total Risks
Top & Emerging	N/A	1	1	N/A	5	3	10
40 - 60	N/A	3	3	N/A	1	0	7
30 - 39	N/A	3	1	N/A	0	2	6
20 - 29	N/A	4	2	N/A	0	13	19
Under 20	N/A	0	0	N/A	0	5	5
Total Risks	0	11	7	0	6	23	47

**\*Note: Committee Chairpersons responsible for raising significant risks to full board level**

# **Verification**

- **Conversations with management**
  - Management requests – audits, assessments, reviews, etc.
- **Internal audit department**
  - Verifies mitigation strategies
- **Regular site visits**
- **Subject matter experts – conduct reviews and assessments**
  - Internally and externally



# Conclusion

## Objectives

- ✓ Systematic approach to risk
- ✓ Risk aware culture
- ✓ Understanding of significant risks
- ✓ Verification

Are we done?

 **No!**

- **Black Swans**
  - Business continuity plan
  - Crisis management plan
- **And the process is continuous improvement**