Presentation to the Select Committee: risks and benefits of hydraulic fracturing
Overview

- Oil and gas projects
- Sectors
- Assessment process
- Mining projects
- Purpose and requirements of YESAA
- Expertise
- Participation
- Decision Bodies and documents
Oil and Gas Projects

- 10 oil and gas projects assessed to date
- None involved modern hydraulic fracturing methods
- Modern hydraulic fracturing is an activity that would be subject to the assessment process under YESAA
Sectors

- Energy - oil and gas, electricity, nuclear (104)
- Mining - placer, quartz, coal (609)
- Land development - residential, commercial, industrial (319)
- Forestry (26)
- Transportation - roads, rail, marine, air (170)
- Telecommunications (4)
- Water / wastewater (46)
- Contaminants and Waste (122)
- Agriculture and Aquaculture (72)
- Research / Wildlife Management (19)
- Other Industrial Activities (81)
Three Levels of Assessment

Designated Office (DO) Evaluation
1701 assessments completed since November 2005

Executive Committee Screening
4 assessments completed since November 2005
3 assessments currently underway

Panel of the Board Review
not been used to date
Hydraulic Fracturing—assessment levels

**Designated Office**
- exploration or other activity in relation to exploration for oil or natural gas
- drilling, operation, modification, decommissioning or abandonment of or activity in relation to:
  - an oil or natural gas well,
  - natural gas processing plant,
  - plant for liquefaction or storage of natural gas
  - oil or natural gas field facility
  - oil or natural gas pipeline

**Executive Committee**
- processing plants for sour, sweet, liquefied natural gas - of a certain magnitude
- storage plant for natural gas – storage capacity of certain magnitude
- oil or natural gas pipeline of a certain length, off-shore or in fresh water
Assessment Process

**Project / Activity**
- **Access**
  - road and trail construction/maintenance, water crossings, barge landing, airstrip
- **Exploration**
  - surveys, drilling, trenching, test pits, explosives
- **Operation**
  - clearing land, moving earth, tree cutting/removal, excavation, resource extraction, construction/installation/manufacturing, water use, human presence, camp, waste management, fuel use, tourism, research, seismic
- **Reclamation**

**Effects**
- Negative and/or Positive
  - Magnitude
  - Geographic Extent
  - Duration
  - Likelihood of occurrence
  - Reversibility
  - Context
  - Frequency

**Significance**

**Values**
- **Environmental**
  - Air Quality
  - Environmental Quality
  - Fish & Fish Habitat
  - Soil Quality
  - Water Quality
  - Wildlife & Wildlife Habitat
- **Socio-economic**
  - Access
  - Aesthetics
  - Business Values
  - Property Values
  - Employment
  - Health & Safety
  - Heritage Resources
  - Land Interest
  - Timber Resources
  - Traditional/Contemporary Lifestyle
  - Wilderness Experience

**Mitigation**
Mining Projects – our experience

• Information requirements
  – Baseline information
    • Surface water quantity and quality information
    • Groundwater flow and quality information
    • Geotechnical information
    • Wildlife and habitat

• Guides for proponents
  – Water Information Requirements for Quartz Mining Project Proposals
Values

- Water resources
- Wildlife and wildlife habitat
- Soils
- Vegetation
- Public health and safety
- Heritage resources
- Community
YESAA – Purpose (s. 5)

- To provide a neutral process done at arms length from governments
- To protect environmental quality and heritage resources
- To ensure socio-economic as well as environmental factors are considered
- To guarantee opportunities for public and First Nation participation
Matters to be Considered (s. 42)

- Purpose of the project
- All stages of a project
- Environmental or socio-economic effects of project (in or outside of Yukon)
- Adverse cumulative environmental or socio-economic effects
- Alternatives to the project
Matters to be Considered (s. 42)

- Mitigative measures
- Protection of First Nations’ rights, special relationship to the environment, cultures, traditions, health and lifestyles
- Interests of residents of Yukon and Canadians outside of Yukon
Expertise Used in Assessments

- Assessment team
- Government experts
- Interested persons
- Research and training
- Technical and traditional knowledge experts
Participation in Assessments

- Guaranteed opportunity for First Nations, individuals and groups to provide comments on projects being assessed
- Media can assist in creating public awareness which can lead to increased participation rates
Decision Bodies

- First Nations with self-government agreements
- Territorial Minister
- Federal Agency or Minister

may accept, reject or vary recommendations when issuing a Decision Document
Decision Documents

• A Decision Document must be issued before any Regulator can issue permits or authorizations

• Permits or authorizations must be consistent with the terms and conditions included in the Decision Document
Collaboration

- Inter-agency
- Technical working groups
- Joint training sessions
- Development of guides
Information and Resources

• The YESAB Online Registry
  http://www.yesab.tzo.com/wfm/lamps/yesab/lampslaunch.jsp;time=1379534711335

• Justice Canada website:

• External expertise

• Briefing binder