Greetings from the Yukon. If we talk about mining legislation, the land that time forgot. Let me give you a brief summary of the last 30 years. In 1972, the federal government introduced the *Territorial Lands Act*. In the NWT the provisions of this legislation apply to all industry, including mining. However, section 3.3 of the TLA exempted the Yukon mining industry from these regulations. Legislation specific to the Yukon mining industry was promised within a year. We are still awaiting mining development, production and reclamation regulations, a discussion paper was circulated this spring. However we saw discussion papers in 1993 and 1998 and nothing came of these papers.

**Skeptical**

This topic is not new.

**The Regulation of Mine Site Reclamation for Quartz Mining in Yukon: A Proposal for Discussion 1993**

“It has become increasingly evident that abandoned mine sites can have a significant impact on the quality of the environment. Abandoned buildings and machinery open shafts and adits, and discarded stocks of waste materials can pose a significant public health and safety hazard. The failure of abandoned tailings impoundments can cause flooding, the silting of rivers, or the destruction of roads or other infrastructure. Waste rock, tailings, and exposed rock faces from the mining and processing of sulphide ores can generate highly acidic drainage containing heavy metals. The resulting effluent can contaminate ground water and local water courses, adversely affecting drinking water and the health of plants, wildlife and fish. Mine sites abandoned in an environmentally-unsound fashion can also disrupt or preclude other land use alternatives. For example, the harvesting of wildlife and fish has provided, and continues to provide, a significant food source for Yukon’s aboriginal peoples, the basis of their traditional economy and a vital component of their cultural heritage. The wilderness character of the north and its wildlife are also the basis for a tourism industry that is playing an increasingly important role in the Yukon economy.
Where mine sites have been abandoned, DIAND will undertake to negotiate with the former owner or operator to have any necessary reclamation work done. If no identifiable owner or operator exists, DIAND will endeavor to deal with any conditions which pose a danger to public health and safety or the environment.”

**Translation: Crisis management rather than leadership.**

Whitehorse Mining Initiative  
Leadership Accord  
Final Report November 1994

“Environmental Protection

Our Goals
To establish in each jurisdiction an acceptable means of identifying responsible parties to undertake reclamation of old mine sites that pose a health, safety, or environmental problem.
To establish in each jurisdiction funding means for reclaiming old mine sites where responsibility cannot be assigned. Reclamation should begin with those sites posing the greatest risk.”

The Minerals and Metals Policy of the Government of Canada  
Partnerships for Sustainable Development  
1996

“In addition to the need to address issues related to present and future mine sites, the government must deal with problems associated with past practices that are no longer permitted. Such practices have led to numerous abandoned and orphaned mine sites, some of which pose a risk to the environment, human health, or public safety.
The Government will work with other governments and industry to evaluate and develop alternative financing mechanisms that are acceptable to all stakeholders. In addition, more information on the number and condition of these sites is required. It is recognized that initiatives are under way in some provinces to conduct a survey of abandoned and orphaned mine sites. The
Government is aware of the need for action to clean up those abandoned and orphan mine sites within federal jurisdiction that represent an unacceptable risk to the environment or public health and safety. It also recognizes the need for the owner of the site, where one can be identified, to pay for the clean-up costs.

The Government recognizes that criteria and indicators are essential because they help us to measure progress by industry toward the achievement of sustainable development. Accordingly, the Government views the development of sustainability criteria related to the environmental, economic and social objectives and indicators for minerals and metals as a priority. It also acknowledges that the formulation of criteria and indicators should be a collaborative undertaking involving all stakeholders, and is prepared to work with the provinces and territories, and other stakeholders, in this area.”

Cynical
Talk of partnership, sustainable development, leadership, inclusiveness, however recent experience shows another model.

- Yukon Mining Advisory Committee (YMAC) - model for Whitehorse Mining Initiative; multi stakeholder, First Nations and ENGO representation. DIAND recently formed the “Blue Book Committee” back to government industry model.
  - also IGOC industry government oversight committee??
- Whitehorse Mining Initiative, half way through that process saw the development of the Keep Mining in Canada initiative, a government lobby program.

The Yukon voices
One well-known local mining industry supporter recommended regarding Faro reclamation “send mother nature the bill”.

Regarding the Whitehorse Mining Initiative, this individual stated “ Just because a bunch of multinational baboons were sucked into signing doesn’t imply that locals endorsed having their rights compromised”
**Faro**
- Reclamation challenge/excuse: court proceedings

Lead zinc mine located in central Yukon
Operated from 1968 to 1982
1985 to 1992
1995 to 1998
- Traditional territory of the Ross River Dena First Nation, with some overlap of Selkirk First Nation and Little Salmon-Carmacks First Nation
- Ross River Dena have documented the effects of the mine on their traditional lifestyle in a document entitled “Like a People get Lost”

**Current status of the site**
- still in the courts dealing with creditors claims
- site is currently managed on a care and maintenance basis by a receiver with the taxpayer picking up the tab
- final reclamation cost still undetermined estimates range from $24 million to $120 million
- approximately 14 million dollars available in reclamation funds
  Reclamation Security Trust, Trusteed Environmental Fund

**Site Concerns**
- relocation of the tailings
- acid mine drainage
- Removal of mill
- Stability of structures
- Reclamation, revegetation, final land use

**History**
- abandonment plan researched and accepted, made condition of water licence just before site shut down in 1982, however no funding mechanism to cover cost, estimated cost approximately $50 million
- store down-valley tailings underwater, large dam in Rose Creek valley
- concerns regarding need for continued monitoring and maintenance of dam

- 1985 deal to re-open, concerns about cost of abandonment, plan taken out of the water licence at the last minute, done on an emergency basis, “last
minute surprise” for the company despite doing due diligence on all aspects of the site.

- funding mechanism agreed between company, Federal government and Territorial government ($0.25 per tonne concentrate) which would provide up to $7.5 million dollars if mine operated for 25 years, this is an example of the federal governments new math
- subsidized power, road upgrades and maintenance, etc.
- operation closed in 1992 generated less than $1 million in reclamation funding through production levy
- opened new pit on the Vangorda plateau, legislation at that time (Northern Inland Waters Act) would not allow for adequate security for perpetual treatment of water and reclamation costs, company required to enter into environmental agreement with federal government
- Company fought this requirement in court and lost, if they had won total reclamation funding available at this time would have been in the $2 million dollar range
- New reclamation plan proposed by the company proposed moving about half the tailings from the down-valley tailings facility to the Faro open pit, however this would only be undertaken if the company could comfortably break even reprocessing these tailings.
- Economics of reprocessing and saleability of bulk concentrate produced never proven.

- deal to reopen in 1995 included Ministerial direction (DIAND) to Water Board instructing them not to deal with reclamation funding.
- new deal, spin doctors said contributions would be capped at $100 million, however the reality was that greatest possible amount much smaller.
- contributions tied to commodity prices, not reclamation costs, base contribution then increasing contribution as commodity prices increased, unfortunately prices decreased.
- contributions could be postponed if cash flow was not positive.
- deal made behind closed doors in Ottawa with no input from Yukoners.

**Current status**

- Trustco deal- Federal Government, Yukon territorial government, Cominco, announced with great fanfare approximately two years ago,
Cominco to manage site, develop reclamation plan, first right of refusal to reopen mine.

- seems to have ground to a halt, last time I talked to Federal officials was told that it is no secret that Cominco is reconsidering.
- Water licences expire at the end of 2003.
  - Environment Canada and Fisheries and Oceans requested a water licence amendment last August, opposed by Indian and Northern Affairs.
  - Would have required moving some of the tailings from the down-valley tailings impoundment back to the Faro pit starting this year.

- The site has been treated as a hot potato, every time the federal government is saddled with site they try to toss it to someone else, regardless of the long-term cost.
- Time to bit the bullet and reclaim.
  - Site care cost 10 million last year.
  - Just finished revamping part of the mill for water treatment due to increasing water levels and zinc concentrations, done on an urgent basis.
  - Need to build a treatment plant for closure had been identified in 1995.
  - Mill complex is huge, old, and falling into disrepair.
  - Cost to heat and maintain a treatment facility in the current building long term will be greater than a small modern state of the art treatment facility.
  - Decision making operational staff Vs political level – when the decision is political it is almost always wrong.
Ketza River
Challenge/excuse: not an imminent danger, low priority, lack of staff & resources.
- South-eastern Yukon, traditional territory of Ross River Dena
- Small gold mine, operated for 2 years in the late 80’s, shut down 1990.
- No approved reclamation plan, no funds available.
- Not a priority site because no imminent risk of failure or contamination.
- Concerns raised by Ross River Dena Council regarding status of the site 1997.
- Water treatment plant, crusher and grinding circuits, electrical control systems, mine generators, and miscellaneous machinery and equipment removed from site.
- Company notified they need a water licence but have taken no action.
- Company notified they need an approved abandonment plan but have taken no action.
- From DIAND water resources letter to water board Dec 21/98
  “When a mine operator experiences financial difficulties, long term “temporary closure” eliminates the need to expend funds for permanent closure works, potentially at the expense of the environment and of public health and safety. When adequate financial security is not in place, there is a financial disincentive for a mine operator to properly decommission and reclaim a site. For this reason, limiting the length of temporary closure is necessary to prevent a mine from remaining in this status for an indeterminate length of time.

The Ketza River site can not be permanently left in its current condition. Weakness in the north dam and the potential for ongoing release of arsenic from the tailings management facility (TMF) could lead to significant adverse impacts to the downstream environment. Other mine components at the site (including industrial buildings and equipment, underground and open pits, waste rock, stream diversions and hazardous wastes) have been left as-is since operations ceased in 1990. The existing financial security of $25,000 is a fraction of the amount required to decommission the site.”

- SO₂ stored at site vented to atmosphere when valve failed, luckily no one on site or in the valley when the event occurred.
- Road/bridge to site in danger of being washed out.

Security $25,000. Hypothetical cost of reclamation & perpetual water treatment at site $7,186,000 (independent consultants estimate)
Cost $1,250,000 for decommissioning and abandonment.
**Clinton Creek**

Challenge/excuse: private property, no owner

- Near Dawson City, traditional territory of Tr’ondek Hwech’in First Nation.
- Asbestos mine operated 1968 to 1978.
- Tails dumped on slopes of the Wolverine Creek valley, have slumped down and blocked valley, tailings now being eroded away by Wolverine Creek.
- Waste rock dumped on slopes of Clinton Creek valley, slumped down and blocked the valley.
- Clinton Creek forced to side of valley and raised 100 feet.
- Created Hudgeon Lake, 115 hectares, up to 100 ft deep.
- Visited the site for the first time last week, can read studies, see pictures and power point presentation but until you are on site cannot grasp the size of the site and magnitude of the problem.
- Eroding the tailings plug, erosion has substantially increased since 1997.
- Hudgeon Lake will drain, not an if but a when.
- Erosion has progressed to the stage where it will not take a major event to trigger the breach.
- Clinton Creek important salmon rearing habitat.
- Currently salmon stocks critically reduced, First Nations have voluntarily reduced their catches.
- DIAND region had requested funding to do interim stabilization at the site this year, Treasury Board turned down that funding request.
- Clinton creek profile, movement of tailings and waste rock just surveyed last week should have further information soon.
- Again must act soon as bridge to access site has not been regularly maintained since the operation shut down and may soon but structurally unable to support heavy equipment.

Chapter 14 of the Umbrella Final Agreement state that First Nations are entitled to “have Water which is on or flowing through or adjacent to its Settlement Land remain substantially unaltered as to quantity, quality and rate of flow, including seasonal rate of flow.”
**Concern**, the agenda and themes for this workshop seem to be strictly reactive, must have a pro-active component. We need the tools and willingness to thoroughly assess new projects to ensure that reclamation is properly funded. Also the Legislation/regulation and willingness to enforce.

**The challenge:** to both the delegates in this workshop and to Mines Ministers, cure my skepticism and cynicism, prove me wrong, show me leadership and commitment, funding and action.