

Presentation to Expert Panel on Environmental Assessment Process

- EA Process more Critical / Climate Change
- Moved to NO Charlton 1974 from SO
- High/Low Nuclear Waste
- Toxic PCB incinerator not legal in US
- Aerial spraying Maticil
- Adams Mine 20 M tones Toronto waste
- EA Process not effective in any of these
- Public information turn the tide

Environmental Review Processes were of No consequence in Finding Solution

- 14 Years of opposition to storage 20 M tones of waste in a elevated fractured pit
- Proponent engineers told to “Blue Sky” the project
- Proponents never took in the level of risk seriously
- Economic became the central driving force behind project
- Social and environmental concerns side tracked
- EA never made promoter aware of engineering failures or risk

A Working Example of Project Liabilities

- Energy East example of misguided Liability Assessment
- Spent time as Corrosion Engineer on TC gas pipeline
- The 40 year old pipe many leaks with gas
- With bitumen, age, external corrosion, additional stress, internal cavitation we can expect an increase in breaches
- Department of Natural Resources Pipeline Financial Requirement .
- Absolute liability limit of \$1 Billion
- Polluter Pay still stated but money not required up front
- Limited partnerships and separate corporations can isolate from liability claims

1,047 incidents found

Amount released



< 128 litres

> 96 million litres

- Spill amount specified
- Zero or negligible amount
- Not a spill or no amount stated

Bubble size shows approximate size of reported spills.

NEB identifies location using the nearest community.

[Methodology and glossary](#)

Billion Dollar Leak... Kalamazoo

- 6 foot hole developed flooded 30 miles of river
- All detection equipment and spill response failed.
- River had control dams limited damage area
- River side removed and bottom scoured
- \$800 M was covered by insurance
- \$200 M paid out by company
- Next leak will be far more costly as insurance paid out



What Happens when a town loses its Water Source ?

All Macdonald Mayor of North Bay has water Intake near Lake with Pipeline Exposure

- 2 Hours warning to shut down water system if they find out about it
- 50,000 people with ... no water
- 2500 business no water
- Schools, colleges and university y no water
- Hospital no water
- Fire department ... no water no fire protection
- Loss of water could go on for days, weeks, months or years
- This could happen in North Bay or Cities like Ottawa, Montreal even Quebec City and every town in between.
- With fast flowing rivers even a number of communities at the same time
- This type of incident and its consequence is unfathomable .
- Every one downstream from a leak is put at risk in their community and their part of the planet At risk of becoming environmental refugees in their own country.

Why are Liability Limitations Inadequate ?

Limited Liability tell the Promoter the project risk is safer than it really is

- 4500 km of pipe multiplies the frequency for failures
- Pipe was never designed for heavy bitumen will stress pipe creating internal stress corrosion and cavitation.
- Prediction of failure rates by company are wrong, leak detection has not worked as predicted.
- DNR regulatory Impact Statement mentions the polluter pays principle it then gives limits to absolute liability. This may not be enforceable as it is not in the regulations.
- Companies need only show access to the limited liability of Canada \$250M
- In the event of multiple spills or once the liability is reached there may be no money left for clean up or compensation or other liabilities.
- What happens in the 2nd, 3rd, 4th, and 5th leaks
- Projects with unlimited potential for damage need to have unlimited liability built in to the business case.

The Environmental Assessment Adaptation Worst Case Analysis

Now working to develop community owned Solar Projects

- Review project risks and manage them
- Manage them through design and insurance
- The projects need to be strong enough pay insurance cost to manage risks
- We protect investors, land owners and co-op through planning through a worst case scenario.
- Hail storm, magnetic storm or tornado we are covered .
- Energy East takes the best case scenario and the limits liability to that.
- Trans Canada's predicted one spill every 7 years
- First year has 12 significant spill
- This makes 84 times as many spills as predicted

Recommendation for Risk Analysis in EA Reviews

Risks must meet Worst Case Scenarios with liability availability

- If liabilities levels can't be met the project is a **no go**
- Current process shows pipeline estimates off by a factor of 84

There should be no absolute liability limit

- Liability limits create a false sense of risk on the project
- When polluter is required to pay by law then realistic business decisions can be made.

Liability should be distributed amongst all parties including the commodity owner

- Confining the liability to one partner through limited partnership agreements allows liability to be avoided through bankruptcy