

Presentation to the Expert Panel: Review of CEEA

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My experience includes participation in the 1996 national EA of the Canadian Concept for Nuclear Fuel Waste Disposal under the Seaborn panel. The EIS was prepared by Atomic Energy of Canada at arms length from the proponent, Ontario Hydro. The multi year independent supporting research underwent rigorous peer review including an international technical review panel. I am now an intervenor for the Energy East pipeline project whose EA conducted by the NEB pales in comparison. I will raise questions about the current environmental protection process in Canada and provide recommendations for improvement.

In the Energy East project, the proponent, supplies the information for the EIS that focuses on new pipeline construction. A mantra that oil spills are local, short term, low magnitude, reversible and easily remediated is repeated as has been done in previous pipeline assessments. Evidence to the contrary, such as from the National Academy of Sciences study on dilbit, and from the Kalamazoo River oil spill is omitted.¹

The route for conversion, determined in 1958 for gas, is not considered for suitability to oil much of which will be sour and contain deadly toxic and corrosive H₂S. The risk to the over forty year old converted oil line from explosion of the adjacent natural gas lines is not considered. A double walled pipeline with leak detection at designed collection points, as is required for underground refined petroleum piping is not considered.

Intervention in the Energy East Project rests mainly on those directly affected who do not normally have the knowledge to analyze the complex processes involved. Funding, coordination and expertise is inadequate to conduct proper studies. Scope and interpretation of the evidence presented is at the mercy of an NEB panel that has already been forced to resign for apprehension of bias. The entire process could be disregarded in final government approval.

Only the upstream process of marine shipping is assessed. Why are gathering pipelines necessary to deliver oil to the mainlines not assessed such as the Husky sour oil line containing up to 5000 ppm deadly toxic H₂S gas?² The Husky oil spill contaminated about 500 kilometres of the North Saskatchewan River and incapacitated major drinking water supplies.

Why are other processes connected with the project such as extraction of oil and bitumen by fracking, strip mining, and thermal processes not assessed? Why is produced water injection, flaring of sour solution gas, field spreading of drill mud and disposal of waste from crude oil and bitumen extraction not assessed? Why are emissions from processors, upgraders, and refineries that have been implicated in heavy metal contamination, respiratory illness, cancer and foetal feminization not assessed?^{3,4,5}

Why did industry monitoring of the massive bitumen tailing impoundments in the Athabasca sands report that environmental releases were no more than naturally occurring? Independent studies by Schindler and others⁶ have clearly shown toxic releases far above background can be traced directly to tailing impoundments and processing plants. Studies by Stephan McLachlan⁷

from the University of Manitoba have shown these toxins are accumulating in the food chain. Why are the toxic impoundments allowed to increase when no effective remediation has been demonstrated? The impoundments will likely be left as a massive toxic legacy to the taxpayers of Canada. Other toxic legacies allowed to accumulate include thousands of abandoned oil and gas wells and mine tailings such as from the abandoned Giant Mine in the Yukon.

Sulphur extracted from sour gas, sour oil and bitumen all over western Canada is accumulating in massive stockpiles or injected in the form of H₂S gas often into old oil and gas wells with no EA.^{8,9} Why should these stockpiles and wells be left to leak H₂S, SO₂, and acid, poisoning both air and water?

In 2008, an Alberta Environment survey found 17% of the water wells in the area of shallow coal bed methane extraction were contaminated with gas.¹⁰ Why was the gas deemed as naturally occurring, despite isotopic signatures consistent with coal bed methane and the presence of nitrogen gas compressed to fracture coal seams? One landowner, Jessica Ernst, whose well was gas free prior to coal bed methane is suing the gas operators and the Alberta regulator for well water contamination.¹¹ Why should her personal assets be depleted by court costs through interminable hearings? No individual can stand against this conspiracy by industry, captured government regulators and courts to protect and encourage the oil and gas industry.

Why, according to the World Health Organization, is carcinogenic benzene from petroleum detected in 50–60% of potable water samples taken at 30 treatment facilities across Canada?¹²

Why are farm chemicals and pesticides that are carcinogenic and hormone and endocrine disruptors allowed? Researchers across the United States and Canada are repeatedly finding high levels of neonics and other residues that exceed vital standards set to protect aquatic life.¹³

The EIS for the BC LNG project, prepared by the proponent, Pacific NorthWest owned by Malaysian Petronas, focussed only on the LNG plants. One condition of approval was a plant emission cap of 4.3 million annual tonnes of greenhouse gas. Upstream fugitive emissions from fracked wells, compressors, pipelines, sour gas plants, and CO₂ in raw natural gas have been estimated to be up to 155 million annual tonnes of greenhouse gas by 2020, far more than the LNG plant emissions.¹⁴ Why were the adverse environmental effects of upstream processes not assessed?

A climate impact analysis by Environment and Climate Change Canada for the upstream emissions for the Enbridge line 3 replacement,¹⁵ was based on NEB forecasts of increasing global demand for oil. Why was the climate analysis not based on a national carbon budget consistent with global commitments? The combined upstream emissions from all the proposed pipeline expansion projects and the BC LNG project could not possibly meet a national carbon budget.

EA in Canada is clearly broken and biased toward industry.

Recommendations

Context and Conduct of Environmental Assessment

A permanent independent Federal Environmental Assessment Agency funded by proponents should be formed that conducts the EA based on cumulative effects of the entire project from extraction to usage and determines limiting terms and conditions. EA must be done by independent unbiased experts selected and managed by the federal assessment agency. Legacy projects approved by provincial licensing that were not subject to EA's should be reviewed by the agency. The amendments passed by the Harper government should be repealed.

Public Involvement

Public input should be an integral part of the process.

Coordination

Levels of government and government agencies such as NRCan, the NEB and the Canadian Nuclear Safety Commission should provide technical input where relevant.

Climate Change and International Obligations

A climate test should be completed first based on a national carbon budget consistent with international commitments. International trade agreements and economic effects should be considered but environmental protection should take precedent using the precautionary principle and the principle of as low as reasonably achievable.

Overarching Indigenous Considerations

Full and complete indigenous consultation and assessment of effects on traditional lands and the food chain, respecting all treaty rights should be completed under the direction of the agency.

Decision and Follow up

Final decision should rest with the Federal Government respecting all terms and conditions determined by the agency. Ongoing environmental monitoring of project effects should be conducted based on the recommendations from the agency.

Legal Challenges

Environmental lawsuits having merit as determined by the agency should proceed expeditiously with legal cost born solely by the defendant.

References

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