

**Concerns about the Raven Coal Mine for Federal/Provincial Environmental Assessment: Environment Committee of the First Unitarian Universalist Church of Victoria.**

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- **Pollution affecting the Seafood/Shellfish in Bayne Sound and adjoining waters:**

- It is expected that the mine and processing/washing plant will generate toxic materials which will pollute the watersheds on the East Coast of Vancouver Island and adjoining waters, with pollutants such as mercury, arsenic, lead etc. that will devastate the aquatic life in these waters, particularly the shellfish industry which is a growing source of employment and an important source of food for local residents and First Nation's peoples. Arsenic is present in the Quinsam River watershed due to coal in the Campbell River area (near the Quinsam Coal Mine). It doesn't make sense to sacrifice ~600 jobs tied to a renewable resource for fewer jobs tied to a non-renewable resource such as coal mining. The "quick and dirty" resource extraction plan provides no assurance of long term viability for a cyclic economic activity such as coal mining.
- A National Marine Conservation Area has been proposed in Georgia Strait extending from Gabriola Island in the North to the Gulf Islands in the South to preserve aquatic life in the area. The pollution flowing from the Raven Coal Mine will seriously affect the whole concept of trying to nurture aquatic life in this area to strengthen adjacent economic fishing zones in the region.
- **Recommendation:** That permission for Raven to operate a coal mine be denied or be contingent on there being no pollutants in the surface runoff that reaches Baynes Sound/Georgia Strait and alternatively the Alberni Valley. This should be regularly monitored by appropriate testing by both government and independent agencies. A bond should be posted by the company to ensure that this commitment is adhered to in the face of corruption or incompetence. Ideally, the mine should extract and process coal "in place" rather than polluting the region.

- **Pollution Affecting the Aquifers in the East Coast watersheds:**

- In a similar manner, it is expected that the Raven Coal mine and processing/washing plant will pollute aquifers and ground water in the area extending from the mine to the east coast of Vancouver Island, affecting drinking water and agricultural activities. A similar recommendation should be implemented as in (1).
- A similar concern exists for the watershed extending West and South into the Port Alberni valley. The same recommendation applies.
- **Trucking of Coal to Port Alberni:**
- The current proposal is to truck all coal mined from the site along Highway 4 (and presumably Hwy 19 - the Island Highway) to Port Alberni. This road is a narrow highway with dangerous twists and turns and hilly sections, which will be prone to accidents related to rain, snow, fog and other extreme weather events as well as forest fires, earthquakes and tsunamis. Operation of large trucks 24/7 (likely with attached trailers) is not appropriate for this highway given current traffic to Tofino, especially given the poor maintenance currently in practice and the anticipated wear and tear on the road. Cathedral Grove, an area with huge old growth trees, is located on this road – where tourists often park and stroll about, especially in summer months. It seems totally inappropriate to have giant trucks roaring through this protected area both from an environmental and safety perspective. This is identical to the situation on the Malahat Highway (Trans-Canada) between Victoria and Duncan, where a single accident can close access up-Island for hours or days at a time.
- **Recommendation:** The best approach to transporting coal mined from the mine site to Port Alberni would be by rail,

This would provide an alternate route to Port Alberni which would not jeopardize access to Tofino when there is an accident. Alternatively, consideration might be given to upgrading the existing rail link to Nanaimo or Campbell River area for shipping of coal outside of the National Marine Conservation area (apparently supported by Premier Clark).

- **Climate Change due to Carbon Dioxide:**

Our principle objection to this coal mine is the additional carbon dioxide added to the atmosphere which would accelerate global warming:

- The carbon from coal exported to Asia (or elsewhere) will be burnt there, creating carbon dioxide which would affect the same atmosphere that we both share.
- The huge amount of CO<sub>2</sub> required to mine and transport the coal, which would add to the carbon dioxide produced by Canada

The following arguments are noted:

- Leading atmospheric climate scientists [Hansen, Brown, Weaver, etc.] have indicated that if all coal reserves on the planet are burned without capture and disposal of the CO<sub>2</sub>, a tipping point will be reached whereby climate change will enter a runaway state which will endanger life as we know it on our planet. To avoid such a situation, it will be necessary to change before 2050 from an economy based on energy derived from fossil fuels, to an economy based on renewable energy. An important first step in this paradigm shift is to discontinue the use of coal in energy production. BC has an important economic advantage since it uses mainly hydroelectric (i.e. renewable and continuous) electrical generation, which can be used to leverage energy production from other renewable but discontinuous sources such as solar, wind and ocean waves and tides.
- It is unethical for Canada to export coal knowing fully well that this will create CO<sub>2</sub> in another region – since all nations share the same atmosphere. This point has been made by James Hansen, who compared coal shipments to “death trains” during the holocaust. In this case, the people affected will be future generations: our children and grandchildren.
- Many Canadians are working hard to reduce their use of CO<sub>2</sub> by driving hybrid cars, avoiding air travel, reducing the energy used to heat their houses by installing additional insulation, efficient appliances and light bulbs, solar heating and solar electricity panels and wind generators at considerable cost and sacrifice (“freezing in the dark”). It is deeply troubling that the corporate sector continues to conduct “business as usual” with regard to CO<sub>2</sub> generation, as illustrated by the “quick and dirty” approach exemplified by this proposal when ordinary Canadians are trying to make such changes. This is a strong disincentive to their efforts. That politicians may be complicit in this approach is especially troubling.
- North America will inevitably implement either a carbon tax or a carbon cap-and-trade scheme at some point in the future to reduce its reliance on fossil fuels. Canada has indicated it will comply with such a continent wide regulation once implemented. To do otherwise would be economic suicide. It is noted that no new coal fired energy plants have been built in the USA in recent years, due to the additional cost anticipated for such coal-based energy production. We note that BC has implemented a limited version of a carbon tax and is working with Western states to implement Cap-and-Trade. It would be important to include exported carbon in such a scheme.
- **Recommendation:** We should leave the coal in the ground. Development of carbon capture technology is unlikely in time and would not avoid either the pollution that would accompany the mining of coal or its transport.