

**Hornby Island Conservancy - Hornby Island, British Columbia**



CHI, Box 55, Hornby Island, B.C. V0R 1Z0

SUBMISSION TO THE ENVIRONMENTAL ASSESSMENT OFFICE  
OF BRITISH COLUMBIA FROM CONSERVANCY HORNBY ISLAND

Conservancy Hornby Island (CHI) would like the Compliance Coal Corporation to address two major issues. First we would like to know what steps, if any, Compliance Coal will take to prevent the leaching of unwanted chemicals into streams and aquifers. Second, we would like Compliance Coal to provide us with a cost: benefit analysis. We realize that the operation of a mine at Buckley Bay will provide benefits (mainly jobs). However, mine operations come with a cost.

With respect to the first issue, it is well known that both iron pyrites and heavy metals, such as arsenic and selenium, are associated with coal deposits. When iron pyrites (ferrous sulphite) is brought to the surface it oxidizes, producing iron, hydrogen sulphide, and sulphuric acid. The hydrogen sulphide and the sulphuric acid increase the acidity of ground water acid with a resultant deleterious effect on waters draining into aquifers and into streams. At least three of the streams traversing the mine site (the Tsable River, Cowie Creek, and Wilfred Creek) are salmon-bearing streams and, especially given the constant reduction in salmon habitat, the loss of even more is unacceptable. It is crucial that Compliance Coal should provide some estimate of the effect of environmental damage resulting from their mining operations. The release of heavy metals will have, perhaps, even more serious consequences. The streams traversing the mine site drain

directly into Baynes Sound. The release of heavy metals could easily destroy the Sound's extensive shellfish industry.

It is possible to at least reduce the effects of the release of acidic chemicals and of heavy metals by building containment systems. CHI requests that detailed information on such structures and their mode of operation be submitted to both Environmental Assessment agencies.

With respect to the second issue, we know that the proposed coal mine will yield 350 jobs over a period of sixteen to seventeen years. That benefit, however, must be set against the possible costs of impacting on the Baynes Sound shellfish industry, on the environment surrounding the mine, and the highway between the mine and Port Alberni.

According to the Minister of Agriculture Food, and Fisheries of BC, Don McCrae (answering a question in the provincial legislature on May 6, 2011), the Baynes Sound shellfish industry has a gross output of \$24 million per annum. CHI cannot see that the benefit of the mine could match that (at a rough guess, the gross value of the mine's salaries is about half the shellfish gross). Compliance Coal could argue that if it creates adequate containment structures the shellfish industry can continue unharmed. However, on the one hand, the cost of such structures could render the mine uneconomic while, on the other, the history of mining is replete with examples of the failure of dams and other containment structures.

Putting a cost on the impact of acid leaching and the release of heavy metals on the quality of groundwater is far more difficult. Nevertheless, Compliance Coal must provide us with plans for preventing or remedying such consequences and must put a cost on possible and probable ill effects. In particular we are concerned about the continued

presence of tailings. Should the mine come into operation, then, for decades to come, the tailings will leach unwanted chemicals into streams and aquifers. What steps will Compliance Coal take to deal with that situation?

Finally, we have the impact of very heavy truck traffic on Highway 4. Given that the highway was not designed to accommodate such heavy vehicles the impact will be severe. It should be possible to estimate the additional costs of maintaining the highway and adding these to the total costs of mining.

We look forward with interest to Compliance Coal's response to these points and additional points raised by other persons and groups. In addition, CHI strongly feels that any project with such potentially adverse effects should not proceed without a full independent environmental review panel and public hearings.