

*Please publish my name and location along with my comments.*

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Re: The Raven Coal Mine proposal draft AIR

I am concerned by the inadequacy of proposed baseline studies both for aquatic (Section 5.5.2.1, 5.6.2.1) and terrestrial (Sections 5.7.3.1, 5.8.2.1) ecosystems and individual species. In particular, I am concerned for the many rare, threatened and endangered species known (and not yet known) to occur in the region around the proposed mine. For terrestrial ecosystems, the proposed RSA ends at the inner island highway (Figure 5.7.1). Such studies should extend to all areas potentially affected by water and air pollution including Baynes Sound, Denman Island and Hornby Island.

Denman Island has the only known breeding colonies of the Taylor's Checkerspot (*Euphydryas editha taylori*). This butterfly needs a particular combination of open grasslands and seasonal wetlands where particular foodplants occur. On Denman, clearcuts from the 1990s provide the habitat this insect needs. Since its discovery on Denman 5 years ago, it has been well studied by local and government biologists. An individual adult of this species has been seen in Buckley Bay, and since much suitable habitat is present in the region between the proposed mine site and Baynes Sound, it likely breeds there too. Intense scientific studies are necessary at appropriate times of year to determine the presence of larvae and adults, their number, distribution and breeding status. It is essential to assess the status of rare species and monitor their populations before, during and following mine operation to ascertain what effects the mine is having and to mitigate mine effects through development of species and habitat-specific management strategies. The mine proponent must post a bond sufficient to pay for such studies.

Another concern is the lack of information on baseline studies already carried out and those proposed for terrestrial ecosystems (Section 5.7.3.1). These studies must be adequate to map ecosystems throughout the region potentially affected by the mine (including areas subject to air pollution such as Denman and Hornby Islands). Plans must be included in the mine proposal to mitigate for ecosystem damage and habitat lost through the building and operation of the mine.

Cumulative effects of the proposed mine on terrestrial ecosystems and individual species must be adequately studied. There is a lack of information on this in the draft AIR

The present draft AIR does the public and the environment a disservice. Only a Joint Federal/Provincial

Independent Expert Environmental Review Panel with full public hearings can determine whether this proposed mine should go beyond this pre-planning stage.

Yours sincerely

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*I am a biologist with a BA in Botany from Oxford University, a PhD in Plant Physiology, several post docs in soil microbiology and 17 years working in Canada and Germany cleaning up mine sites using natural processes. I am currently Lands Manager for the Denman Conservancy Association. I am also on the technical committee of the Comox Valley Coalwatch.*