BVLDAMS 2024 AGM

What Matters in Our Valley Report

Telkwa Coal Environmental Assessment Air and Dust Missing Information

Information that is needed:

1. **Quality of Life** – We have repeatedly asked for so-called nuisance or annoyance studies to be performed so that area residents will know whether their properties will be coated by dust and whether their quiet way of life will be disturbed by the explosions and other noise produced by the mine. Yet, notwithstanding the fact that this very type of information was required during the environmental review of the nearly identical coal mine proposal from Manalta Coal in the mid-1990's, notwithstanding the fact that Telkwa Coal itself acknowledged it could perform such studies when WMIOV met with them (a commitment it later reneged upon), notwithstanding the fact that surveys have established that preserving a quiet, peaceful way of life is one of the most important factors to many residents in this area, notwithstanding the fact that dust deposition and noise are well known disturbances in coal mining communities, notwithstanding the fact that these disturbances would also have an obvious impact on property values, notwithstanding the fact that outdoor recreation is highly important to area residents including at the local downhill ski hill and Nordic skiing centre which both face the mine and are directly downwind from it at a distance of about 10 kilometres, notwithstanding the fact that both the communities of Telkwa and Smithers are also downwind from the mine and in close proximity to it no such studies have been required. As a result, we face going into the final public consultation and assessment period without any way of knowing whether we face these types of impacts.

2. **Air**: Studies identifying how far, to where and to what degree dust from the mine, including during construction and all phases of the project (not just during operations which is the focus of the current information responses) will be deposited in all areas throughout the Valley. The absence of any information about construction impacts is of particular concern since it can be assumed that the use of explosives and other mine building activities that cause dust and other materials to become airborne will be most intense during this period. These reports need to take into account local atmospheric conditions such as wind, air pressure and other factors that influence these impacts.

   For the study on dust dispersion, it is essential to consider a broad spectrum of meteorological conditions. Dry deposition was modeled using particulate matter (PM) size parameters as specified in the Newfoundland Guideline for Plume Dispersion Modelling. Please clarify if there are any differences in the PM size parameters between the guidelines of Newfoundland and Labrador province and those of British Columbia. If there are differences, these reports should rely on BC air dispersion modelling and not models applied by other provinces as is the case with the information that has been provided up to now. Isopleth maps should illustrate not only the maximum predicted ambient concentrations and dustfall deposition rates but also integrate background environmental levels to provide a comprehensive view of air quality impacts.

   Isopleth maps should illustrate not only the maximum predicted ambient concentrations and dustfall deposition rates but also integrate background environmental levels to

provide a comprehensive view of air quality impacts.

The potential impact of the coal dust on the recreational activities such as the ski areas and the quality of life for residents in Smithers and Telkwa is needed. An assessment of the economic and social impacts of air pollution on local businesses, property values and communities is required.

Health Impacts – Our air here is poor. It is some of the worst in the province, especially when it comes to PM ≤ 2.5 and PM ≥ 10. Much of the air pollution is due to wood smoke.

The TC operation will admittedly produce more of this pollution. TC dismisses this concern by claiming that since the air here already exceeds maximum Provincial objectives and the mine will not cause any further limits to be exceeded, then all is good. All is not good. Here are the deficiencies in the previously provided information.

No information is provided for anything other than the operations phase. As noted above, the worst air pollution is very likely to occur during construction and no information has been supplied about this at all. Decommissioning may also produce substantial amounts of air contamination.

No baseline health information is provided and reports should use this information to then project additional health impacts from the added pollution produced by the mine. The cumulative impacts on health in an already degraded airshed need to be known.

Reports so far rely on projections of maximum concentrations without accounting for frequency and duration. Health damage does not just arise from maximum exposures but also from how long and how often and at what levels exposure takes place.

The previous reports identify both mercury and arsenic and other potential heavy metals, as well as ammonia from explosives as possible contaminants. Mercury and arsenic and heavy metals in general are well known as posing significant risks to human health. TC dismisses the concerns about mercury and arsenic as falling below threshold levels. This once again fails to account for cumulative impacts. Both mercury and arsenic are commonly associated with wood smoke exposure and, as noted, this is currently one of the primary sources of air pollution in the Valley.

When it comes to ammonia, which is formed from materials associated with blasting, the reports so far do not identify the quantities of explosives that will be used. Therefore, it is impossible to tell if the contaminants will fall below thresholds as TC claims.

The reports so far fail to apply BC air dispersion modelling in all places and instead apply Newfoundland and Labrador standards for wet and dry deposition. To the extent that they exist, all reports should refer to BC or Canadian standards whichever is most applicable.

In summary, here are the deficiencies that we have found when it comes to the air studies:

a. The assessment of effects on air quality, GHG emissions, and noise should encompass all phases of the project, not only the operational phase. The “annoyance” or “nuisance” impacts must be reported.

b. Isopleth maps should illustrate not only the maximum predicted ambient concentrations and dustfall deposition rates but also integrate background environmental levels to provide a comprehensive view of air quality impacts.

c. Identify the population density and distribution of the community (i.e., including all inhabited areas between Quick and Smithers) and wildlife areas in the isopleth maps to show the overlapping areas and identify the sensitive receptors (baseline incidence rates for the population, population exposure changes).

d. A sensitivity analysis of the air pollution quantification is needed in the absence of the ability to conduct new measurements; estimates of variability are important.

e. Emphasize the importance of a cumulative effects assessment perspective rather than focusing on percentage changes over high background levels.

f. The dispersion modelling analysis needs to capture the interannual variability (multiple years, i.e., 3-5 years, is recommended), but has only been done for one meteorological year (2015).

g. The Air Quality Health Index (AQHI) should be included in the report to give a picture of the current air quality in Smithers and Telkwa. AQHI is a scale designed to help people understand what the air quality around you means to your health. This index pays particular attention to people who are sensitive to air pollution and provides them with advice on how to protect their health during air quality levels associated with low, moderate, high and very high health risks. This index will help the community better understand the health risks associated with each category.