

Notes for RDBN Directors on Crematory permitted use proposal by West End Ventures and Laurel Menzel

December 7th 2021
Smithers, BC

from Dave Stevens, Smithers Rural A resident

I have read the application before the RDBN Board and public comments as posted on the RDBN website on November 30, 2021 and have discussed the proposal with interested locals. I recommend that the Directors reject the proposal. Here are some reasons.

The proposal as it stands is inadequate in scope and context to form a suitable basis for diligent decision making. I have no disagreement with concerns raised by the residents, they seem to me to be pertinent and reasonable.

I have a history of involvement in air pollution issues and ill health. An inadequacy of the proposal is that prior informed consent must be based on relevant facts but those facts are not present. No baseline information about current air conditions are presented so a clear and specific assessment of adding an air pollution source is not possible even though it would be straightforward and cheap to gather at least some information but this has not been done.

The air in Smithers is known to be polluted at levels known to be harmful. This proposal, if it leads to the crematorium being operated, will make matters worse. Adverse physical and mental health consequences are very likely to ensue. A first class liability magnet.

An amendment to the zoning text will affect not only this location but other M1A zoned land as well. The residents near this other place have not, as far as the record shows, been informed or consulted about this matter. The actual effect of this lack of notification remains to be seen but would be an inadequacy that would need to be taken into account in any future development proposal.

Four kinds of air pollutant are specified as being typical of crematory operations – particles, products of partial combustion, mercury and radioactive substances. I'd like to comment a bit on each of them.

Microscopic particles have at least two kinds of toxicity – chemical and physical. If fine particles of a non-toxic element or compound are introduced through the lungs inflammation will result from their physical presence in the alveoli. This will be harmful on its own. If in addition the chemical composition of the particle is toxic (as might be the case with particle sulphate, say) this toxicity will make matters worse.

Mercury is a potent nervous system toxin and is especially harmful to the development of the nervous system in gestation. It would be very imprudent to expose a pregnant woman to this kind of pollution, yet mercury is specified as likely to be emitted. It is suggestive to look at the concentrations of mercury discussed in the literature present on the RDBN site. The units used are *ng*. This is nanograms – billionths of a gram. This is the usual unit and is indicative of the state of knowledge of levels now known to be harmful. It is interesting to look at the 1.5 grams per cadaver figure combustion release mentioned and see that this represents millions or more of doses. Very bad news.

Products of partial combustion such as PCDD are members of a family of chemicals called dioxins and furans. Like mercury they have harmful effects at extremely low levels. There is an abundant literature on their toxicity which can be consulted by any interested party.

Radioactive treatment residue substances emitted to the air are especially worrisome since unstable isotopes don't just go away. The decay product chain involves varying levels of radioactivity and chemical toxicity.

In all four cases the level of emissions are not accurately known, nor are the vulnerabilities, medical history or exposure of those nearby known. Even given good will it's impossible to be diligent in the face of such large gaps in facts.

It is mentioned in the proposal that with only 94 deaths annually in Smithers the emissions will be tiny. This figure is at least outdated. As of this writing the BC Vital Statistics Agency reports 110 deaths this year in Smithers and we have a month to go. There is no reason to expect that people from Witset, Hazelton, Kitsekukla, Kitwanga, Telkwa, Houston and Burns Lake won't be among the incinerated. A back-of-the-envelope calculation shows the potential for 330 cremations per year, a much more nearly realistic figure. The minimization of the volume of business may of course be merely a miscalculation, but even so is not reassuring – rather the reverse.

My final comment is that there is every appearance that suitably zoned land is actually available, at ordinary market rates, that will not have neighbours nearby to be exposed. I can not see why the proponents don't build there. If they want a commercial presence in Smithers there are vacancies that will make a suitable street level office without any operation issues. One might cite RA Schrader's Funeral and Crematory services building on Queen St. as an example.