

COMMENTS ON RELIANCE ON QUALIFIED PROFESSIONALS
Jan 18, 2018

Reliance on Qualified Professionals has shown to be over the years the transfer of government responsibilities to private consultants whose professional bodies have yet to show how they have been “enforcing rules, developing professional standards and conducting disciplinary processes” for environmental assessments. Simply put, this represents a privatisation of public services and the abdication of “governing”. Worse, given this context, there are serious concerns regarding the scientific integrity of the assessments and many reasons to believe the conclusions are preempted to fit the agenda of proponents and governments of the day. Conflicts of interest are rampant.

1. Please tell us what you think is working well with the current professional reliance model in B.C., and what is not.

I do not see anything favourable with the current professional reliance model. After many years of presenting comments on several “health risk assessments” for large projects done by different consulting firms, I cannot support the present professional reliance model.

- There is no definition of what a “qualified” professional for health risk is. Mostly, assessments are written by somebody with a Masters degree in Biology. Holding a M.Sc in biology is insufficient for qualifying as a “health” risk assessor. Health goes far beyond the simple and direct “cause and effect” biologists are trained to look at. It encompasses social, psychological and economic effects which fall outside their limited scope.
- It is impossible to gage the relevance of the qualifications of the authors. The Aurora LNG plant proposal shows for its Human Health Technical Data Report¹ publicly available on the BC EAO website for the Aurora LNG Project:
Rick Lee, M.Sc., MBA, R.P.Bio Author, Discipline Lead
Patrick O’Brien, B.Sc., R.P.Bio. Author
Bryan Leece, Ph.D Senior Quality Reviewer
Tania Noble, M.Eng., P.Eng, Independent Reviewer

One author only had a B.Sc and we are given no information on what PhD the “Quality Reviewer” had. Neither do we know what does a “Quality Reviewer” do. Also, what was the role of an engineer in the health risk assessment? Who, overall, is responsible for the report?

- Usually, the authors have been employed by the private sector for a long time and have not had any recent scientific publications to assess their scientific knowledge and expertise. The assessments they have produced for previous projects are not made available to the public. In BC, one company seems to have had the monopoly of health risk assessments. It is not unusual to find cut and pasted paragraphs for the different evaluations, raising concerns about the specificity of the assessment where local factors may change predicted effects.
- Professional bodies are not meant to review assessments Regarding Registered Biologists, their website makes it difficult to find complaints, reviews and resolutions, while complaints peak only at 3 /yr. Their general format for risk assessment, starts with “*Problem Formulation - the ecotype, community, population or individuals of interest is clearly evaluated. Was there an attempt to gain first-hand knowledge of the community, population, individuals, potentially rare or sensitive species or conditions? If there was an attempt, was it scientifically credible?*”

Regarding health risk assessment, epidemiological data are essential. However, they are mostly non-existent for local project areas and this is not acknowledged. Assessments are made without credible data preventing demonstrating any effects for the long-term. Advising for an “attempt” at collecting

¹ <https://projects.eao.gov.bc.ca/api/document/58923174b637cc02bea163f3/fetch>

data clears the professional with his/her professional organization but is a long shot for producing a fair evaluation of the risks involved.

- Conflicts of interest are rampant

Many consulting firms advertise their services as “getting” their clients the sought permit or certificate. They offer to “interpret” scientific data towards it. This could lead to “bending” the science, and I contend it does. Lack of evidence (like the lack of reliable epidemiological data) is not evidence of lack of effects. The “science” used in those reports rests widely on lack of evidence and inferences of non effect which are very fitting for the proponents.

I have yet to see one of those large consulting firms working for a small public group potentially affected by a large project. This shows to me that only proponents with deep pockets can make their case and science is not the only driver.

The same applies for the governments of the day retaining those firms. In Prince Rupert, the government was so bent in pushing LNG plants that they refuted one air quality study which showed areas in Prince Rupert with non acceptable air quality standards. They simply asked the consultants to come up with different data. After they did it, the offensive red colours on the map for dangerous air quality, magically disappeared!

The revolving door between government and consulting firms is well known. That cozy relationship raises doubts as to the fairness and integrity of the reports produced.

2. What changes, if any, are needed to maintain or improve public trust in the professional reliance model?

- This is a leading question, assuming public trust is the issue. The issue is scientific integrity and impartiality which are both compromised in the professional reliance model.
- A multi stakeholder committee should set criteria for consulting firms to be allowed to be retained for any kind of environmental/health risk assessments. Those who would abide by those criteria should be listed and only those listed could be retained for studies.
- Consulting firms should make available to the public the CVs of the authors as well as previous assessments/reports.
- Applicants should fund studies requested by affected communities in an equal amount as the ones they fund for their proposal.
- The Committee should set criteria for assessments and have the ability to reject those that do not follow the criteria. I wrote in my comments to EAO regarding the Aurora LNG proposal “EAO was not able to provide us with guidelines for what is required for a human health assessment. They could only direct us to “*Table 3-5 of the Aurora LNG AIR (pg. 3-37) which includes a list of the standards and guidance documents considered by the proponent in their assessment of human health and related pathway effects*”. This is far from adequate and it remains unclear if EAO will ensure that the guidance documents have been properly interpreted and followed”.
- The vacuum of governments' abilities to review documents should be addressed. It was the role of EAO to ensure that the guidance documents were properly used but they never saw fit to do that. It should be clearly communicated to the public if they did or not and they should have documents to prove it.
- Unsatisfactory and partial assessments should prevent the authors/consulting firms from being retained in the future
- Reports should make very clear what is *not* known. Language like “**it is unlikely**”, is not acceptable. A range of scenarios should be offered, worse and best scenarios with associated chances of them to occur. The same goes with “**insignificant**” which should be clearly defined.

Another frequently used expression is “**Limited toxicological information**” which means insufficient information to come to any conclusion. This expression is too often used, while it does not prevent consultants to conclude the project will have no “significant” effect. Admitted limited toxicological information should be a red flag against any firm conclusion of no effect or no “significant” effect.

3. Do you have any other observations or recommendations you would like to make about this review?

- This review defines the professions involved as “*engineers, geoscientists, foresters, biologists, agrologists and applied science technologists*”.

From this definition, I do not see any qualification for conducting a health risk assessment. I recommend that a medical doctorate should be mandatory for the evaluation.

- Accountability

Consulting firms are making huge amounts of money producing reports and assessments. Models are now a commodity that can be bought. However, modeling is only a tool to understand better how things work. Academics strongly advise that models should never be used as predictive tools. In spite of this, models have become “holy grails” of seeing into the future. Regarding the Aurora LNG plant proposal, I commented:

The uncertainties of the air dispersion model upon which exposure levels are deduced do not support the conclusion “*inhalation exposures to COPCs would result in a negligible change in inhalation health risk for residents in Digby Island, Prince Rupert, Port Edward, Georgetown Mills (no residents) and Metlakatla Village*” (p.65 of the Data Report).

The Proponent should test how the conservative assumptions will hold their conclusions with a worst case scenario.

Given there is no turning back when the project is approved and built, consulting firms should be held accountable for their erroneous predictions.

Health risks assessments are made in a format which is used over and over by the consulting firms. It is an exercise in risk modeling which has little to do with health. It is also very lucrative. By fragmenting the risks of one contaminant at a time, they offer little help to determine real health effects of a proposal. Should we look at a small increase of risks of upper respiratory problems the same as an increased risk of heart attacks or cancer?

The reports I have dealt with are very careful to NOT describe those effects. As an example, the Aurora LNG proposal report describes potential health effects as respiratory which is generally perceived as not too alarming. The word “asthma” is nowhere to be seen in their assessments. This results of a displacement of the subject at hand and does not justify titles like “human health risk assessment”.

Moreover, like in the case of the Aurora proposal, the conclusions did not match the material presented. Obviously, much pressure was put on the consulting firm to please the proponent (and the government of the day). This is unacceptable. The same multi stakeholder Committee should review reports and assessments to ensure the conclusions are not foregone and clear the language of meaningless and misleading phraseology.

To summarize, present Professional Reliance by governments for reports and assessments is fraught with problems associated with the lack of definition of what an expert is, what qualifications are required, potentials for conflicts of interests and a deplorable lack of resources and mechanisms to assess the impartiality and quality of the works produced. Professional bodies have never been

intended to do the work of governments in these matters. There is a glaring need for changes including making a list of consulting firms which agree to fit defined criteria for expertise, some form of peer/multistakeholder reviewing of the work produced and means to enforce professional accountability.

Thank you for taking my comments into consideration.

Dr. Josette Wier