Response from Lalita Bharadwaj to remaining public questions from the Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing public proceedings May 27, 2014

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What do you think of FracFocus?

FracFocus is a website where fracturing fluid constituents are posted. It is a preliminary step in information sharing regarding the types of chemical constituents are utilized in the fracturing process.

Does developing a natural gas industry in a jurisdiction without one currently make sense?

The development of a natural gas industry in a jurisdiction that currently has no experience could be developed through an extensive consultative process with jurisdictions where there has been a long history. Working with, and learning from, regulators, industry and community members who have lived in a natural gas jurisdiction for years can provide information to inform decisions to move forward or not to move forward with natural gas development. Development decisions need to be informed through thorough consultative processes with all stakeholders.

Can fracturing fluid be returned to safe drinking water standards?

At the current time fracturing fluid is being recycled for re-use. The understanding of the chemical fate and behaviour of chemicals (as well as the mixtures) within the fracturing fluid is not yet understood. In general, fracturing fluid chemicals are not part of Health Canada's drinking water standards so these chemicals should not be present in drinking water and at the current time it is unknown if there is a treatment process that removes these chemicals from the fracturing fluid. Thus it is currently treated for waste water disposal and not for drinking water.

It was mentioned that shale gas is "sweet," what is the potential for wells to turn "sour"?

The reference to "sweet" shale gas indicates that the shale gas is free of sulphur content. I am unfamiliar with the term sour as it relates to shale gas, but shale gas can also be wet (contains commercial amounts of natural gas liquids like ethane and butane) or dry (contains very little or no natural gas liquids).

Please explain why natural gas is considered to be safe clean energy.

Natural gas is considered to be safe clean energy because it burns more cleanly than coal-derived energy and there is a decreased emission levels of airborne contaminants and CO2 as compared to coal-derived energy.

Do you support hydraulic fracturing in Yukon or would you recommend banning it?

There is considerable public debate around the development of Shale Gas in the Yukon and other areas of the country where shale gas development is proposed particularly in areas where oil-gas development has not yet been experienced. Public concerns relate to regulation of the industry, safety, exposures to potential contaminants, economics etc.

There is an opportunity for the Yukon to work collaboratively with all stakeholders (industry, government, community) to make an informed decision to move, or not to move, forward with Shale gas development. This will provide a forum to identify concerns and issues, challenges with the industry and regulations the govern it.