Letters from I. Simpson

May 2, 2015

1 – Letter from I. Simpson

Dear Dr Gosine,

I am writing this submission to the Review Panel. I have been actively researching the peer reviewed articles on the health aspects of hydraulic fracturing for the past three years. I have become more and more convinced that there are health effects associated with hydraulic fracturing and that they may be increasing. The recent dramatic increase in available health related peer reviewed articles in certainly a strong indication of that. In addition there is now evidence of long term health effects. Since this industry is relatively young the evidence of long term health implications will almost certainly increase over the years . The effect of low dose toxicity from oil and gas emissions is most obvious in the unborn, and young infant. One example would be the increase in cardiac, neurological, and behavioural defects in children born close to oil and gas wells, compared to a control group further away from the emissions. (see references)

There has only been one Health Impact Assessment done, that I can find in the literature; -- Battlement Mesa Colorado, -- and many complaints from Public Health Associations that public health seems excluded from the table at all planning sessions. I believe that it is probable that Newfoundland is heading towards the same mistake, in not having either a public health officer on the review panel, or a physician with epidemiological *I* environmental credentials.

I am submitting this request that I be allowed to present to the Panel so that I may present the reasons why I think that there should be a ban on tracking, at the very least until adequate Health Impact Assessments are done, more scientific data obtained, and the full impact of this industry on all the communities on the West Coast of Newfoundland is known.

I am aware that I will need to submit my presentation before June 1 and will ensure that you will receive it in time. In the meantime, please note me down as an interested party to present.

Sincerely

Ian Simpson MA, MB. BChir.(Cantab).CCFP. FCFP.

SCIENTIFIC ARTICLES ON FETAL AND NEWBORN HEALTH AND FRACKING.

I.Bamberger M and Oswald R 2012 Impacts of O and G drilling on Human and Animal Health. Journal New Solutions. 22-51 77.
$2.\ Colbome T. Kwiatowski Cetal. 2011\ Natural\ Gas\ Operation from a Public\ Health\ Perspective\ Human\ and\ Ecological\ Risk\ Assessment\ . An international journal\ 17:1039-1056.$
3. Colbome T. Schultz K et al. 2014 An exploratory study of Air Quality near Natural gas Operations. Human and Ecological Risk Assessment 2012.
4. McKenzie L Guo, Witter et al, 2014 Birth outcomes and Maternal Residential Proximity to Natural Gas Development in Colorado. Environmental Health Perspectives 122
5. McKenzie L, Witter R, Newman et al, Human Health Risk Assessment of air emissions from development of unconventional natural gas resources. Sci. Total. Environ. 424.79-87
6. Rabinowitz et al 2014 Proximity to Natural gas Wells and reported Health status. Results from a survey in Washington County Pennsylvania. Env Health Perspectives doi:l0.1289/ehp.1307732
7. Steinzor N. Subra W, Sumi L. 2013. Investigating links between Shale gas Development and Health Impacts through a Community survey Project in Pennsylvania. New Solutions A journal of Environmental and Health policy 23: 55-83
8. Hill I. Cornell./ MIT. Study Increased incidence of Low Birth Weight babies and increased Prematurity in babies born after fracking commenced, compared to the average prior to fracking.

 $2.\ Pennsylvania\ study, indicated\ that\ there\ was\ a\ 26\%\ increase\ in\ low\ Apgar\ scores\ in\ communities\ that$

are fracked compared to non-fracked communities.

9. McKenzie et al Increase of Congenital Cardiac defects in babies living in closer proximity to Oil and Gas Fracking wells, compared to babies living further away.

25,000 cases analysed.

Neurological impairments probable, but data not so strong as with the cardiac deficits.

10 Utinah county in Utah State .A midwife noticed an enonnous increase in newborn and infant burials in the last few years. This is being investigated.

This area has seen a very rapid increase in drilling and fracking in the last few years; and the previous "pristine" air quality has deteriorated to one of the worst in US.

www stateoftheair org/2013/stateslutah/utina

May 5, 2015

2 – (I. Simpson comments) "Toxic pollutants are dangerous to the foetus, and small children."

Scientists warn of hormone impacts from benzene, xylene, other common solvents.

http://www.environmentalhealthnews.org/ehs/news/2015/apr/endocrine-disruption-hormones-benzene-solvents

3 – (I. Simpson comments) "The effects on unborn and newly born children must be considered."

The Faroes Statement: Human Health Effects of Developmental Exposure to Chemicals in Our Environment

http://www.precaution.org/lib/faroes_statement_pub.070801.pdf