

New Brunswick Anti Shale Gas Alliance, Inc.  
PO Box 2011  
Riverside Albert, NB E4H 4B0  
[jimemberger@yahoo.com](mailto:jimemberger@yahoo.com)

September 1, 2014

Hon. Danny Soucy, Minister of Environment and Local Government  
Marysville Place, P O Box 6000  
Fredericton, NB E3B 5H1  
[danny.soucy@gnb.ca](mailto:danny.soucy@gnb.ca)

**Re: EIA Application 1390**

Dear Minister Soucy:

I am writing on behalf of the New Brunswick Anti Shale Gas Alliance (NBASGA ) to comment on the application for Environmental Impact Assessment review by Atlantic Industrial Services (AIS). The proponent proposes to dispose of “flowback” waste water from unconventional hydraulic “fracking” operations into the sewer system that serves Dieppe, Moncton and Riverview. From there it will travel into the Petitcodiac River, and subsequently disperse into the Bay of Fundy, travelling up and down with the tides until eventually it flows out of the Bay.

I will mention a few overarching points and then raise a number of issues that are of major concern to the many New Brunswickers who are part of NBASGA. For more information about NBASGA and what we stand for, I invite you to view our website at <http://www.noshalegasnb.ca/>.

1. Under the *Clean Environment Act - Regulation 87-83*, specifically *Schedule A; Undertakings 87-108.m*, there appears to be an absolute requirement – i.e. an **automatic trigger by legislation** – for a full, public Comprehensive EIA Review in regards to **any industrial project** that includes a **waste disposal system**.
2. I realize your department is at a preliminary stage with Application 1390, but so far your department has not been forthcoming about engaging the multiple parties that would be brought into this comprehensive public review. It is my understanding that the City of Dieppe only received a copy of the proponent’s proposal from a concerned private citizen, about two months after the application was filed with your department. Further it is my understanding that the communities of Moncton and Riverview, who share a water/sewage system with Dieppe, only learned about Application 1390 from the media coverage of the August Dieppe City Council meeting where this was discussed. These procedural shortcomings suggest a reluctance to fully disclose to key partners, which is not at all in the spirit of the legislation.

3. Please take this as official notice that **NBASGA wants to be involved and informed at every stage of this application**. We look forward to having some of our following questions and concerns addressed through the mandated Comprehensive EIA Review process.
4. Something does not add up properly: the proposed facility has only been granted a six month license to operate in this location, while the proposal calls for approximately three years of work. It has been said that this facility was out of operation for a period of time before Application 1390 was developed. To address public concerns, **more information is required on the equipment at the site, the operational condition of the facility at the site, and the reason the licence is only valid until November 6, 2014**.

Now I will turn to other details that are of great concern to NBASGA members.

5. **What are the Government of New Brunswick's standards, processes and technology for assessing and monitoring the accumulation of low-level radioactivity and/or toxicity in bodies of water to which industrial effluent has been added?** Please point us in the direction of these standards or if they are not yet in place, please advise when they will be.
6. Apparently, there has never been any independent testing of the supposedly "treated" wastewater that is being held in Nova Scotia, as AIS awaits a decision on this application. AIS always took the samples and submitted the samples themselves. The history of dealing with the troublesome wastewater produced by fracking is replete with examples of companies evading or breaking regulatory requirements. NBASGA is not accusing AIS of any such actions, but we note that the history of this wastewater shows that the company did not initially disclose the nature of radioactive and toxic contents of wastewater to the municipal sewage treatment systems with whom it was working in Nova Scotia. **Will New Brunswick authorities require an independent, arms-length third party retest of this water prior to the application being approved to begin transporting it to Dieppe?**
7. How can we be certain that the chemicals being tested by AIS or anyone else constitutes the complete list of chemicals used in those particular fracking operation mixtures that created this wastewater?
  - First, trade secrets often overrule public interest, so that the precise cocktail of chemicals used is often unknown to anyone but the fracking company.
  - Second, when chemicals combine they can often combine to become something else, perhaps more sinister than the original compounds.
  - Third, from the document, *OUT OF CONTROL: Nova Scotia's Experience with Fracking for Shale*, we see that of the chemicals that **were** identified by AIS many have toxic or carcinogenic properties.
    - Of the 22 identified chemicals used in Hants County: two are known to adversely affect reproduction; eight are potential mutagens; eight are

potential carcinogens; and eleven have the potential to cause adverse effects to ecological integrity.

- Of the 31 identified products (chemical mixtures) used in Hants County: five are associated with adverse effects on reproduction; five contain potential mutagens; eight contain potential carcinogens; and eight can cause adverse ecological impacts.

In the five years that this water has been sitting open to the elements in Nova Scotia holding ponds, the chemicals have been diluted by water, potentially mixed with other wastewater or had time to break down. Is the complete list of fracking chemicals originally in the wastewater known? Are they toxic? Have any combined to form new hazardous compounds?

**How will the province of New Brunswick assure the public that the complete composition of all chemicals in each load of wastewater is known prior to its transport, and that the proponent actually has the industrial capacity to treat and remove all these dangerous substances from that load of wastewater?**

8. **On standards and radioactivity:** One reason why Nova Scotia originally refused the wastewater was due to the level of radioactivity. Dieppe has no standards for radioactivity in its by-laws. Canadian federal standards have not been updated for decades although more stringent guidelines are coming into effect for municipal treatment plant shortly – raising the additional question of will the water still meet the stipulations of those guidelines? If not, what happens then? While regulations have not kept pace, during recent decades much scientific research has been done on the negative cumulative effects of low-level radiation. Peer reviewed studies done in Pennsylvania have found that treated fracking wastewater often still exceeded US radioactivity standards. **What will New Brunswick do in terms of research and testing to address these concerns?**
9. **What went wrong in Nova Scotia and why is there such urgency for disposal?** In the EIA application, the rationale for the project hinges on the holding ponds at Debert being full, and AIS being uncertain of the success of an experimental project which saw two million litres diverted for "incineration" at a NS cement plant in NS. As they have completed the test of two million litres, should we assume the urgency to dispose of water in Dieppe means this was unsuccessful? We can guess that the two million litres delivered by AIS to the Lafarge Cement Kiln at Brookfield for experimental disposal apparently did not work as planned, as Lafarge didn't take any more. Does this mean that it could not be scrubbed of hazardous chemicals even using this process? **Why did this experiment not work? Is the reason the same as the reason that Nova Scotia municipalities continue to refuse to accept the wastewater?** This is important information that must be disclosed so that the public can feel a reasoned decision is being made based on good science. **Also, has the**

**urgency of this request and the amounts of wastewater actually been verified?**

- If the wastewater contains any contaminants or radioactivity, the tidal bore would take some of the waste upriver as far as Salisbury and leave any radioactive particles or residue chemicals in the muddy banks along the way. The same situation applies to downriver. Halls Creek and all tidal streams will be affected. As the process continues, any chemicals and radioactive particles will gradually accumulate over time, becoming more toxic and threatening aquatic life. **All these communities and the people who live in them are entitled to the full disclosure and engagement process offered by a Comprehensive EIA Review.**
- **Who will pay?** Some of these tests take several weeks, and that is just one factor that makes the essential independent, arms length testing expensive. So, of course as taxpayers, we would like to know who will pay for it? Keeping things safe costs a lot of money, so there is a lot of incentive for companies to do as little as possible and to weaken regulations as much as possible. That is why we must remain cautious and vigilant.
- **Protecting the unique Bay of Fundy environment, on which many, many Maritimers rely for their livelihood:** We believe that The Nova Scotia Department of Environment stated that they would not approve release of wastewater to an aquatic environment until tests had been done in the particular environment in question, which in this case is the Bay of Fundy. Clearly N.S. had its reasons for saying this, so **I ask if your government has undertaken or commissioned such testing?**

In view of all the serious issues we have raised, we ask that you immediately make the determination to require Proposal 1390 to undergo a full, public Comprehensive EIA Reviewed due to the human health and environmental considerations arising from the intended activity.

We also ask that you invite the Chief Medical Officer of Health or her departmental designate to join this Comprehensive EIA Review as a lead partner. We make this request because of the very deep concerns she expressed about human health impacts of these industrial effluents, and the province's capacity shortfall to deal with this matter, in her report ***Chief Medical Officer of Health's Recommendations Concerning Shale Gas Development in New Brunswick*** (October 2012).

Thank you for your consideration of these points. NBASGA looks forward to your prompt response.

Sincerely yours,

Jim Emberger, Spokesman, New Brunswick Anti-Shale Gas Alliance

- cc. Scott Sangster, Director of Health, Safety & Environment, EnviroSystems (AIS) [SSangster@envirosystems.ca](mailto:SSangster@envirosystems.ca)  
Gary Drescher, Project Manager, Dillon Consulting [GDrescher@dillon.ca](mailto:GDrescher@dillon.ca)  
Shawn Hamilton, Project Manager, Environmental Assessment Section,  
Department of Environment and Local Government [Shawn.Hamilton@gnb.ca](mailto:Shawn.Hamilton@gnb.ca)  
Dr. Eilish Cleary, NB Chief Medical Officer of Health [Eilish.Cleary@gnb.ca](mailto:Eilish.Cleary@gnb.ca)  
Karen White, Director, Healthy Environments, Health [Karen.White@gnb.ca](mailto:Karen.White@gnb.ca)  
Hon. David Alward, Premier of New Brunswick [David.Alward@gnb.ca](mailto:David.Alward@gnb.ca)  
Hon. Craig Leonard, Minister of Energy and Mines [Craig.Leonard@gnb.ca](mailto:Craig.Leonard@gnb.ca)

Moncton Municipal Government

[george.leblanc@moncton.ca](mailto:george.leblanc@moncton.ca)  
[dawn.arnold@moncton.ca](mailto:dawn.arnold@moncton.ca)  
[shawn.crossman@moncton.ca](mailto:shawn.crossman@moncton.ca)  
[blair.lawrence@moncton.ca](mailto:blair.lawrence@moncton.ca)  
[brian.hick@moncton.ca](mailto:brian.hick@moncton.ca)  
[rene.landry@moncton.ca](mailto:rene.landry@moncton.ca)  
[pierre.boudreau@moncton.ca](mailto:pierre.boudreau@moncton.ca)  
[paulette.theriault@moncton.ca](mailto:paulette.theriault@moncton.ca)  
[charles.leger@moncton.ca](mailto:charles.leger@moncton.ca)  
[daniel.bourgeois@moncton.ca](mailto:daniel.bourgeois@moncton.ca)  
[paul.pellerin@moncton.ca](mailto:paul.pellerin@moncton.ca)

Dieppe Municipal Government

[maire@dieppe.ca](mailto:maire@dieppe.ca)  
[jean.gaudet@dieppe.ca](mailto:jean.gaudet@dieppe.ca)  
[jody.dallaire@dieppe.ca](mailto:jody.dallaire@dieppe.ca)  
[jordan.nowlan@dieppe.ca](mailto:jordan.nowlan@dieppe.ca)  
[jean-marc.brideau@dieppe.ca](mailto:jean-marc.brideau@dieppe.ca)  
[jean-claude.cormier@dieppe.ca](mailto:jean-claude.cormier@dieppe.ca)  
[paul.belliveau@dieppe.ca](mailto:paul.belliveau@dieppe.ca)  
[ernest.thibodeau@dieppe.ca](mailto:ernest.thibodeau@dieppe.ca)  
[roger.leblanc@dieppe.ca](mailto:roger.leblanc@dieppe.ca)

Riverview Municipal Government

[ASeamans@townofriverview.ca](mailto:ASeamans@townofriverview.ca)  
[WBennett@townofriverview.ca](mailto:WBennett@townofriverview.ca)  
[LHansen@townofriverview.ca](mailto:LHansen@townofriverview.ca)  
[CCassista@townofriverview.ca](mailto:CCassista@townofriverview.ca)  
[IMacdonald@townofriverview.ca](mailto:IMacdonald@townofriverview.ca)  
[ALeblanc@townofriverview.ca](mailto:ALeblanc@townofriverview.ca)

[RHayward@townofriverview.ca](mailto:RHayward@townofriverview.ca)  
[TToner@townofriverview.ca](mailto:TToner@townofriverview.ca)

Stephanie Merrill, Conservation Council of New Brunswick  
[water@conservationcouncil.ca](mailto:water@conservationcouncil.ca)

Anita Cannon Conservation Council NB Southeast  
[ccnbsoutheast@gmail.com](mailto:ccnbsoutheast@gmail.com)

Margo Sheppard, Council of Canadians, Fredericton, [NTNB1@bellaliant.net](mailto:NTNB1@bellaliant.net)  
Angela Giles, Council of Canadians Atlantic Region, [agiles@canadians.org](mailto:agiles@canadians.org)

Members of NBASGA, [shaleinfo.nb@gmail.com](mailto:shaleinfo.nb@gmail.com)

Clean Energy Sussex

Concerned Citizens of Penobsquis

Cornhill and Area Residents Assn

Council of Canadians, Saint John

Darlings Island

Kent South No Shale Gas

Hampton Water First

Memramcook Action

Notre Environnement, Notre Choix

Petitcodiac Watershed Alliance

Sustainable Energy Group

Tantramar Alliance Against Hydro-Fracking

Taymouth Environmental Action

Upper Miramichi Stewardship Alliance

Upriver Environment Watch

Water and Environmental Protection for Albert County