

To: Mayor Bratina and Hamilton City Council

Subject: Request for Resolution Against Hydraulic Fracturing (Fracking)

Dear Mayor Bratina and City Council:

I am the current Chair of the Great Lakes & Water Group, a working group of the Hamilton chapter of the Council of Canadians. We are deeply concerned about the practice of hydraulic fracturing, or fracking, as it is commonly referred to.

I am writing to you today to encourage the City of Hamilton to join other cities and municipalities in Canada and the US that are taking action to oppose fracking.

On July 28, 2010, the UN General Assembly passed a resolution recognizing the human right to water and sanitation. After years of denying that the right to water even existed, the Canadian government finally confirmed the right to water in 2012. It is time for the Canadian government to uphold this right by banning fracking until the appropriate scientific studies on the technology used in the fracking process have been done.

There are many reasons why the City of Hamilton should be concerned about fracking. Fracking – also known as hydraulic fracturing – is one of the biggest threats to clean water. It is a process used to extract natural gas or oil trapped in shale rock and coal beds. Energy companies are using millions of litres of water, thousands of litres of chemicals, and thousands of kilograms of sand to blast apart rock formations. Fracking companies are not legally required to disclose the chemicals they use, despite the fact that some of the chemicals are toxic and have been known to cause cancer and damage people's internal organs. The disposal of fracking wastewater poses a long-term risk to clean water and public health. Therefore, any fracking in southern Ontario would pose a serious risk to water quality in the Great Lakes.

Companies currently are arranging for shale gas pipeline and petro-chemical processing projects in Ontario. Some of this gas would come from fracking in neighbouring U.S. states. Companies with facilities in Sarnia-Lambton's Chemical Valley are seeking out shale gas from the northern U.S. However, it is possible that this shale gas could come directly from Ontario in the future.

There seem to be three major zones of shale gas sources in Ontario:

- the Kettle Point Formation known as Antrim Shale
- the Collingwood/Blue Mountain formations known as Utica Shale
- the northernmost limit of the Marcellus Shale

At least two companies currently are preparing to frack around Ontario: Mooncor and Eurogas. These companies also use the names DRGN Resources and Dundee Energy Limited Partnership, respectively.

Three Great Lakes are threatened by those plans: Lake Huron (including Georgian Bay), Lake Ontario and Lake Erie. Much of Lake Erie has the Marcellus Shale under it, and any fracking near the shores of the Great Lakes could be devastating — for drinking water, and the lake environment in general.

There are also potential fracking threats to the following native territories, which are being targeted: Bkejwanong / Walpole Island, Aamjiwnaang, Kettle Point, Caldwell, the Moravian of the Thames reserve, the Oneida Nation of the Thames, Munsee-Delaware, and the reserve for the Chippewas of the Thames. It seems that Mooncor plans to begin its operations in Lambton and Chatham-Kent, beside Bkejwanong / Walpole Island).

With the consciousness of people in Canada on the issue of “fracking” having been taken up a notch by the Mi’kmaq-led resistance in New Brunswick, the Chiefs of Ontario have made it clear they are opposed to fracking taking place anywhere in Ontario.

“We are not going to allow it,” stated Patrick Madahbee, grand council chief of the Anishinabek First Nation after a Chiefs of Ontario special assembly. “The Chiefs of Ontario have passed a motion against any fracking taking place in any of our communities in Ontario...there is widespread opposition to it.”

“We’ve talked to Premier Kathleen Wynne to make our concerns known,” said Chief Madahbee. “It is crazy, this practice can ruin water tables in any area it is carried out in and everyone has to drink from the same water sources.”

“We are going to fight any fracking taking place,” agreed Glen Hare, deputy grand chief of the Anishinabek First Nation. “Fracking needs to stop and on behalf of all of our communities we are saying no to it.”

Fights against fracking are happening across the country. Alberta farmers who live near fracking drill sites can light their tap water on fire because it’s so contaminated with methane. The Fort Nelson First Nation in northeastern B.C. is experiencing earthquakes linked to the injection of fracking wastewater, and people living there are fighting to stop companies from withdrawing billions of litres of water from the local watershed.

Communities in Nova Scotia are also speaking out about fracking. The Union of Nova Scotia Municipalities passed a resolution supporting a province-wide ban on the practice, as communities all across Atlantic Canada are demanding a ban on fracking to protect their drinking water. These expressions of concern led the Nova Scotia government to institute a moratorium on fracking in 2012. This moratorium will stay in place until the summer of 2014 in

order to provide the Nova Scotia government with more time to review the technology used in fracking operations.

2012 also saw the government of Quebec institute a moratorium on fracking until its environmental impacts are better understood. Environment Minister Pierre Arcand was quoted by the Montreal Gazette as saying that "The conclusion of the report [recommending the moratorium] is clear: the lack of knowledge about shale gas requires the government's close supervision, and to proceed very cautiously."

Opposition to fracking has also been growing in Newfoundland and Labrador following proposals for exploration in three sites along the west coast of the province. The possibility of fracking in Gros Morne National Park received international attention when UNESCO raised concerns about how it would affect the area and its World Heritage Site status. As a result of this concern, Newfoundland and Labrador Minister of Natural Resources Derrick Dalley said that his government would not be "accepting applications for onshore and onshore to offshore petroleum exploration using hydraulic fracturing."

"From coast to coast, communities are calling for a stop to fracking. We're relieved to see that the Newfoundland and Labrador government is taking a common-sense approach by reviewing regulations, conducting impact studies and engaging the public before moving ahead," said Emma Lui, National Water Campaigner for the Council of Canadians, following the government's announcement. "Now that fracking is on hold in Quebec, Nova Scotia and Newfoundland and Labrador, it's time for other provinces and the federal government to do the same."

Canada's largest private sector union, Unifor, has also joined the growing chorus of concern over fracking. This labour organization, representing over 300,000 members in a wide range of economic sectors, including energy, is calling for a national moratorium on fracking.

Opposition to fracking is worldwide. France instituted a ban on hydraulic fracturing in 2011, and opposition to fracking is widespread in the United States. When faced with the prospect of fracking activity within their jurisdictions, towns are increasingly adopting moratoriums on fracking in Texas, Colorado, New York and elsewhere. In California, a group of top U.S. climate scientists have sent a letter to California Gov. Jerry Brown urging him to issue a moratorium on fracking in his state. Twenty scientists — including James Hansen, former head of NASA's Goddard Institute for Space Studies and vocal advocate of taking action on climate change, and Michael Mann, professor of meteorology at Penn State University — signed the letter. The letter outlines the emissions impact, threat of dangerous pollution and the vast water requirements of extracting gas and oil from California's shale reserves.

Mayor Bratina and City Council, I am writing to you today to ask the City of Hamilton to formally express its opposition to the practice of hydraulic fracturing and to ask the Ontario and Canadian governments to institute provincial and national moratoriums on the practice.

Some further information which may assist you with your deliberations can be found on the Council of Canadians website at <http://www.canadians.org/fracking> and also at <http://stopfrackingontario.wordpress.com/fracking/in-ontario/>.

I have attached some sample resolutions and municipal bylaws that have already been passed by other Canadian and US communities that could be used as the basis for a resolution that the City of Hamilton might consider passing.

If you have any questions, I would be pleased to speak with you. I can be reached by phone at 905-389-7887 or by e-mail at ed_reece@yahoo.ca. Thank you very much for your time and consideration of this matter.

Most sincerely,

Edward Reece

Chair

Great Lakes & Water Group

Hamilton Chapter, Council of Canadians

SAMPLE MUNICIPAL RESOLUTION(S) ON FRACKING

WHEREAS, hydraulic fracturing (fracking) for natural gas and other fossil fuels often involves the injection of hundreds of toxic chemicals into the ground; and

WHEREAS, hydraulic fracturing uses massive amounts of water, as much as 36 million litres per fracking "job"; and

WHEREAS, there have been more than a 1,000 documented cases of water contamination near fracking sites in the U.S. and some people, such as in Rosebud, Alberta, have well water that now contains so much natural gas they can light their drinking water on fire; and

WHEREAS, the pollution of water caused by fracking threatens the long-term economic, social and ecological well being of communities that depend on clean water sources to meet their basic needs; and

WHEREAS, the treatment of fracking wastewater strains municipal wastewater systems and puts water sources at risk since wastewater treatment systems are not capable of removing endocrine disruptors and other toxic chemicals from fracking wastewater; and

WHEREAS, more study is needed on the impact of hydraulic fracturing on localized air pollution which can have adverse health effects; and

WHEREAS, while the industry claims that natural gas is a cleaner fuel, some independent studies have shown that hydraulic fracturing creates more lifecycle greenhouse gas emissions than mining and burning coal and clearly more scientific study is needed; and

WHEREAS, water and air are shared commons and public trusts and as such require genuine public consultation and a process that enables communities to be a part of the decision-making process; and

WHEREAS, on September 23, 2011, the UN Human Rights Council passed Resolution A/HRC/18/L.1 affirming the human right to safe and clean drinking water and sanitation and as such contamination of drinking water by fracking fluids is a violation of this and other human rights;

(OPTION 1. MORATORIUM UNTIL REVIEW/PUBLIC CONSULTATION OCCURS):

NOW, THEREFORE BE IT RESOLVED, that on the ____ day of ____ 20__, (municipality or town) supports a province-wide and national moratorium on hydraulic fracturing until provincial and

federal reviews have been completed that include extensive public consultation and full consideration of the potential human and environmental impacts of hydraulic fracturing.

BE IT FURTHER RESOLVED, that (municipality or town) also calls for dialogue between First Nations, federal, provincial and municipal governments on the impacts of hydraulic fracturing.

NOW, THEREFORE, BE IT ORDAINED, that hydraulic fracturing for natural gas and other fossil fuels within (municipality or town) and (name of local watershed) watershed and the treatment of fracking fluids in (municipality or town)'s wastewater treatment plant(s) is prohibited until the above-noted public consultations and reviews have been completed.

PASSED, APPROVED, AND EFFECTIVE on this ____ day of ____, 20__.

ATTEST:

Mayor

Council President

(OPTION 2. OUTRIGHT BAN):

NOW, THEREFORE, BE IT RESOLVED, that on the ____ day of ____, 20__, (municipality or town) supports a provincial and national ban on hydraulic fracturing for natural gas and other fossil fuels.

BE IT FURTHER RESOLVED that (municipality or town) will send a letter to (Members of Provincial Parliament and Members of Parliament) calling for a ban on hydraulic fracturing and for the development of provincial and federal legislation banning hydraulic fracturing.

NOW, THEREFORE, BE IT ORDAINED, that hydraulic fracturing for natural gas and other fossil fuels within (municipality or town) and (name of local watershed) watershed and the treatment of fracking fluids in (municipality or town)'s wastewater treatment plant(s) is banned.

PASSED, APPROVED, AND EFFECTIVE on this ____ day of ____, 20__.

ATTEST:

Mayor

Council President

SAMPLE BYLAW ON FRACKING AS PASSED BY THE MUNICIPALITY OF THE COUNTY OF INVERNESS, NOVA SCOTIA:

Municipality of the County of Inverness: By-law #

BEING A BY-LAW TO PROHIBIT THE USE OF CHEMICAL (*SLICKWATER*), HYDRAULIC FRACTURING, OTHERWISE KNOWN AS HIGH VOLUME HYDRAULIC FRACTURING (HVHF) OR *FRACKING*, TO EXTRACT METHANE GAS OR PETROLEUM

- 1) WHEREAS** The Municipality of the County of Inverness supports conventional methods of exploration for and harvesting of oil and gas, but not chemical hydraulic fracturing, to fracture underground rock structures as a means to explore and extract oil or methane gas from drilled wells within the territorial jurisdiction of the Municipality of the County of Inverness.
- 2) WHEREAS** it is generally acknowledged that within free and democratic societies the power to govern derives solely from the authority and consent of those governed;
- 3) AND WHEREAS** Section 7 of the Canadian Charter of Rights and Freedoms, enshrined within the Constitution Act of 1982, guarantees a person's right to *Life, Liberty, and Security of Person*;
- 4) AND WHEREAS** the Supreme Court of Canada has made clear that *Life, Liberty, and Security of Person* are distinct and separate rights and has ruled in past cases that the particular and universal right to *Security of Person* embraces an individual's "*health and well being*";
- 5) AND WHEREAS** International Law recognizes the *Precautionary Principle* which states that action which may cause morally unacceptable harm to humans or the environment **not be taken**, the accepted threshold for caution and restraint being that the identified potential harm is scientifically plausible;
- 6) AND WHEREAS** the Supreme Court of Canada in **114957 Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)**, [2001] 2 S.C.R. 241, 2001 SCC 40 referred directly to said *Precautionary Principle* in its unanimous judgment upholding the legal right of the town of Hudson, Quebec, under that province's **Cities and Towns Act, Section 410(1)**, to adopt a bylaw that legislated restrictions on the use of pesticides in order to protect the "*health and general welfare in the territory of the municipality*";
- 7) AND WHEREAS** said Supreme Court 2001 decision implies that, not only do municipal, county, provincial, and federal governments all bear a common responsibility to protect the health and well being of their residents but, further, that government at every level has latitude and broad discretion to regulate activities that pose potential harm to residents within their respective jurisdictions;
- 8) AND WHEREAS** it is reasonable that government, or any party licensed or empowered by government, not violate the Principles of Fundamental Justice by infringing upon an individual's right under said Section 7 through the societal pursuit of a purported "*legitimate objective*", that objective in the case of this bylaw being the technical use of hydraulic fracturing to facilitate the flow of methane gas or oil from underground rock structures;
- 9) AND WHEREAS** previous interpretation of said Section 7 by the Supreme Court of Canada (**Blencoe v. BC (Human Rights Commission) 2000 SCC 44**) has broadened the scope of an individual's "*health and well being*" to include an individual's "*psychological integrity*", thereby asserting an individual's right to be protected from undue mental stress
- 10) AND WHEREAS** the municipalities of the Province of Nova Scotia derive their power under the **Municipal Government Act (S.N.S. 1998 Chapter 18)** which in **Section 2 (General Purpose)**

expanded the scope of the previous **Municipal Act (RSNS 1989, Chapter 295)** in order to: (a) *give broad authority to councils, including broad authority to pass by-laws, and to respect their right to govern municipalities in whatever ways the councils consider appropriate within the jurisdiction given to them;* (b) *enhance the ability of councils to respond to present and future issues in their municipalities;* and (c) *recognize that the functions of the municipality are to (i) provide good government, (ii) provide services, facilities and other things that, in the opinion of the council, are necessary or desirable for all or part of the municipality, and (iii) develop and maintain safe and viable communities;*

11) AND WHEREAS said **Municipal Government Act 1998** in **Part III Section 47(1)** confers general power to legally elected councils of Provincial municipalities to make bylaws and further enshrines in **Part VII** the following powers: **Section 171(1)** *Subject to Part VIII, in this Act, the power to (a) license includes the power to regulate; (b) regulate includes the power to license and (c) regulate includes the power to prohibit;* **Section 172(1)** *A Council may make by-laws, for municipal purposes respecting (a) the health, well being, safety and protection of persons, (b) the safety and protection of property; and* **Section 172(2)** *Without restricting the generality of subsection (1) but subject to Part VIII a Council may, in any By-law, (a) regulate or prohibit, (b) regulate any development, activity, industry, business ..., (c) provide, that in a prosecution for violation of a by-law, evidence that one neighbour is disturbed is prima facie evidence that the neighbourhood is disturbed;*

12) AND WHEREAS no statutory declaration within said **Nova Scotia Municipal Government Act of 1998** can be reasonably interpreted as intent on the part of the Province to preclude a municipality's right under **Section 172(1)** to prohibit the widespread introduction of toxic chemicals on such a scale, considering International Law's *Precautionary Principle*, as to seriously impact the environment and, accordingly, the *health, well being, safety and protection of persons;*

13) AND WHEREAS the Municipality of the County of Inverness hereby asserts its legislative right on behalf of its residents under **Section 172(1)** of said **Nova Scotia Municipal Government Act of 1998** to take preventative action in countering a scientifically plausible threat to "*health and well being*" based on said Supreme Court citation of said *Precautionary Principle*;

14) AND WHEREAS said **Nova Scotia Municipal Government Act of 1998** further states in **Schedule B, (Statement of Provincial Interest Regarding Drinking Water)** an explicit goal "*To protect the quality of drinking water within municipal water supply watersheds*" noting further that "*A safe supply of drinking water is a basic requirement for all Nova Scotians*" and that "*Inappropriate development in municipal water supply watersheds may threaten the quality of drinking water*";

15) AND WHEREAS the **Water for Life: Nova Scotia's Water Resource Management Strategy** of 2011 lists as primary goals: "**Human Health** • *ensure safe, secure water for consumption, recreation, and livelihoods, Economic Prosperity* • *ensure sustainable and beneficial use of water resources, and Ecosystem Integrity* • *protect, conserve, and enhance water resources and dependent ecosystems, with emphasis on the "stewardship" of water as a "guiding principle" toward achieving "one of the most environmentally and economically sustainable ways of life in the world by 2020"*;

16) AND WHEREAS benzene is a volatile organic compound (VOC) typical of numerous VOCs that make up proprietary fracking fluid recipes used by corporations to hydraulically fracture rock formations;

17) AND WHEREAS petrolific formations are associated with not only VOCs (particularly benzene) but also naturally occurring radioactive metals (NORM including uranium, highly radioactive radium, and radioactive isotopes of thorium and lead) all of which make their way back up drilled wells as components of "produced water" (flowback), a net result of the highly pressurized injection of the millions of liters of water needed to "frack" a single gas or oil well;

18) AND WHEREAS Health Canada's Publication 4162 (**Benzene Guideline Technical Document: Guidelines for Canadian Drinking Water Quality, June 2009**) details benzene's acute effects on human health which extend to carcinogenic and genetic toxicity;

19) AND WHEREAS the Municipality of the County of Inverness, recognizing that physical health and economic wellbeing depend on the viability of the County's watersheds, hereby asserts that all residents of the County possess a fundamental right to pure water, this inalienable right encompassing and extending to all County waters, wetlands, aquifers, and interrelated natural communities occupying the County's land base, particularly with regard the purposeful introduction of any known or suspected carcinogen, neurotoxin, mutagen, or otherwise life disrupting agent through the use of hydraulic fracturing to extract gas or oil;

20) AND WHEREAS scientific studies have identified the presence of benzene and other VOC's in airborne emissions from fracking operations at concentrations above levels considered safe for human health and whereas heavier than air VOCs tend to settle in low lying valleys typically well populated in Inverness County, the Municipality of the County of Inverness hereby asserts that all residents of the County possess a fundamental and inalienable right to clean air free of airborne contaminants at levels known to pose a risk to human health and wellbeing;

21) AND WHEREAS the **Nova Scotia Environmental Goals and Sustainable Prosperity Act** of 2007 states as fundamental principles the following: "*(a) the health of the economy, the health of the environment, and the health of the people are interconnected; (b) environmentally sustainable economic development that recognizes the value of the Province's environmental assets is essential to the long-term prosperity of the Province; (c) the environment and the economy of the Province are a shared responsibility of all levels of government, the private sector, and all the people of the Province; and (d) the environment and economy must be managed for the benefit of future generations;*

22) AND WHEREAS, the Municipality of the County of Inverness hereby asserts that County residents have a fundamental and inalienable right to non-polluting diversified development consistent with the County's **Integrated Community Sustainability Plan (ICSP)** established to protect and enhance the County's "*Environmental, Economic, Social, and Cultural*" wellbeing;

23) AND WHEREAS the chemical contamination of water sources, the emission of noxious gases, and the widespread degradation of natural assets, all clearly associated with the utilization of unconventional hydraulic fracturing technology to extract gas and oil, bear

negatively both on those inherent rights claimed herein and, accordingly, on the ability of the Municipality to protect the viability of the County's natural environment upon which depends the present health and future wellbeing of its residents;

NOW THEREFORE THE COUNCIL OF THE MUNICIPALITY OF THE COUNTY OF INVERNESS ENACTS AS FOLLOWS: BY-LAW # ____:

(1) No person, partnership, joint venture, or trust or any corporate, governmental, or quasi-governmental entity or joint venture thereof may utilize either chemical (*slickwater*) hydraulic fracturing, (otherwise known as High Volume Hydraulic Fracturing (HVHF) or, simply *fracking*,) to fracture (*frack*) underground rock structures as a means to explore for or extract oil or methane gas from drilled wells within the territorial jurisdiction of Municipality of the County of Inverness.

(2) The Municipality of the County of Inverness may adopt policies reasonably related to the implementation and enforcement of this By-law.

(3) Any violation of this By-law is hereby declared to be a nuisance.

(4) Any person who violates this By-law is guilty of an offence and shall be subject to a fine for each day a violation of this By-law continues in the amount of \$10,000.00.

(5) If any clause, sentence, section, or provision of this Bylaw is determined by any court of competent jurisdiction to be invalid in any respect, each remaining clause, sentence, section and provision of this By-law shall remain undiminished and in full force.