

Solidarity Halifax: The Alton Gas Project

An analysis by: Jake Hubley

K'jipuktuk (Halifax)

Eight years ago, Alton Gas – a subsidiary company of Alberta-based AltaGas Ltd. – applied to the Nova Scotia government with a proposed project that would allow natural gas to be stored in underground salt caverns near the Shubenacadie River, in Alton, N.S. Since then, the project has received opposition from community members, activist groups and resistance from local Mi'kmaq Bands, Sipekne'katik First Nation and Millbrook First Nation. In the fall of 2014, development of a brine discharge pipeline started next to the Shubenacadie River, but local resistance and claims to First Nation title managed to halt the project for about a year. However, in January 2016, Alton Gas was given government permits for the project to continue. Now, in March 2016, the Alton Gas project faces more opposition than ever.

Who is Alton Gas? What is the Approved Project?

Alton Gas is a subsidiary company, as is Halifax-familiar Heritage Gas, of AltaGas Ltd., an energy giant based out of Calgary, Alb. Thanks to its many subsidiaries, AltaGas has become a behemoth in the Liquid Natural Gas (LNG) industry with projects ranging from fracking to cross-Canada pipelines to processing and home delivery. The company is now expanding its diversity further, as it seeks to melt and hollow up to 20 salt caverns, anywhere from 800-1,000 metres deep, out of naturally occurring salt formations beneath Brentwood, N.S. Here it will store anywhere between four to six billion cubic feet of LNG, a project which has a 65% failure rate in the United States and a [40% failure rate globally](#). These failures have led to massive [explosions](#) that can **kill or injure** workers and locals, as well as to the uncontrollable release of extremely toxic chemicals into the air, soils and waters of local environments and communities, [forcing locals out of their homes](#) while threatening their health.

How could this project have been approved by the Nova Scotian government? That's what we would like to know. These storage caverns are being built right under the homes of local residents, where families have lived, children have played, food has grown and wilderness has thrived for many more years than AltaGas Ltd. and its subsidiary Alton Gas Storage LP have even been companies. Although being one of the most obvious reasons as to why this project should be stopped, or should not have started in the first place, failure rates only scratch the surface of issues related to this LNG project. For example, First Nations bands local to the Alton Gas project were not adequately consulted and have not given their consent for the project to continue. Rather, they actively oppose its continuation. Local non-indigenous folk also share the

view that they were not adequately consulted, some having only heard about the project after seeing service roads being built behind their homes.

It is common for government and corporation to have months or years to plan a project and to have resources like money and lawyers, which regular community members often do not have access to, particularly First Nations peoples. Despite the inequality of these resources, local communities are often given very short periods of time to review project proposals, environmental impact assessments, write appeals and organize their community members without the same expertise or access to experts as the proponents. They are expected to do these things while managing their jobs and families, while officials can dedicate work days and are paid to design and implement projects, as well as to dissolve opposition to them. In the case of Alton Gas, residents were given little-to-no notice of any public meetings for hearing their concerns about the project, before it went ahead. They are expected to trust the government, AltaGas and the 'experts' who carried out the research informing the project's safety for people and the environment. Local First Nations bands carry these same burdens, on top of having their sovereignty, treaty rights and title ignored.

The government has indicated it has fulfilled its duty to meaningfully consult with First Nations about the project, in part because it acquired the approval of the Mi'kmaq Rights Initiative (KMKNO), which claims to represent 12 of 13 Mi'kmaq bands' consulting authority. However, both Sipekne'katik and Millbrook Nations have been polarized from the KMKNO over this issue, because they feel there has been no consultation. Despite their official appeals to halt the project until proper consultation has been followed through, the NS government has given Alton Gas a green light and has yet to pause its operations while it reviews appeals.

The treaty and title rights Mi'kmaq bands possess through treaties signed between themselves and early settlers are being ignored by the government, the same way it ignores them as an autonomous governing body. The project is continuing despite its development sites being built on the **unceded** - never formally relinquished, surrendered or lost -territory of these First Nations Bands without their permission. However, the company has only had the privilege of doing this because early indigenous people agreed to share, but not give away, the land on which Canada has come to fruition after the state-led colonialism and cultural genocide that left so many First Nations communities broken; rendering them socially, culturally and spiritually disconnected and disenfranchised as a people. This history is the reason why the Canadian **Truth and Reconciliation Report** calls that our Nation adopt the *United Nations Declaration on the Rights of Indigenous Peoples*, which includes a standard for all levels of government to "**Commit to meaningful consultation**, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects" ([TRC, p. 554](#)). By approving

the Alton Gas project and if it subsequently does not heed appeals to stop it, the Nova Scotia government will be ignoring its provincial responsibility and role in reconciling relations between First Nations Peoples and the Canadian state.

So salt cavern LNG storage is extremely dangerous with high failure rates, they haven't meaningfully consulted with First Nations or non-indigenous locals whose lives will be impacted and both the government and Alton Gas Storage LP are ignoring Mi'kmaq title and treaty rights. But appeals over the project also include concern over the environmental impact on local ecology, not just from the risk of caverns malfunctioning, but from the project functioning as it is supposed to. Many concerns are over the process through which the salt brine will be disposed of after being extracted from the caverns, how it will impact fish and other wildlife, as well as discrepancies over the research informing the environmental impact assessment, which deems the project safe for the local environment. What happens to the salt?

The hollowing of the salt caverns will happen using a controlled **brining process**. Wells are driven down through the ground and into the salt formations, where water is then injected. The water dissolves the salt and mixes together, creating a brine solution that is extracted to be disposed of. In the case of the Alton Gas Project, water will be diverted from the Shubenacadie River through a 12-kilometre long pipe extending to the cavern-hollowing site. Once flushed through the salt formations, the resulting brine mixture is piped back to the Shubenacadie River where it is planned to be stored in a "brine pond" and diluted to 28 parts per thousand (ppt) - down from approx. 260 ppt - before being released back into the river's tidal estuary. In comparison, seawater is usually between 30-35 ppt. The idea is that the massive tides the Shubenacadie River receives from the monstrous tidal forces of the Bay of Fundy will wash the brine away into the Cobequid Bay and will eventually flow into the rest of the Atlantic Ocean. **That's the 'idea.'**

However, the reason local fish populations such as striped bass swim up the river to spawn eggs is because they cannot survive in ocean water. Thirty to 35 ppt is too high a salt percentage for survival. In fact, data acquired at the part of the river Alton Gas will release their 28 ppt brine mixture into showed the river's salinity levels to be between 0 and 20 ppt. The same [study](#) found striped bass eggs and larvae survive close to 70% of the time in salinity levels of up to 20 ppt and only 47% of the time at levels between 30-35 ppt. The research team responsible for this data, which Alton Gas informs its dilution level with and which it also paid for, tested survival rates in salinity levels of 0, 2, 5, 10, 20, 30 and 35 ppt. Despite informing a 28 ppt dilution level, **it did not test between 20-30 ppt**, where survival rates of striped bass eggs and larvae drop 23 percent.

There is a clear gap in the research informing this project that even the untrained eye can see, yet the environmental impact assessment went through? Even if Alton Gas was perfectly precise at meeting its seemingly uninformed 28 ppt salinity level

before discharge, it is within an unstudied salinity increment and is extremely close to the same salinity levels as ocean water shown to decrease striped bass egg and larval survival rates to 47%; salinity levels the fish themselves have **always** avoided when spawning in nature. The fish have never had to deal with continuous fluxes of the salt water they avoid when spawning in the part of the river where it has always been fresh enough to retreat to. It's important to remember, we aren't talking about a little salt for a few months. We are talking about **tonnes** of salt brine for **years**.

For a **single** cavern, 792.5 tonnes of salt (2,500 cubic metres of brine) will need to be released into the river *each day*. It's important to remember that Alton Gas plans to build up to **18 caverns to start**. Once at peak brine generation (Day 150) with four wells drilled and proceeding through the brining process, an estimated 10,000 cubic metres of brine (3,170 tonnes of hard salt) will be released into the river each day for up to 10 years or until 20 caverns have been hollowed out (See [Appendix C](#) of the Nova Scotia Government Environmental Assessment of the Alton Gas Project).

It would take a line up of approximately 172 tandem dump trucks 1.7 kilometres in length to move that much salt. In 2005, the Nova Scotia Department of Transportation and Public Works (NSTPW) reported 270,000 tonnes of road salts were used to provide snow and ice control on provincial highways in the winter months. The Halifax Regional Municipality uses an average of 37,000 tonnes *annually*. **It will take less than 100 days to release both of those salt amounts combined into the Shubenacadie River.**

Energy Minister Michel Samson claims the project will stabilize natural gas prices and save consumers up to \$17 million a year. It will service a Halifax-centric customer base comprised mostly of institutions, government buildings and businesses rather than homeowners or the local community in Alton. Also worthy to note, is that natural gas prices will inevitably rise due to market inflation and its depletion or shortage as a finite resource. In comparison, investment into renewable energy projects could stabilize energy prices for everyone, forever, while helping to reverse climate change. Renewables would keep jobs and profits in Nova Scotia for **Nova Scotians** rather than for a **Western-Canada energy giant** like AltaGas.

From the Alton Gas project, AltaGas will not only profit from sales and cost savings in Nova Scotia, it will also have access to a close-to-limitless American Seaboard market as its Alton Gas LNG storage facilities will be connected to the Maritimes and Northeastern Pipeline, which runs throughout the Atlantic provinces and extends as far as Massachusetts, connecting to a massive system of pipeline veins all throughout the United States. So, big-business Alton Gas Storage LP (Alberta-based AltaGas) will do nothing but profit while offering little-to-any sustainable benefit to the local

communities whose lands and lives will be impacted. Big business and a few people win, while our environment and many more people lose. This story of profit before people and the planet is all too familiar.

We should recognize that this same struggle is felt all over the world in many different ways, whether it's an oil company polluting land, air and water; the pulp industry deforesting traditional First Nations lands in British Columbia or in the Indonesian rainforest; apparel companies harnessing the sexualization of women, which perpetuates gender inequality, to sell clothes; the disproportionate placement of production facilities next to low-income and racialized communities (i.e. Harrietsfield NS or Flint, Michigan), which have poisoned air and groundwater with toxic heavy metals that lead to birth defects, cancers and death; we see profit before people and the planet everyday, in different ways because of the same problem. **Capitalism**, an economic system based on a few people with money (capital) using the lands and labour of the rest of us to make *more* money, is what we must unite under as a common problem, through our common interests and across our different struggles to change; Just like Harrietsfield did; just like Flint, Michigan is; just like Brentwood, Nova Scotia and Mi'kmaq bands Sipekne'katik and Millbrook First Nations are.

What has opposition been looking like?

The Alton Gas project has received opposition from the very beginning, particularly from local First Nations Bands Sipekne'katik and Millbrook but also non-indigenous community members. Actions included highway blockades, development site encampment and educational events. In January 2016, following the approval for the project to continue, a letter was addressed to Premier Stephen McNeil, Energy Minister Michel Samson and Environment Minister Margaret Miller asking to suspend any further approvals so the local First Nations bands could consult with their members. The letter also demands up-to-date evaluations, research and cumulative risk assessments for the LNG project. It was supported by **Council of Canadians, Ecology Action Centre**, the Atlantic chapter of the **Sierra Club Foundation**, the **Nova Scotia Fracking Research and Action Coalition**, the **Canadian Youth Climate Coalition** and **Divest Dalhousie**.

Now, coming into April 2016, at least eight groups (including Solidarity Halifax) are working together in solidarity to stop the Alton Gas Project. Several of these groups held a press conference at the Mi'kmaq Friendship Centre (Halifax) in February to announce they would each be submitting appeals to stop development on the brine release site. Appeals were submitted to the provincial government on grounds that Alton Gas provided inadequate research, has not considered impacts on local fish populations and groundwater sources and that the province has not fulfilled its duty to meaningfully consult with First Nations communities. Among the appellants are

Sipekne'katik and Millbrook First Nations, the Shubenacadie River Commercial Fishermen's Association and the Ecology Action Centre. We stand with them.

Solidarity Halifax's Position

Solidarity Halifax supports our allies in actively opposing AltaGas' *Alton Gas Project*. We consider it our responsibility to actively oppose and build resistance against projects, corporations and government officials who place profit before the health and well-being of people and our planet. It is imperative that we stand with and for the members of our communities and province when politics and development stand to negatively impact our lives, our **shared** natural environment and our relationships with one another. The economic system we live under, capitalism, will continue to threaten the quality of our lives and our environment through its relentless pursuit of profit, unless we unite to change it. A healthy environment is something we **all** need regardless of our similarities or differences. We have a collective responsibility to protect it, **for all of us**. As such, Solidarity Halifax opposes the Alton Gas project for the following reasons:

- 1) Both the Province of Nova Scotia and Alton Gas have failed to meaningfully consult with all First Nations communities in a satisfactory manner about this project. Although the Province has claimed it has satisfied these criteria, both Sipekne'katik and Millbrook First Nations, the local Mi'kmaq communities, do not feel adequately consulted or informed and oppose the LNG project.
 - a) For the Nova Scotia government to ignore First Nations opposition toward a project and to not seek their full engagement with it - a project being developed on **their unceded** territory - is to ignore First Nations as autonomous governing bodies and to ignore the title and rights they hold through treaty over the land.
- 2) First Nations people are too often over burdened with the responsibility to protect our *shared* natural environment. The environment is shared by all of us and so it is our shared responsibility to protect it, **this is not just an indigenous issue**.
 - a) Because of the connection between environmental destruction and the economy, particularly in resource extraction and fossil fuels, First Nations are often portrayed as a burden to the economy when they oppose those projects. It is the responsibility of non-indigenous community members to deny this depiction and stand with indigenous peoples for **everyone's benefit**.
- 3) The Province of Nova Scotia is choosing economic gain and private profit before honouring treaty rights and responsibilities.
 - a) The new Canadian Liberal government has mandated repairing and reconciling relationships between First Nations and the Canadian state. This province must do its part in that process and if the Province allows Alton Gas to continue, they are actively **ignoring the call for reconciliation**.

- 4) Environmental impact from the release of brine into the river systems could affect both the livelihood and quality of life of the local communities who use the river for food to feed their families, economic advantage and enjoyment. Local First Nations communities could experience the worst of these impacts, adding to the environmental racism (the disproportionate experiences of environmental pollution which impact their lives) they face and continue to endure throughout Canada as a racialized and historically oppressed community.
 - a) The Nova Scotia Legislature is currently in the second reading of [Bill 111](#), an act to address environmental racism in Nova Scotia. If the Nova Scotia government allows LNG-Giant AltaGas to continue their Alton Gas Project, they are ignoring our provincial interests and efforts in building a healthy social and natural environment by ignoring the call to address environmental racism, respect treaty rights and protect our shared environment for the future of our families.

- 5) The release of salt brine into the Shubenacadie and Stewiacke rivers could have negative effects on the surrounding local ecology, such as fish populations including endangered Atlantic salmon, Tomcod Eggs and Striped Bass. It may also have negative effects on groundwater, such as the contamination of the local water table. Given these possibilities and appeals filed over concerns of inadequate research and a lack of appropriate data presented by Alton Gas and the outdated provincial environmental assessment, Solidarity Halifax opposes the project do to its inherent environmental risks, damages and threats to human health.
 - a) The environmental consultant for Alton Gas, Bob Rutherford, stood up at an open house held at Millbrook First Nation and claimed there were no tomcod larvae eggs in the estuary the brine will be released in. With the data not publicized for scrutiny, Alton Gas seems comfortable claiming there are never tomcod eggs in the Shubenacadie River. On this point, [Miles Howe notes](#), “The Mi’kmaq name for the first moon of the new year (Penamujuiku’s) translates roughly into Frost Fish Moon or Tomcod Moon. For hundreds upon hundreds of years before [the] team didn’t find any tomcod eggs or larvae in the Shubenacadie river estuary, the local Mi’kmaq felt the annual tomcod spawn was an important enough event to name an entire lunar cycle after it.”
 - b) In 2012, 11 of 23 lakes [tested](#) for road salt contamination near developed areas in Halifax were “well over the recommended salt level guidelines for chronic exposure,” which can lead them to become stagnant, killing the organisms of the lake. In February 2016, a part of Williams Lake near a new subdivision showed signs of this stagnation due to high levels of road salt [exposure](#). In comparison to the runoff of road salt, Alton gas will pour 10,000 cubic metres of diluted salt brine (3,170 tonnes of hard salt) **a day** into the Shubenacadie River.

- 6) A go-ahead on the Alton Gas project means an investment into a capitalist industry (Fossil Fuels) that is largely responsible for climate change and the continuing destruction of our planet through the pollution of our air, water, soil and oceans. It is an

industry that keeps large profits in the hands of a few by extracting resources from the lands many more share and depend on.

- a) It is clear we need to be investing in renewable energies, especially in Nova Scotia where we have access to significant wind and tidal energy. The world's climatologists have set a 2 degree Celsius limit on global temperature rise. If the world exceeds this limit, which at current emission rates could be **less than five years**, it will trigger unpredictable catastrophic weather events around the world. At the 2015 Paris Climate Conference (COP21), Canada committed to reducing its emissions to 30% [below 2005 levels](#). It has also made an ambitious political commitment to work towards a [1.5C cap](#), rather than 2C, which would require Canada to achieve 100% renewable energy within 35 years. Investing in the Liquid Gas Industry and infrastructure is opposite of either of these National and International commitments.
 - b) On November 14, 2014, Nova Scotia passed [Bill 6](#), effectively placing a legal moratorium on hydraulic fracturing (fracking) – a process of shale oil extraction by pumping water and chemicals deep underground – in the province. A poll on the issue showed [69% of Nova Scotians](#) support a continued moratorium on fracking “unless an independent review finds there is no risk to drinking water, human health, the climate or communities.” Where all of those concerns have been raised and filed in official appeals over the Alton Gas project, its continuation would be counter to the demands of Nova Scotians and opposite of the direction toward sustainability we clearly want and need to go in.
- 7) Investing in the Alton Gas LNG project is an investment in an industry and infrastructure that will quickly become redundant, as we necessarily transition from fossil fuels to renewable energies. This is a transition that must be First Nations and community-led. It is also a transition, which Nova Scotia, until this point, has been a leader. The federal government has made commitments to reduce climate emissions to a minimum of 30% below 2005 levels by 2030; and have committed to adopting the [United Nations Declaration of the Rights of Indigenous Peoples](#). These commitments render the Alton Gas Project and other LNG projects in Nova Scotia infeasible.
- 8) Salt cavern storage is inherently dangerous. According to the [Council of Canadians](#), underground salt cavern storage of liquid natural gas has a 65% failure rate in the U.S. and 40% globally. There are [risks of explosions](#), leaks and emissions of poisonous chemicals like methane that have [forced many out of their homes](#).

What it Comes Down To.

We all know someone who has lost their job could not afford the basic needs of life, has suffered from environmental pollution or who has otherwise had their quality of life threatened or deemed ‘less important’ than someone or *something* else. We have seen communities rallying together to save their land, air and water; or workers uniting

to fight for better, equal or fairer working conditions and benefits the company will not afford them. We have seen also First Nations defending their culture, title and their treaty rights throughout hundreds of years of oppression, disenfranchisement and state-led colonialism; as well as people of colour or other marginalized groups fighting through systematic disadvantage and racism to have an equal right to the life chances and basic needs people born into a higher class (income bracket) receive, just by being born into it. We have seen these people of different backgrounds come together in common struggles for a better world; They fought and continue to fight for something they believed in, something they had and have a **right** to. We must do the same.

What do all of these groups have in common? What do **we** have in common? Decisions by a corporation or government in relation to economic development put profit and a thriving economy before our needs, our health, our environment and our dignity. They continue to choose profit over **us**. So we will stand with one-another because we share this relationship together under Capitalism. We share common interests like food, water and clean air and we share the fact that Capitalism, as an inherently oppressive and environmentally destructive economic system, stands to divide us and to destroy those common interests. We cannot let the Alton Gas Project do the same. Another world is possible.

#StopAltonGas

In Solidarity,

How Can You be Engaged?

- 1) Write to your Minister of Environment (Margaret Miller), Minister of Energy (Michel Samson), your Premier (Stephen McNeil) and local MLA's supporting appeals filed to stop the Alton Gas Project. Feel free to use the points listed in this article!
 - 2) Share links and articles via social media.
 - 3) Join the public group on Facebook [here](#)!
 - 4) Engage and educate your friends, family and neighbors about the project and its opposition.
 - 5) Attend or organize protests, meetings and any other action you can!
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A special thanks to Miles Howe's work on his article, [Going against the tide: The fight against Alton Gas](#). Your work was very helpful in writing this analysis!