

March 1, 2016

Woodfibre LNG Project  
Canadian Environmental Assessment Agency  
410-701 West Georgia Street  
Vancouver, British Columbia V7Y 1C6

To Whom It May Concern,

**Re: Woodfibre LNG Project — Public Comments Invited**

Please accept these comments from the District of Squamish as our submission to the Canadian Environmental Assessment Agency with regard to the proposed Woodfibre LNG project within our municipal boundaries. Due to the incredibly short timeframe in which to comment we are unable to complete a comprehensive submission. In lieu of this, please find the attached letter and report prepared by the District of Squamish as final comment to the Provincial Environmental Assessment Office in April, 2015.

In particular we want to highlight issues of Federal jurisdiction including impacts to fisheries and marine environments, environmental impacts and safety standards with regard to shipping and full accountability of upstream Green House Gas Emissions (GHGs).

Of particular concern and an area that requires a significant amount of assessment relates to the seawater cooling system and the potential for harm to the marine environment in Howe Sound (Items 1 and 2 in the EAO submission attached). The complete lack of baseline data as a result of reduced funding for DFO presents a significant challenge in our collective ability to truly evaluate the impacts of this proposal. The Howe Sound marine environment is rebounding after decades of industrial activity. Despite previous information there is now clear evidence that the herring has returned and is spawning close to the proposed sea water intake of this project. Fundamentally this project cannot contradict the Federal Government's own fisheries and environmental standards and policies. The Ministry of Environment through the CEAA must ensure that the Howe Sound marine environment continues to rebound and that the long-term health and sustainability of the marine ecosystem is protected in perpetuity.

Another area of serious concern is the lack of Federal regulation around the shipment of Noxious and Hazardous Substances (Items 11, 12 13 in the EAO submission attached). Funding cuts to the federal agencies responsible for monitoring, enforcing and responding to marine


crisis situations leave Howe Sound incredibly vulnerable and put our communities at risk. Internationally recognized shipping standards must be a requirement for this proposed project.

The full-cycle analysis and accounting of GHG emissions including upstream sources was not considered in our Provincial environmental submission as it was not included in the Provincial terms of reference. We are pleased that the Federal Government has recognized this significant omission. Our expectation is that the Federal Government develops a specific method of accounting for full-cycle GHGs, and the costs allocated appropriately. The comments we made regarding GHG emissions can be found in Items 14, 15, 16, 17 of the attached letter.

In summary, given adequate time to comment, we would have had the opportunity to provide a much more comprehensive submission and we would welcome the opportunity to do so should you extend the comment period.

Due to the significant outstanding information and the community concerns that have not been adequately addressed, and that there are no guarantees at this time that that they will be satisfactorily addressed, the current application is not supportable by the District of Squamish.

We trust that the District's response and concerns will be given due consideration. Please advise if you require further information or clarification.

Sincerely,   
<Original signed by>

✓  
Mayor Patricia Heintzman

Cc: Minister of Environment and Climate Change, Catharine McKenna  
Minster of Public Safety and Emergency Preparedness, Ralph Goodall  
Minister of Fisheries and Oceans and the Canadian Coast Guard, Hunter Tootoo  
Minister of Transport, Mark Garneau  
Minister of Natural Resources, Jim Carr  
Minister of Infrastructure and Communities, Amarjeet Sohi

April 30, 2015

Mike Shepard  
Project Assessment Manager  
Environmental Assessment Office  
PO Box 9426 Stn Prov Govt  
Victoria BC V8W 9V1

EAO Files:     Woodfibre LNG Project  
                    Eagle Mountain - Woodfibre Gas Pipeline Project

Dear Mr. Shepard,

RE: District of Squamish input on Woodfibre Liquefied Natural Gas and Eagle Mountain - Woodfibre Gas Pipeline environmental assessments

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On behalf of the Squamish community, the District of Squamish submits this response to the Environmental Assessment referral regarding the proposed Woodfibre Liquefied Natural Gas (WLNG) project, and the related Eagle Mountain Fortis BC pipeline project. As documented within the attached report, the District respectfully requests the following:

1. That the EAO require WLNG to:
  - a. Provide more information on other cooling systems that were considered and reasons why they were not selected in order for the District to understand why the once-through seawater cooling system is preferred;
  - b. Provide more information on the potential negative impacts to marine life due to the use of the once-through seawater cooling system;
  - c. Design the once-through seawater cooling system so that it does not compromise the health and recovery of the marine environment, or alternately require WLNG to use a different cooling system that is conclusively shown to not compromise the health and recovery of the marine environment in Howe Sound and is the best possible system for the environment in perpetuity.

2. That as a condition of the issuance of an EA certificate, WLNG be required to minimize noise that may have a negative impact on the marine environment during construction and ongoing operations; and further that the proponent be required to gather baseline acoustic measurement and conduct ongoing marine acoustic monitoring and reporting for inclusion in a cumulative impacts project.
3. That the EAO require WLNG to provide a District-led detailed Socio-Economic Impact Assessment that considers the three pillars of sustainability and the impacts on the community, such as the example impacts listed in the full attached report; and that the District be afforded the opportunity to provide further comment to the EAO considering the information presented in the detailed Socio-Economic Impact Assessment prior to the issuance of an EA certificate.
4. That the EAO require that the Socio-Economic Impact Assessment include an assessment of the project's impact on the community's wilderness tourism values.
5. That the EAO require Fortis BC to provide more information on the pipeline routing option selection and compressor station location for discussion and reconsideration in order to balance the community's economic, social, and environmental values.
6. That the EAO require WLNG, Fortis and BC Hydro to produce a cumulative impact presentation of all the elements that support the WLNG project in order for the District to assess the impacts of the entire project on the District, and that the District be afforded the opportunity to comment to the EAO on the cumulative impacts prior to the issuance of any certificate.
7. That the EAO require WLNG to provide additional information to address the outstanding technical concerns raised in the District's attached report, with the desire that the WLNG project will be the greenest LNG export facility in the Province.
8. That the EAO require there to be ongoing oversight of the operation of the WLNG facility by a Squamish Citizens' Committee, with a means to report to the responsible Ministry, and that the cost of operating this committee is borne by the proponent.
9. That the EAO require WLNG to commit to being an active participant in the provincially-led cumulative impacts project for Howe Sound that the District understands to be underway, and that sufficient benchmarking is included in this study.
10. That the EAO encourage the various federal and provincial regulatory agencies that share responsibility for monitoring and responding to issues to work together and develop a much-improved and coordinated approach to regulatory enforcement for LNG export operations.
11. That the EAO encourage the federal government to adopt the new regulation *Noxious and Hazardous Substances Standard* as soon as possible, with the objective of having the approval in place prior to any export shipments of LNG from British Columbia.




12. That the EAO require WLNG to meet or exceed international best practices as opposed to just meeting the current local legislative or regulatory requirements.
13. That the EAO encourage the provincial and federal governments to adopt shipping regulations that meet or exceed international standards or best practices.
14. That the EAO encourage the federal and provincial governments to conduct more research into the potential harmful impacts of hydraulic fracturing (fracking) on the environment, and to enact legislation with higher standards for natural gas extraction in British Columbia that reflect global best practices. These standards should include regulations that prohibit the use of potentially harmful fracking techniques in order to minimize or eliminate the harmful impacts of fracking on human health and the environment.
15. That the EAO require as a condition of an environmental certificate that WLNG be required to minimize the GHG emissions from the WLNG facility and if feasible to capture and sequester GHG emissions, and to also annually measure and report on GHG emissions and airborne particulate matter from the WLNG facility.
16. That the EAO encourage the federal and provincial governments to monitor and report on the use of Canadian LNG in other countries and the subsequent reduced use of higher GHG and pollution-emitting fossil fuels due to the use of Canadian LNG, including measuring and reporting of reduced greenhouse gas and particulate emissions directly attributable to the use of Canadian natural gas in other countries. The District would like the Province to demonstrate that there is an achievable goal that can be reached with the aid of natural gas as a transition fuel, and provide an implementation plan to meet that target.
17. That the EAO encourage the federal and provincial governments to seek replacing coal fuel with LNG in power generating facilities in Canada, to help reduce Canadian GHG and particulate emissions.
18. That the EAO improve the EA application review process in order to:
  - a. Ensure future EA review processes are structured to facilitate greater citizen engagement in a more meaningful way.
  - b. Ensure that the EA applications consider all relevant components as part of the project in order to trigger the most detailed review process, not the more simplistic review process.
  - c. Ensure the public is adequately consulted or engaged on designing a new EA review process that meets a broader public interest perspective.
  - d. Ensure the public is able to ask questions of the proponent during the EA application review process, and that the proponent is required to provide answers to the questions in a more open and transparent manner. This would ensure that all those interested can see the responses, and that the same response is provided consistently.

Due to the significant outstanding information and the community concerns that have not been adequately addressed, and that there are no guarantees at this time that that they will be satisfactorily addressed, the current applications are not supportable by the District of Squamish.

We trust that the District's response and concerns will be given due consideration. Please advise if you require further information or clarification.

Sincerely,

<Original signed by>

  
Patricia Heintzman, Mayor  
District of Squamish

Cc: Squamish Nation Council  
Jordan Sturdy, MLA West Vancouver-Sea-to-Sky  
John Weston, MP West Vancouver, Sunshine Coast, Sea-to-Sky Country  
Christy Clark, Premier of British Columbia  
Mary Polak, Provincial Minister of the Environment  
Rich Coleman, Provincial Minister of Energy, Mines and Natural Gas  
Leona Aglukkaq, Federal Minister of the Environment  
Bowen Island Municipality  
Village of Lions Bay  
District of West Vancouver  
Squamish Lillooet Regional District  
Sunshine Coast Regional District  
Greater Vancouver Regional District  
District of Squamish Council

Attachment: District of Squamish EAO referral Response – WLNG, Fortis BC

**Woodfibre Liquefied  
Natural Gas and  
Fortis BC**

April 30, 2015





## INTRODUCTION

### *Community Context*

Squamish is a community at the north end of Howe Sound positioned half way between Vancouver and Whistler. It is a community that has transitioned from being primarily an industrial community travelled through on the way to Whistler, to being its own vibrant destination community full of entrepreneurial spirit and unparalleled outdoor recreation opportunities.

Squamish's vision is that "We are a spectacular seaside mountain community where people come to live, learn, work and play in harmony. We are multicultural, compassionate, vibrant and diverse. We are leaders in fostering social integrity, economic development, and environmental sustainability."

To help the community reach this vision, the District's Official Community Plan (OCP) outlines principles that provide the solid framework for guiding development in the community. These principles include Environmental Stewardship, Natural Resource Conservation, Community Livability, Community Leadership, and Citizen Engagement. It also includes a sustainability commitment to work in harmony with natural systems; buildings and infrastructure that are greener, smarter, and cheaper; jobs are close to home; the spirit of the community is honoured; and everyone has a voice.

### *Environmental Assessment Referral*

The District of Squamish received two referrals from the Province of British Columbia's Environmental Assessment Office (EAO) regarding Environmental Assessment (EA) applications, one for the Woodfibre Liquefied Natural Gas (WLNG) project, and one for Fortis BC's Eagle Mountain Project. As the District is tasked with the responsibility of helping the community achieve its vision, the District conducted its review of these two EA applications considering the community's vision and the principles and commitments set out in the OCP.



## WOODFIBRE LIQUEFIED NATURAL GAS PROJECT

The District of Squamish has been involved in the review of the two related LNG projects proposed in our municipality for close to two years. This involvement includes participation in the proponents' and the EAO's open houses, participation in the EAO's Working Group meetings, hosting a District-led review of the project through a Community Committee, and hosting a District-led community engagement process regarding the two projects. In addition, the Squamish Chamber of Commerce undertook a survey of the business community in the fall of 2014 through which the level of business community support for the LNG project was gauged (based on the information respondents had on the project at that time).

The District undertook the additional review and engagement in order to provide a more holistic response to the EAO referral regarding these two related projects. The District received significant feedback on the EA applications from the Community Committee and from citizens within the community, as well as comments from non-residents that participated in the District's community engagement process. This response considers the comments from the Community Committee, the community engagement process, and from the EAO Working Group. The District's response to the EA referral with respect to the two projects is delineated into the following areas of concern:

1. Local Issues
2. Howe Sound
3. Regulatory Issues
4. Global Issues
5. Environmental Assessment Process

In addition, attached to this response is detailed information on the processes and key results from the Community Committee and the Community Engagement Report.

## LOCAL ISSUES

Throughout the review process, a number of shared concerns were expressed that the District believes may have adverse effects on the economic, social and environmental health of Squamish. While the documented comments can be found in the attachments, the most significant local concerns are as follows:

*1. Potential harm to the marine environment due to the once-through seawater cooling system.*

The number one concern identified by the community through the public engagement is the potential impact that the seawater cooling system could have on the marine ecology of Howe Sound.

The District does not have sufficient information on the use of this cooling system to be satisfied that the proposed system will not have a negative impact on marine life, primarily due to the potential for harm to marine life at the intake of a water cooling system.

The District does not support the use of a cooling system that could compromise the recovery of Howe Sound from previous industrial activities.

We understand that the water intakes should not be located within two kilometres of fish spawning grounds. We also understand that herring spawn was found within two kilometres of the WLNG site this year. As such, the District is concerned that the water intake may have a negative impact on herring and other high value fish stocks. The District understands that other jurisdictions are moving away from once-through water cooling systems, or are heavily regulating the use of water-cooling systems to minimize the negative impacts on marine life.

Considering this, the District would like to consider and provide comment on additional information on the potential negative impacts on marine life due to the use of the once-through seawater cooling system. The District does not believe that sufficient information was provided or considered with respect to the impacts of the once-through seawater cooling system, or other potential cooling systems. As such, the District requests **that the EAO require WLNG to:**

- **Provide more information on other cooling systems that were considered and reasons why they were not selected in order for the District to understand why the once-through seawater cooling system is preferred;**

- **Provide more information on the potential negative impacts to marine life due to the use of the once-through seawater cooling system;**
- **Design the once-through seawater cooling system so that it does not compromise the health and recovery of the marine environment, or alternately require WLNG to use a different cooling system that is conclusively shown to not compromise the health and recovery of the marine environment in Howe Sound and is the best possible system for the environment in perpetuity.**

*2. Potential harm to the marine environment due to the impact of noise in the water and consequential negative effects on marine life.*

The District is concerned that the project may have a detrimental impact on marine life due to the transmission of noise into the marine environment from the industrial activity during both construction and the operations stage. With the return of herring spawn to Squamish, the District is concerned that too much noise could cause the herring to retreat from the area. The District understands that marine noise can be monitored, and that industrial marine activity could be modified to minimize the transmission of noise into the marine environment.

The District does not believe that the WLNG EA application adequately demonstrates how these impacts could be eliminated, minimized, or compensated for. As such, the District requests **that as a condition of the issuance of an EA certificate, WLNG be required to minimize noise that may have a negative impact on the marine environment during construction and ongoing operations; and further that the proponent be required to gather baseline acoustic measurement and conduct ongoing marine acoustic monitoring and reporting for inclusion in a cumulative impacts project discussed later in this response (Howe Sound).**

*3. The Social and Economic impacts to Squamish are not clear.*

While many citizens welcome an increase in local jobs and an additional tax base, the EA application does not provide sufficient information for the District to adequately assess the social or economic impacts to Squamish. Examples of information that would assist with evaluating the project includes more detail on property taxation, employment opportunities, impact on tourism related industries, impact of workers commuting to and from Squamish versus living in Squamish during construction, impact on transportation including highway 99, impact on housing, and the positive or negative social impacts that would occur during and after construction.

Neither application balances the three values of sustainability, being economic, social and environmental health. Accordingly, the District respectfully requests **that the EAO require WLNG to provide a detailed District-led Socio-Economic Impact Assessment that considers the three pillars of sustainability and the impacts on the community, such as the example impacts listed above.** The District proposes to determine the scope of the study, determine who carries out the study and to conduct the study at the proponent's cost. The District has used this approach with other EA referrals and found it to be a useful process that eliminates the community's perception of bias. **The District would also expect to be able to provide further comment to the EAO considering the information presented in the detailed Socio-Economic Impact Assessment prior to the issuance of an EA certificate.**

*4. Potential negative impact on current and future tourism related values.*

The District is concerned that wilderness and recreation tourism values may be negatively impacted by adding more marine traffic and heavy industry in the Sound. Neither EA application provides sufficient information on their project's impact on the community's tourism values, and whether the negative impacts could be eliminated, minimized, or compensated for. The District requests **that the EAO require that the Socio-Economic Impact Assessment include an assessment of the project's impact on the community's wilderness tourism values.**

*5. Protection of the Squamish River Estuary and surrounding Wildlife Management Area.*

The Squamish Estuary is a highly valued community asset. The community has worked with provincial and federal agencies to remove industrial activities from specific areas of the Estuary, including the Wildlife Management Area, and to protect the Estuary. The community remains committed to this vision.

The Fortis EA application routes the pipeline through (beneath) the heart of the Estuary and Wildlife Management Area. Although the methods designed for routing the pipe beneath the Estuary are expected to minimize the surface impacts in the Estuary, the selection of this route does not demonstrate full appreciation for the community value of protecting and reclaiming the Estuary and Wildlife Management Area.

The District believes that the Fortis EA application does not adequately address how the negative industrial impacts on the Estuary would be minimized or compensated for, or that all other routing options that would avoid the Estuary have been adequately explored, or that the selected route decision adequately balances the social, financial or environmental perspectives. In addition, the District has concerns regarding the selected location of the compressor station. Although other locations could be



considered more suitable, the District is concerned that these alternate locations were not given more serious consideration, and as such, Fortis selected a location for the compressor station that is relatively close to residential property.

As the pipeline route selection is such a significant community concern, the District requests **that the EAO require Fortis BC to provide more information on the pipeline routing option selection and compressor station location for discussion and reconsideration in order to balance the community's economic, social, and environmental values.**

*6. Cumulative Impacts.*

The District is frustrated that the project has been separated into three individual components, thereby eliminating the need for a cumulative assessment and presentation of the project. The District requests **that the EAO require WLNG, Fortis and BC Hydro to produce a cumulative impact presentation of all the elements that support the WLNG project** in order for the District to assess the impacts of the entire project on the District, and **that the District be afforded the opportunity to comment to the EAO on the cumulative impacts prior to the issuance of any certificate.** .

*7. Outstanding technical concerns.*

The Community Committee reviewed many technical aspects of the project. After concluding their detailed review of the project, in addition to the concerns noted above or elsewhere in this document, they remained somewhat concerned with flaring and light pollution, moderately concerned with air pollution, and significantly concerned with the potential for foreshore marine pollution. In addition, other outstanding issues identified include the capture and use of waste heat, commitments for baseline studies, a lack of information on geotechnical issues such as fault lines, and a lack of detail on emergency preparedness.

While the review discussed that flaring was expected to be minimal, there was no concrete information on what “minimal” meant. The review determined that insufficient information was provided on the visual and air quality impacts caused by flaring, and that the language on light pollution was vague as there lacked a base line to compare to, nor whether any consideration was provided to minimize light pollution.

The review identified a lack of current air quality baseline information. The committee also identified the need for a commitment for ongoing monitoring to understand potential changes to air quality.

A significant technical issue outstanding is the potential impact the project may have on marine sediment and foreshore. The District understands that pollutants are in the marine sediment at the site from the previous industrial use of the site, and the District is unaware of recorded measurement of the contaminants. The District is concerned that reclamation and new construction could compromise the marine environment by disturbing the pollutants. As the District is unaware of baseline research regarding the site contamination, the District would like commitments for monitoring and containing pollutants to minimize the impacts on the marine environment. Baseline measurement of the existing contaminants present in the sediment in and around Howe Sound would enable WLNG and the community to understand what, if any, changes take place during the life of this project, and what remediation is required when the plant is decommissioned.

The District would like to ensure the WLNG and Fortis BC projects operate using best practices, as opposed to just meeting minimal regulations. The District would also like both proponents to commit to conduct baseline studies and ongoing monitoring and reporting. The District believes this to be a crucial missing component from the applications.

The District understands that there is a seismic fault line that is in close proximity to the WLNG site. The WLNG EA application does not include information that considers this geotechnical issue and its full consideration in the project's design. In conjunction with this issue, the District believes that the information on emergency response lacks detail.

In addition, there are beneficial uses for waste heat that could be included or captured with the project. As society is working to transition away from fossil fuels, many projects are working to fully capture and beneficially use other energy systems. Waste heat is an obvious energy that could be captured and used.

In the District's opinion, these concerns are not adequately addressed in the WLNG EA application. The District requests **that the EAO require WLNG to provide additional information to address these outstanding issues, with the desire that the WLNG project will be the greenest LNG export facility in the Province.**

*8. Ongoing oversight of operations.*

The District requests **that the EAO require there to be ongoing oversight of the operation of the WLNG facility by a Squamish Citizens' Committee, with a means to report to the responsible Ministry, and that the cost of operating this committee is borne by the proponent.**

## HOWE SOUND

During the past 100 years, the marine environment in Howe Sound was compromised by industrial development. In the past decades, all levels of government have worked together on many fronts to clean the fiord from the many years of damage caused by industrial activity. The unprecedented Pink Salmon run two years ago was a sign of success, the recent herring spawns have shown great promise, and the return of whales and dolphins have brought joy to everyone fortunate to see them.

These success stories must continue. The District believes that a coordinated response in protecting this resource is necessary. District Council commits to being a part of that solution, and seeks similar commitments from senior governments, the proponents and other organizations with similar interests.

The District is concerned with the cumulative impact of reactivating heavy industrial activity within Howe Sound, and that additional industrial activity could cause further damage or slow the repair of Howe Sound. The WLNG EA Application does not provide sufficient information in order to assess the cumulative impacts of additional heavy industry on Howe Sound nor is there sufficient information on the impact that this heavy industry would have on the recovery to Howe Sound.

The District would like research on cumulative effects benchmarking in place in order to effectively consider new industrial development in Howe Sound, including the WLNG project. This may require that senior levels of government establish parameters and a baseline for considering cumulative effects, and in particular, the cumulative effects on Howe Sound.

The District and the community would like the opportunity to actively participate in monitoring the health of Howe Sound. The District would like WLNG to also commit to participating on a committee to monitor the health of Howe Sound.

Accordingly, the District requests **that the EAO require WLNG to commit to being an active participant in the provincially-led cumulative impacts project for Howe Sound, and that sufficient benchmarking is included in this study.**

## REGULATORY ISSUES

The District of Squamish has limited ability to influence the regulatory oversight of issues that fall within the federal or provincial realm; but as the local governing agency closest to the industrial activities in and around Squamish, we have concerns with respect to the regulatory oversight. Specifically, the District is concerned with the monitoring and enforcement of regulations, the development of new regulations with respect to this new industry, and the consideration of international standards.

*1. Monitoring and enforcement coordination.*

Squamish has had numerous disappointing experiences working with both federal and provincial agencies for issues within the numerous environmentally sensitive areas in and around the District. We remain concerned with the lack of coordination in monitoring and enforcement of federal and provincial legislative requirements, and response during emergency events. The District is regularly seeking support for enforcement actions from federal and provincial agencies for issues within the community. Despite assurances to the contrary, the District is concerned that the ongoing federal and provincial budget cuts, along with the lack of presence of the Oil and Gas Commission in southern BC, will further compromise regulatory oversight efforts. The District is even more concerned as this new industry will require significant regulatory oversight, and without an improved approach to monitoring and responding to issues, it is the community of Squamish that will be compromised.

The District respectfully requests **that the EAO encourage the various federal and provincial regulatory agencies that share responsibility for monitoring and responding to issues to work together and develop a much improved and coordinated approach to regulatory enforcement for LNG export operations.** This includes ongoing coordination for enforcing compliance with regulations and cleanup of environmental issues, primarily on the water but also on land.



## 2. *New Regulations*

The District understands that a *Noxious and Hazardous Substances Standard* has recently been developed by federal staff to bring LNG shipping in line with existing regulations on shipping oil. This Standard is necessary to ensure that adequate funding is in place for liability for any catastrophic event and that without it, the costs over and above that covered by insurance would be borne by British Columbia, or even local taxpayers. We understand this new regulation is to ensure liability for major events is transferred to industry and shared by the members of that industry worldwide.

The District understands that there is currently no timeline for implementing these standards. We believe that in order to ensure that the liability for any major event is transferred to industry and not government that this regulation needs to be in place. As such we request **that the EAO encourage the federal government adopt this new regulation as soon as possible, with the objective of having the approval in place prior to any export shipments of LNG from British Columbia.**

## 3. *International Best Practices.*

In the EA application the proponent has committed to meeting the appropriate federal or provincial legislative or regulatory requirements.

Concerns have been raised regarding the travel of large LNG ships in Howe Sound. The District understands that some jurisdictions have stringent regulations regarding LNG shipping. As many of these other jurisdictions have been exporting LNG for a number of years, the District considers it prudent to follow these highest standards that provide the greatest assurance of safety for our community. At this time the District does not have sufficient information to know whether the proposed project is designed to meet international standards such as SIGTTO and TERMPOL.

WLNG has committed to meet the current regulatory requirements. Due to the ecological sensitivity of the Howe Sound and the existing volume of marine traffic in the Sound, and at the entrance to the Sound, the District requests **that the EAO require WLNG to meet or exceed international best practices as opposed to just meeting the current legislative or regulatory requirements.** In addition the District requests **that the EAO encourage the provincial and federal governments to adopt shipping regulations that meet or exceed international standards or best practices.**

## GLOBAL ISSUES

Another significant focus of concern that became apparent during the review process is the concern on issues that have a global reach. These include hydraulic fracturing (fracking) for natural gas extraction including the global impacts caused by fracking and the assertion that natural gas as a transition fuel will decrease greenhouse gas emissions.

While the EA application is generally silent on issues that have a global impact, the District believes that the review of the application for this project must also consider global impacts. The District recognizes that consideration of global impacts requires significant leadership from both the provincial and federal government. As such, the District respectfully requests that the EAO solicit support from senior levels of government on the following global issues.

*1. Hydraulic Fracturing.*

The community would like to ensure there are long-term studies on the impacts to human health and the environment caused by fracking, and that options to reduce the potential harmful impacts are considered. The Community requests **that the EAO encourage the federal and provincial governments to conduct more research into the potential harmful impacts of fracking on the environment, and to enact legislation with higher standards for natural gas extraction in British Columbia that reflect global best practices. These standards should include regulations that prohibit the use of potentially harmful fracking techniques in order to minimize or eliminate the harmful impacts of fracking on human health and the environment.**

*2. Climate Change – Reduction of Greenhouse Gases and airborne particulate matter.*

Our climate is changing. Science has connected climate change to greenhouse gas emissions. Even though there is no agreement that humans are solely responsible for climate change, governments around the world are striving to reduce reliance on fossil fuels and thereby reduce global greenhouse gas (GHG) emissions. Natural gas is a cleaner burning fossil fuel and less harmful than other fossil fuels like coal and using natural gas instead of other fossil fuels will reduce both GHG emissions and particulate matter in the air. Although the Province is supporting the export of LNG as an economic activity that could replace coal burning in electricity plants in Asia, there is no assurance that exporting natural gas will in fact reduce greenhouse gas emissions or airborne pollution particulates in the importing countries.

The District believes that as Canadians we have a Corporate Social Responsibility to ensure that we are not contributing to more GHG emissions or air pollution, but rather, we are doing our part to help reduce global GHG emissions and air pollution. This would have positive impacts on our environment as well as Asia's, as a significant portion of the particulate matter in our air comes from Asia.

Generally, the District is concerned that exporting LNG may contribute to additional greenhouse gas emissions if it is not used to reduce the use of coal in current operations in Asia. Rather, the natural gas could be used to increase economic activity and the current coal-fired operations in Asia could continue to emit significant GHGs and air borne particulates. On the same topic, the District is also concerned that there are many coal-fired power generating facilities in Canada that should be converted to natural gas to reduce Canada's GHG emissions and air pollution.

As such the District requests the following regarding GHG and particulate emissions.

- a. That the EAO require as a condition of an environmental certificate that WLNG be required to minimize the GHG emissions from the WLNG facility and if feasible to capture and sequester GHG emissions, and to also annually measure and report on GHG emissions and airborne particulate matter from the WLNG facility.**
- b. That the EAO encourage the federal and provincial governments to monitor and report on the use of Canadian LNG in other countries and the subsequent reduced use of higher GHG and pollution-emitting fossil fuels due to the use of Canadian LNG, including measuring and reporting of reduced greenhouse gas and particulate emissions directly attributable to the use of Canadian natural gas in other countries. The District would like the Province to demonstrate that there is an achievable goal that can be reached with the aid of natural gas as a transition fuel, and provide an implementation plan to meet that target.**
- c. That the EAO encourage the federal and provincial governments to seek replacing coal fuel with LNG in power generating facilities in Canada, to help reduce Canadian GHG and particulate emissions.**

## ENVIRONMENTAL ASSESSMENT PROCESS

The final issue that the District has concern with is the process used for the Environmental Assessment of the WLNG project. Two separate applications were submitted related to the WLNG project, one for the Woodfibre site, and one for the Fortis pipeline component. Due to the many complexities of this project, reviewing two separate applications and participating in two separate processes has frustrated the District. In addition, we are also frustrated that the project was separated into two applications thereby eliminating the need for a more comprehensive federal review process.

By separating the application into two projects, details on the upgrades required for the power supply were not included. The District needed to gather information on the power upgrades separately, placing the onus on us to determine the cumulative impacts of the three elements versus the proponents. As an example of this frustration, there has been no way to assess the entire visual impact of all three projects without combining three individual schematics (WLNG, Fortis, and Hydro) to create one visual graphic for the community, as each project element is presented separately. In our opinion, this combined information should be readily available and provided.

A further concern with respect to the community consultation process it that is appears that the EA process does not consider the level of citizen engagement that is active in Squamish nor the time and effort required by staff and Council to review and process two separate applications in such a short time frame. The review process is not easy for regular citizens to be part of it. It is based on input from technical groups, information filtered and disseminated by government, or consultants hired by proponents. Many citizens were frustrated as they felt the process was not geared to facilitate a meaningful review of the project by the community. Citizens found it difficult to find answers to questions, found it impossible to read through the lengthy documents and generally felt left out of the process. This left citizens skeptical which contributes to a “lack of trust” of government.

Considering the above, the District recommends **that the EAO improve the EA application review process in order to:**

- a. **Ensure future EA review processes are structured to facilitate greater citizen engagement in a more meaningful way.**
- b. **Ensure that the EA applications consider all relevant components as part of the project in order to trigger the most detailed review process, not the more simplistic review process.**



- c. **Ensure the public is adequately consulted or engaged on designing a new EA review process that meets a broader public interest perspective.**
- d. **Ensure the public is able to ask questions of the proponent during the EA application review process, and that the proponent is required to provide answers to the questions in a more open and transparent manner. This would ensure that all those interested can see the responses, and that the same response is provided consistently.**

## CONCLUSION

Squamish is at a crossroads. The community's opinions and values on these projects are mixed; there are those who strongly support the tax revenue, jobs and other benefits and those who strongly oppose the project due to environmental, community and economic concerns. There are also those who are more divided and feel that the community needs industry but that it should not detract from the values and existing businesses that make Squamish the place it is today.

Numerous citizens believe that industry and tourism can successfully coexist; however, many believe that heavy industry such as LNG is not the right fit for the community and its vision for enhanced livability and sustainability.

This response to the EAO referral for the WLNG project and the Fortis Eagle Mountain Pipeline highlights many of the concerns and issues identified by the community. The full details that are the basis for this response are attached:

- Appendix 1, Community Committee
- Appendix 2, Community Engagement Report
- Appendix 3, Chamber of Commerce Survey

The District understands that this is a complex project and that establishing an LNG export industry in British Columbia is a significant objective of the provincial government, however we have many substantial and well-considered concerns.

Due to the significant outstanding information and the community concerns that have not been adequately addressed, and that there are no guarantees at this time that that they will be satisfactorily addressed, the current applications are not supportable by the District of Squamish.

## Appendix 1: Woodfibre LNG Community Committee

In April 2014 the District of Squamish announced the creation of a Community Committee to help District staff objectively assess the proposed Woodfibre Liquefied Natural Gas (WLNG) project. The goal of the assessment was to provide input to both District of Squamish Council and the project proponents as the proposed project progressed through its review. The Community Committee was launched in April 2014 with a call for interest from qualified citizens.

A large number of high-calibre applications were received from highly-educated, deeply experienced individuals representing a range of backgrounds. The end result was a well-balanced, highly-engaged, and deeply committed group of local citizens who volunteered their time over the period of several months.

The committee's citizen members-at-large offered expertise across the tourism, manufacturing, and energy sectors, with a strong focus towards environmental and resource management, as well as engineering. The committee was rounded out by representatives from key local organizations including the Squamish Chamber of Commerce, Tourism Squamish, and the Squamish Climate Action Committee. Faculty members from Squamish's two universities were also represented on the committee. The Squamish Nation was also invited to participate, however declined due to the Nation's own assessment process that was concurrently underway.

Committee members, in alphabetical order:

- Sean Carron, Member-at-large
- Linda Kelly-Smith, Squamish Climate Action Network
- Karine Le Du, Member-at-large
- Chris Pettingill, Squamish Chamber of Commerce
- Jennifer Reilly, Member-at-large
- Glenn Stainton, Member-at-large
- Sara Van Mulligen, Member-at-large
- Donna Wall, Tourism Squamish
- Richard J. Wildman Jr., Member-at-large

The committee was supported by staff and Council:

- Rod MacLeod, District of Squamish, Director of Engineering
- Doug Race, District of Squamish Council, ex-officio representative
- Karen Elliott, District of Squamish Council, ex-officio representative

The committee was facilitated by Catherine Rockandel, also a Squamish resident and a certified professional facilitator, well-practiced in supporting people through understanding complex issues and making effective decisions together.

The committee's mandate was twofold:

- To provide input to staff as the technical advisors who will help inform Council prior to the District's response during the provincial environmental application review phase of the project.
- To provide feedback directly to the project proponents on certain technical matters that could mitigate impacts or enhance the project in the eyes of the community. Such technical matters included decisions that will be made on: water- compared to air-cooling technology, land- compared to water-based plant structures, environmental, safety and community impacts.

The committee's first order of business was to visit a compression facility and liquefaction facility in the Lower Mainland, scheduled for June 7. The committee met 11 times between June 26, 2014 and January 29, 2015.

The focus of the citizen committee's work involved an analysis of the technical implications of the project including, but not limited to: water- compared to air-cooling, electric- compared to gas-fueled, land- compared to water-based plant structures, environmental, safety and community impacts. The committee sought independent answers from technical experts to issues in order to better inform Council and the community on their findings.

The committee reviewed information and presentations on the following topics:

- Woodfibre LNG production and storage facility and the Eagle Mountain gas pipeline
- Lifecycle Greenhouse Gas Emissions of the Proposed Woodfibre LNG project
- Adapting to Sea Level Rise in Squamish
- Vancouver Aquarium Presentation - Cetaceans in Howe Sound
- Vancouver Aquarium Presentation - Ocean pollution priorities in Howe Sound
- BC Safety Authority presentation
- Industry Training Authority (ITA) LNG Trades Planning
- Linde Engineering company presentation
- Fortis BC Eagle Mountain - Woodfibre Gas Pipeline Project
- Oil and Gas Commission: Regulating LNG Facilities
- Canadian Coast Guard - Marine Safety Services in BC Waters
- Understanding the BC Environmental Assessment Process

- Pacific Pilotage Authority
- Marine Safety and Transportation of LNG
- Howe Sound with scaled 350m x 42m vessel superimposed
- Scale model of Aframax in Second Narrows
- LNG fire test (video)
- Marine Shipping
- Air Quality Objectives
- Ground Level Ozone
- Nitrogen Oxides
- Clean Energy Canada - One Piece of the Carbon Puzzle - Electric LNG in Squamish
- Electric Drives and Seawater Cooling

The committee's findings were presented to Council on September 16, 2014 and February 25, 2015.

Following the wide variety of independent technical presentations and extensive discussion among a highly-engaged, experienced and educated volunteer committee, the committee's outstanding concerns were ranked and summarized as follows at the February 25<sup>th</sup> meeting:

**Committee's Outstanding Concerns:**

- **HIGH:** Significant concern due to uncertainty
- **MEDIUM:** Moderate concern
- **LOW:** Low level of concern for Committee members\* due to technical information received.

*\*May still present significant concerns for some community members.*

**Flaring (LOW)**

- Proponent states flaring will be "minimal" but committee is still concerned about visual impacts

**Light Pollution (LOW)**

- Not clear as to whether mitigations are within acceptable International Dark-Sky Association Guidelines
- Language in application is vague. For example "impact will be negligible" but in comparison to what other existing sites
- What is baseline?



#### **Air Quality Monitoring (LOW-MEDIUM)**

- The need for a current air quality baseline and consistent monitoring of air quality to understand changes even incrementally in the future.

#### **Marine Sediment Pollution (MEDIUM)**

- Not clear if a sediment baseline of existing conditions is being conducted
- Historic pollution in marine sediment is an issue at the site
- Not clear whether mitigations detailed in application to avoid sediment agitation are **best practice or designed to only meet basic regulations**

#### **Foreshore Marine Environment (MEDIUM-HIGH)**

- Reclamation, new construction, removal of existing pilings and docks
- What baseline research and ongoing monitoring for priority pollutants is being conducted in sediments and invertebrates?
- How will they identify new pollutants, track pollution trends over time?
- How are they evaluating the biological effects of contaminants of concern on indicator organisms?
- What about underwater noise, how it will be monitored and mitigated?

#### **Seawater Cooling (MEDIUM)**

- Is this best practice globally?
- What other options for innovative alternatives to “once through cooling”?
- If “once through cooling” is best option, what mitigation can reduce impacts?
- What alternatives to capture/re-use waste heat rather than dispersing in Howe Sound exist?

#### **Economic Development (MEDIUM)**

- Influx of construction workers may impact availability of hotel rooms for tourists
- Uncertainty related to fit with Squamish’s new brand, tourism, and potential economic impacts

#### **Economic Development: Jobs (HIGH)**

- Uncertain amount of Squamish jobs from construction and for long term
- Loss of potential economic benefit if workers don’t live in community
- Impacts of bussing workers from Lower Mainland

#### **Emissions (MEDIUM-HIGH)**

- There are Green House Gas impacts and there are Air Quality impacts
- There are many uncertainties
- Uncertainty about whether natural gas is offsetting other dirtier fuels
- Unsure about how to evaluate impacts

**Capacity** of senior levels of government to **monitor, enforce and respond (HIGH)**

- Does Transport Canada, Coast Guard, DFO, have the resources required, due to ongoing program cuts, and limited LNG experience; and the regional capacity of the Provincial OGC as the main permitter.

**Marine Noise Pollution (HIGH)**

- Acoustic impacts on marine life from construction to operations
  - Need high quality acoustic baseline data
  - Monitoring and mitigation of underwater noise from ship transits/ port operations
  - Specific mitigations for pile driving including use of vibratory hammers
  - Are global best practices being used?

The committee outlined the following recommendations for Council to consider advocating for:

- Proponents to work to global best practices rather than standard regulations;
- Request an ongoing monitoring and advisory role for Committee as an EA condition;
- Collaborate with Local Governments to outline concerns identified in this presentation to senior levels of government:
  - i.e. New/Improved Air Quality monitoring station
- Identify uses for waste heat generated;
- Commission a Report: Bridging divergent perspectives around contentious projects. What has Squamish learned and what could other communities learn from this process?
- Opportunities Agreement “What’s in it for Squamish” i.e.: a research facility/chair focused on Howe Sound Sustainability;
- Confirm mechanisms for improving community engagement around future contentious projects.

A copy of all agendas, minutes and presentation materials, as well as the committee’s Process Charter and Terms of Reference, are attached for reference and review.

## Appendix 2: Community Consultation, March 2015

To further inform Council's response to the Environmental Assessment Office on the Woodfibre LNG and Fortis BC pipeline projects, the District of Squamish undertook a focused engagement process in March 2015 to understand the community's opinions and values on these proposed projects. Modus Planning, Design and Engagement Inc. was contracted to work with District staff to design, facilitate and report from this process.

Engagement success was defined as:

- Useful input will be gathered from the greatest number of residents;
- An opportunity will be provided for everyone to feel they have been heard;
- Dialogue will be respectful and will help reduce conflict;
- Discussion will be thoughtful about our shared future to inform Council discussions.

Between March 9 and 23, 2015 the District asked the community to "speak, listen and learn" and engage in a dialogue about the proposed projects and the best possible outcomes for Squamish. This branding and messaging was chosen to reflect the fact that Council wished to hear all voices in the community, but did not want conflict over the project to increase.

Council's objective to hear from the greatest number of residents led to this process of engagement being chosen over a statistically accurate survey, where a sample of the community would have been surveyed. The dialogue aspect of this engagement was an important element to the process.

Engagement activities included:

- **Informal briefings** were held with a range of community groups and individuals (15 briefings in total) who were seen as 'key community influencers' regarding these projects, including a range of known opposers, supporters, and neutral parties. Attendees were told about the process activities and objectives, and were asked to promote input as widely as possible.
- **An online discussion forum (PlaceSpeak)** was available from March 9 – 23. A total of 36 comments were received through this forum from a total of 13 respondents. The discussion was viewed by 437 people (unique IP addresses).
- **A public questionnaire** was available in online and paper formats between March 9 and March 23. A total of 517 individual responses were received (including nine paper submissions); this total includes partial completions.
- **A dialogue-based community event** was held in the evening of March 18 at the Sea to Sky Hotel. Approximately 90 people attended this face-to-face discussion.

These activities were promoted extensively and in advance through a wide range of communications channels including: The District of Squamish website and e-news group; newspaper and radio advertising, social media shares and promoted posts, posters and direct emails.

Seven “pillars” or discussion topics were used to organize the engagement process in order to provide feedback in a way that was meaningful and relevant for Council as well as the Environmental Assessment Office:

1. Environmental – Water
2. Environmental – Air & Land
3. Environmental – Broader Environmental Considerations
4. Economic
5. Social
6. Heritage
7. Health

Using these seven discussion topics and the concept of dialogue as a guiding framework, several key questions were asked to obtain feedback on the community’s opinions and values:

**The online discussion forum asked:**

- If the project goes ahead, how can we make it the best possible project for Squamish?
- If the project does not go ahead, how do we build up Squamish to be the best it can be?
- What issues or values should Council consider as it develops a response on these projects?

**The online public questionnaire** was built after the Modus team identified the main issues (both concerns and benefits) that have arisen from research, public comments to the Environmental Assessment Office, and from the work of the District’s Community Committee.

- Participants in the questionnaire were asked to review the main issues for each topic and select up to three issues that they felt were the most significant for Squamish.
- Participants were also asked to provide additional detail in open-ended questions under each topic:
  - What are the most important facts that Council should consider about this topic and why?
  - What does Council need to know about your feelings/values on this topic?
- Lastly, participants were asked to provide general comments about any concerns or benefits they felt the project may bring to Squamish.

Questionnaire respondents were asked to look at a number of issues (both concerns and benefits) in each topic area that have arisen from research, public comments to the Environmental Assessment Office, and from the work of the District's Community Committee.

The top 10 concerns or benefits (of 53) that respondents felt were most significant across all topic areas were:





**The dialogue-based public event** involved an opening presentation, and then three rounds of small group discussion of 40 minutes each. During the first two rounds of discussion, participants were asked to choose a table that focused on a topic of their choice (based on the seven discussion topics). During the third round, participants were asked a more general question.

- The first two rounds of discussion (topic-based) asked:
  - What must Council know about this theme and what matters most to me?
- The third and final round of discussion asked:
  - Putting aside whether these projects go ahead or not, what is the best future for Squamish?

The focus of the forum was to ensure that all attendees had a chance to speak, and that people listened to each other, and that there were learnings from the discussions. The intent was NOT to come to agreement.

The results and analysis of the Community Engagement, as well as a copy of all verbatim comments received through the questionnaire, are attached for reference and review.

## Appendix 3: Squamish Chamber of Commerce Advocacy Survey 2014

In October and November 2014, Instapulse conducted a phone and email survey of Squamish Chamber of Commerce members regarding advocacy issues for the Squamish Chamber of Commerce.

The results of the survey are sufficient to be considered representative of the membership's opinions with a +/- 14% margin of error, 19 times out of 20.

One of the questions focused on the proposed Woodfibre LNG project, and the result from the survey is depicted in the pie graph below.

**Based on the information you do have about the  
Woodfibre LNG Plant do you currently:**

