

# SUMMARY / PGL'S ENVIRONMENTAL REPORT ON WOODFIBRE LNG PROPOSAL

## LEADERSHIP'S MESSAGE

Squamish Nation Council has taken a stance on LNG in our territory and will soon vote on a project that has the potential to define us in the 21st Century — the \$1.6 billion Woodfibre LNG & FortisBC proposal at the former village of Swiy'a'at. And while there are many risks and rewards relating to this proposal, SN has made it clear it will not consider any economic benefits ***until all environmental and cultural issues have been addressed — to our satisfaction.***

When it comes to the Woodfibre LNG proposal, we must rely on our elders and members that use our land, along with facts, hard data and a thorough scientific review.

And, over the past year, that is exactly what we have done, sharing that information with SN members and Council.

That is also why we insisted on conducting an independent assessment of the WFLNG proposal — despite the fact that both the federal and provincial governments are also conducting environmental assessments.

We simply cannot rely on provincial and federal governments to do the right thing on our behalf. We must stand up for ourselves.

We make it an article of faith to protect the valuable marine resources of the Squamish estuary and Howe Sound, both within our traditional territory.

We are working to bring Howe Sound back to a level of natural sustainability — before industrial pollution began to destroy marine life, starting with the Britannia copper mine in 1904. Then in the '60s '70s and '80s, mining effluent was joined by contamination and environmental degradation from chemical plants, logging and pulp mills. These turned the Sound into a dead and poisoned place where toxic mercury levels meant we could no longer eat the fish.

There is much good news to report: The herring are coming back; so are the wild salmon, cod and Grey Whales; and, as recent sightings demonstrate, killer whales and Pacific white-sided dolphins are returning too.

***Bottom Line. If our lands and waters are not protected LNG plants or other industrial operations simply won't get built. Period.***

Chief Ian Campbell  
Council Spokesperson



# INTRODUCTION

In 2013, Woodfibre LNG and FortisBC announced plans to supply and build a small, \$1.6 billion LNG plant at our former village of Swiy'a'at (former Woodfibre pulp mill site) seven kilometres southwest of Squamish. Woodfibre LNG is a subsidiary of Pacific Oil and Gas Ltd., owned by Raja Garuda Mas International (also known as Royal Golden Eagle).

According to WFLNG, the plant is expected to produce between 1.5 and 2.1 million tonnes of LNG per year.

To supply the natural gas to the plant, FortisBC would build a 52-kilometre twinned pipeline from Indian Arm to Squamish, including a 700-metre pipeline trench on the west side of the Squamish River. An estimated two LNG tankers would travel up Howe Sound each month.

The LNG liquefaction facility would operate similarly to a large fridge. The natural gas, which is the same gas found in households, is chilled to -162 degrees Celsius, the point when the gas turns into a liquid.

The project was in the Environmental Assessment Certificate Application process, though it has recently been suspended as a result of SN's "25 Conditions" announcement. (Important clarification: because of a clerical error during the SN Council session, it was initially reported there were 26 conditions — but that number is incorrect. There are 25 confirmed conditions.)

The pipeline is proposed to route under much of Squamish estuary with a 700-metre trench on the west side of the Squamish River.

Each month an estimated two tankers will carry the LNG through Howe Sound south through the Gulf Islands, into Juan de Fuca and west into the Pacific Ocean to customers in Asia.

It is important to point out that the pipeline and plant will be carrying and processing natural gas — **not oil**. According to many experts, natural gas is far less damaging to marine and land environments should an accident occur.

As soon as we heard the news, SN set in place our "Squamish Process," a comprehensive program designed to protect sensitive marine and land environments in and near the Squamish Estuary, Howe Sound and beyond — all in traditional SN territory.

The Squamish Nation Process included a comprehensive independent assessment — the first by a First Nation in B.C. It started in July 2014 and continues to this day.

At the same time, SN also launched a comprehensive program of public education for its members. Public meetings were held at various phases of the assessment, and plain-language brochures were produced and delivered door-to-door and posted on the SN website.

Key to the Squamish Nation Process was commissioning an extensive independent environmental review by Pottinger Gaherty (PGL) consultants. The review investigated both technical aspects of the project and specific concerns raised by SN members.

The report, submitted to SN Council for review on June 26, 2015, is science and fact-based, a rigorous investigation of all aspects of the proposal. After review, SN Council mandated its team to negotiate an agreement based on 25 stringent conditions.

Council made that announcement publicly, first to members and then to the public and media. The story was given wide media play and continues to do so.

Just four days later on June 30, and a direct result of SN's "25 Conditions" announcement, Woodfibre LNG requested suspension of the formal environmental process, asking for more time to study the Conditions. That delay was granted.

Bottom line: SN made it clear it would protect sensitive land and marine habitat and its culture. And Woodfibre was listening, taking SN's conditions seriously.

This is a hot button issue. Strong opinions within our community are only to be expected. We strive to be a self-governing Nation and we welcome the opinions of all our members. But at the same time many vocal outsiders — for and against the proposal — are trying to influence us. But they are wasting their time and energy. It's our future and we will decide it ourselves.

Going forward, SN Council intends to clearly spell out all the risks — and all the benefits — in plain language. This summary represents an important step in that process.







# PGL REPORT / KEY POINTS

On June 25, the Nation's consulting firm of Pottinger Gaherty (PGL) submitted its final environmental report to SN Council. PGL had been hired to conduct a technical study of the Woodfibre LNG project.

Comprehensive and technical in nature, the report reviewed existing studies and the latest science — while at the same time, collecting and collating information from SN members, Chiefs and councilors.

General objectives of the study included:

SQUAMISH NATION ASSESSMENT REPORT: KEY ISSUES	SQUAMISH NATION CONDITION TO ADDRESS ISSUE
<b>Seawater Cooling:</b> We do not find that the proponent's conclusions of "negligible" impacts on herring and plankton (tiny fish, plants, marine insects, larval fish or shellfish) are sufficiently proven.	Conduct further studies on the proposed sea-water cooling method that will prove to the satisfaction of the Squamish Nation that the biological impacts on marine life are acceptable to it and also that the method has lower overall environmental impact than alternative technologies. If WLNG cannot provide conclusive evidence to demonstrate this, then WLNG will pursue an alternate method of cooling the natural gas that is acceptable to the Squamish Nation.
<b>Wildlife Management Area:</b> Numerous at-risk ecosystems and individual plant species can be found in the Squamish River estuary. The project proposes to clear nearly 10ha (of the 673ha in total) in the Skwelwil'em Wildlife Management Area (which also overlaps with the Squamish River Important Bird Area). This is a highly productive and sensitive ecological zone that has already been subjected to a lot of disturbance, and is only now being allowed to recover.	Must avoid any industrial impacts in the Skwelwil'em Wildlife Management Area ("WMA") boundaries by constructing the new pipeline completely underneath or around the WMA so that no excavation or land clearing is required in the WMA. This includes no barge landings in the WMA.
<b>Compressor Station:</b> It was found that there is a low probability of an explosion, but some risk. Therefore, current location of compressor poses some risk to members living on reserve lands in the vicinity of the compressor station.	Must relocate the compressor station from the location proposed in the EA Application to a location that poses no risk to Squamish members residing on any Indian Reserve in Squamish territory.
<b>Controlled Access Zone:</b> The proponent is legally required to control access to the LNG facility ("Controlled Access Zone") by erecting fences surrounding the land portion of the project and creating a "no go" zone 400-500 metres offshore of the project. Squamish members hunt and fish in areas within and beyond the Controlled Access Zone.	Must provide access to Squamish Nation members through the Controlled Access Zone to allow for Squamish Nation practice of aboriginal rights.
<b>Explosions/Gas Leak:</b> We found that there is low probability of explosions or gas leaks due to an accident or malfunction related to tankers, the facility or the pipeline, but that there is some risk that such an event could occur and may harm members and members' property.	Must provide insurance coverage or form of bond to address personal loss and injury costs of members that may be impacted by an explosion caused by an accident or malfunction of project.
<b>Mill Creek:</b> We found that there is potential for low water flows during the summer months due to the project requiring water from the creek. This may impact salmon and trout. Also, the creek is not in its natural state as the former owner of the site made changes to the creek. There is still some contamination from the former mill site in the lands surrounding the creek, and the creek is contained in lock block walls instead of naturally vegetated banks.	Must locate other water sources during critical stream flow periods if the necessary water flow amount is not met on Mill Creek.  Must also restore Mill Creek and adjacent area to a "green zone" designation. Formal recognition that the project is located in the former village of Swiy'a'at must also be in this green zone.
<b>Cumulative Impacts:</b> We found that the development of this project adds to other industrial impacts on Howe Sound at a time when the waters are coming back to life.	Must fully fund a Squamish Nation marine-use plan to help address cumulative impacts of industrial projects on the marine environment in Howe Sound. The province of BC must enter into government-to-government discussions with the Nation regarding a marine-use planning agreement.



SQUAMISH NATION ASSESSMENT REPORT: KEY ISSUES	SQUAMISH NATION CONDITION TO ADDRESS ISSUE
<p><b>Cultural Sites:</b> Although the project footprint does not directly overlap with any other categories of land from the 2007 agreement, the pipeline would be constructed directly adjacent to three Cultural Sites and one village site:</p> <ul style="list-style-type: none"> <li>&gt; Monmouth Creek Cultural Site;</li> <li>&gt; Indian River Cultural Site; and</li> <li>&gt; Stawamus Creek Cultural Site.</li> </ul> <p>Although there would be no footprint impacts to these sites, there would be disturbance of the landscape: noise and human presence would increase during construction, and wildlife avoidance would likely extend into the affected areas. The Land Use Agreement does acknowledge that adjacent land uses to these sites may conflict with Squamish Nation cultural-use objectives.</p>	<p>Must route the pipeline to avoid impacts within, and adjacent to, the following cultural sites that have been legally designated under land-use agreement with BC: Monmouth Creek, Stawamus Creek and Indian River. For certainty, in order to minimize disturbance to the cultural sites FortisBC will come to agreement with the Squamish Nation on a reasonable buffer area around each of these cultural sites.</p>
<p><b>Fueling of Tankers:</b> LNG tankers will carry bunker fuel. Whereas LNG spills from a tanker have relatively little environmental impact, bunker fuel spills may have longer-lasting effects. The highest risk of bunker fuel spills occurs during re-fueling. The remaining risk is related to large-ship collisions or running aground. Given the safeguards that will be in place for this project, there is a very low probability of such an event.</p>	<p>Must be no fueling of LNG tankers with bunker fuel in Squamish territory.</p>
<p><b>Noise during construction and during operations:</b> During construction, noise would be a short-term issue and with diligent focus, should result in negligible impacts. However if not properly addressed, this could cause permanent injury to a small number of individual mammals. During operations, impacts from project shipping are probably small, but may contribute to a larger cumulative problem. Operation-related noise may interfere with normal communication for mammals. This may lead to avoidance of preferred areas.</p>	<p>Must contribute to further study on noise impacts of the Project on marine mammals, to ensure long-term operational practices minimize under-water noise disturbance as much as possible.</p>
<p><b>Conversion to oil:</b> Members raised concerns that the natural-gas line and associated LNG facility have the potential to be converted to transport crude or diluted bitumen.</p>	<p>Must only operate the facility for the liquefaction and export of natural gas.</p>
<p><b>Expansion of Project:</b> Members expressed concern that the project may be expanded immediately after it is approved at the current size.</p>	<p>There must be no future expansion of the project without Squamish Nation approval.</p>
<p><b>Concerns with environmental performance/compliance:</b> The proponents have committed to a number of management plans and monitoring of the plans in their respective Environmental Assessment applications. We found that most of the plans proposed by the proponents did not include Squamish Nation input and that there are not sufficient monitoring and enforcement mechanisms in place to implement the plans. There are plans proposed for issues of concern to the Nation such as impacts due to the flare tower, emptying of ballast in Howe Sound, clearing of vegetation and wildlife management to name a few. At present these plans are only conceptual. The overall environmental performance of the project depends on responsible development and implementation of these plans.</p>	<p>Must Partner with the Squamish Nation to co-manage the environmental management programs and the monitoring of the programs (including the funding of SN participation).</p> <p>Must make certain mitigation measures proposed in the EA application that are considered voluntary measures legally binding under a Squamish Nation Environmental Certificate.</p>
<p><b>Emergency response:</b> Members are concerned that there is not an adequate emergency response plan currently in place in the project area to ensure Squamish members are safely evacuated in the case of an accident that poses health and safety risks to Nation members.</p>	<p>Must work with the Squamish Nation to develop an Emergency Response Plan for the Squamish Valley area.</p>



## A CALL TO ACTION / THE 25 CONDITIONS

As soon as SN Council received the PGL report, it spelled out its intentions — loud and clear.

Council proclaimed ***it has no intention of approving the deal — unless 25 stringent conditions are met.***

SN Council set out the conditions in a meeting held on the Squamish Reserve in North Vancouver on Friday, June 25.

### Conditions included:

1. The first of SN's requirements is greater certainty around the environmental impacts of the proposed Woodfibre LNG seawater cooling discharge system. SN requires more information about potential immediate and cumulative impacts on marine life in Howe Sound from discharges of warm, chlorinated water from the proposed system and the potential for small fish to be harmed by the intake system. In addition, SN wants detailed information about potential alternative technologies and the impacts of those technologies on marine life in Howe Sound, in both relative and absolute terms, compared to the proposed discharge method.
2. The project must avoid industrial impacts in the Skwelwil'em Wildlife Management Area (WMA). In particular, the project proponents must commit to a drilled underground pipeline that starts outside of the WMA and exits outside the WMA — or to circumventing the WMA altogether.

3. Relocation of the compressor station in FortisBC's EA Application from the proposed site to a location that poses no risk to Squamish members residing on any Indian Reserve in Squamish Nation territory.
4. A guarantee of access to SN members through the Controlled Access Zone of the Project to allow for SN practice of aboriginal rights. (Note: notwithstanding SN compliance with any safety concerns arising from SN's presence on an industrial site).
5. Insurance coverage or a form of bond to address risks of personal loss and injury costs for SN members in the event of a mishap such as a spill, explosion or other industrial or marine accident that brings harm to members.

Council made its announcement in a news release that went first to members and then to the media and the public: "Bottom line here is that SN will simply not approve the WFLNG proposal unless all 25 of these conditions are addressed and resolved — to the Squamish Nation's satisfaction," the news release said.

To enforce compliance, SN will also require the project proponents to enter into a legally binding agreement regarding the conditions, called a Squamish Nation Environmental Certificate.

Issuing these conditions is significant in that SN has been able to identify which environmental issues are important and determine how they should be addressed — from its perspective. Provincial and federal EA processes simply don't allow for that.

## MAKING NEWS, LOUD AND CLEAR

Just days after SN Council sent out its "25 Conditions" news release, the environmental assessment of Woodfibre LNG was suspended.

The B.C. Environmental Assessment Office suspended its review of the \$1.6-billion Woodfibre liquefied natural gas project to give the WFLNG time to respond to concerns raised by SN.

Michael Shepard, project assessment manager, said that the 180-day time limit for the application review is suspended at Woodfibre LNG's request. The assessment will resume once the province is "satisfied with the information provided and with the adequacy of consultation with Squamish Nation," he said.

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Meanwhile, SN Council will continue to consult with members, making the full PGL report available for viewing. But this summary will be delivered to all households and will be posted on the SN website.

This issue has put SN under the media spotlight. Many, many people ask us how SN Council is likely to vote. An important

point here: it was made clear when the Squamish Process began a year ago, there would be no referendum. At every community meeting we hosted we repeated this message: SN Council, elected to represent its members, has the responsibility to accept or reject the deal.

***It's our future and we will decide it for ourselves.***

## ADDENDUM / THE 25 CONDITIONS

### **Woodfibre LNG Project Squamish Nation 25 Environmental Conditions** June 26, 2015

The Squamish Nation concluded its environmental assessment of the proposed Woodfibre LNG plant and associated Eagle Mountain-Woodfibre Gas Pipeline expansion project (collectively, the "Project"). The Assessment has identified a number of environmental issues that do not meet the Squamish Nation's standards. Therefore, the Squamish Nation will not consider approving the Project until Woodfibre LNG Ltd. ("WLNG"), FortisBC and the Province of British Columbia first agree to the following conditions of any potential approval. If the Parties are agreeable to these conditions, the conditions will be included in a legally binding Squamish Nation Environmental Certificate issued by the Squamish Nation.

#### **Woodfibre LNG commits to:**

1. Conduct further studies on the proposed sea water cooling method that will prove to the satisfaction of the Squamish Nation that the biological impacts on marine life are acceptable to it and also that the method has lower overall environmental impact than alternative technologies. If WLNG cannot provide conclusive evidence to demonstrate this, then WLNG will pursue an alternate method of cooling the natural gas that is acceptable to the Squamish Nation.
2. Restoring Mill Creek and adjacent area to a "green zone" designation. Formal recognition that the project is located on the former village of Swiy'a'at will also be located in this green zone.
3. Locating other water sources during critical stream flow periods if the necessary water flow amount is not met on Mill Creek.

4. Fully funding a Squamish Nation marine use plan to help address cumulative impacts of industrial projects on the marine environment in Howe Sound.
5. Providing access to Squamish Nation members through the Controlled Access Zone to allow for Squamish Nation practice of aboriginal rights.
6. Partnering with the Squamish Nation to co-manage the environmental management programs and the monitoring of the programs (including the funding of SN participation).
7. Providing insurance coverage or form of bond to address personal loss and injury costs of members who may be impacted by an explosion caused by an accident or malfunction of project.
8. No future expansion of the project without Squamish Nation approval.
9. No fueling of LNG tankers in Squamish territory.
10. Further study on noise impacts of the Project on marine mammals.
11. Only operate the facility for the liquefaction and export of natural gas.
12. Making certain mitigation measures proposed in its EA application that are considered voluntary measures legally binding under a Squamish Nation Environmental Certificate.

**CONTINUED ON BACK COVER**



**FortisBC commits to:**

13. Avoid any industrial impacts in the Skwelwil'em Wildlife Management Area ("WMA") boundaries by constructing the new pipeline completely underneath or around the WMA so that the pipeline surfaces outside of the WMA boundaries.
14. No barges in WMA.
15. Relocating the compressor station from the location proposed in its EA Application to a location that poses no risk to Squamish members residing on any Indian Reserve in Squamish territory.
16. Routing the pipeline to avoid impacts within, and adjacent to, the following cultural sites that have been legally designated under land use agreement with BC: Monmouth Creek, Stawamus Creek and Indian River. For certainty, in order to minimize disturbance to the cultural sites FortisBC will come to agreement with the Squamish Nation on a reasonable buffer area around each of these cultural sites.
17. Partnering with the Squamish Nation to co-manage the environmental management programs and the monitoring of the programs (including the funding of SN participation).
18. Providing insurance coverage or form of bond to address personal loss and injury costs of members that may be impacted by an explosion caused by an accident or malfunction of project.

19. No future expansion of the pipeline without Squamish Nation approval.
20. Making certain mitigation measures proposed in its EA application that are considered voluntary measures legally binding under a Squamish Nation Environmental Certificate.

**Province of BC commits to:**

21. Not authorizing the transportation of oil through the pipeline.
22. Government to Government discussions regarding a marine use planning agreement to address cumulative impacts of industry in the Howe Sound area.
23. Working with the Squamish Nation to develop an Emergency Response Plan for the Squamish Valley area.
24. No future expansion of the LNG Plant or pipeline without Squamish Nation approval.

**Further, if WLNG, FortisBC and the Province are agreeable to meeting these environmental, cultural and safety conditions all Parties will commit to:**

25. Entering into an economic benefits agreement with the Squamish Nation that will be reflective of the Squamish Nation's aboriginal rights and title interests.



**SQUAMISH NATION**

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