TGS-NOPEC Geophysical Company ASA, Petroleum GeoServices and Multi Klient Invest (TGS/PGS/MKI) Northeastern Canada 2D Seismic Exploration Survey

-National Energy Board-

November/December 2012 Community Engagement Report

TGS-NO	PEC Geophysical Company ASA, Petroleum GeoServices and Multi Klient Invest	
(TGS/PG	S/MKI) Northeastern Canada 2D Seismic Exploration Survey	1
-National	Energy Board-	1
Novembe	er/December 2012 Community Engagement Report	1
	oduction	
2. Mee	ting Overview	3
2.1.	Hamlet Council and Hunters and Trappers Organization Meetings	3
2.2.	Community Meetings	4
2.3.	Pond Inlet Arctic College Meeting	4
2.4.	Iqaluit High School Meeting	4
3. Con	nmunity Summaries	5
3.1.	Qikiqtarjuaq	5
3.2.	Pangnirtung	8
3.3.	Clyde River	
3.4.	Pond Inlet	12
3.5.	Kimmirut	13
3.6.	Iqaluit	14
4. Othe	er General Observations	16

1. Introduction

TGS-NOPEC Geophysical Company ASA, Petroleum GeoService, and Multi Klient Invest AS (TGS/PGS/MKI) is committed to continuing effecting community consultation with regards to the proposed 2D seismic survey in Baffin Bay and Davis Strait, herein referred to as the "Project". In November and December 2012, the NEXUS Team travelled to Qikiqtarjuaq, Pangnirtung, Iqaluit, Clyde River, Pond Inlet, and Kimmirut to conduct public information sessions and meetings with representatives from the Hunters and Trappers Organizations and Hamlets.

Table 1: Meetings held throughout the November and December 2012 trip

(note: meetings	attended b	TGS-NOPEC representative are indicated by *)	

Participants	Date	Time	Location					
·	Qikiqtarjuaq		'					
Hamlet Council and Staff	28 November 2012	9am-11am	Hamlet Office					
HTO Members	28 November 2012	1pm-3pm	HTO Office					
Community members	28 November 2012	7pm-9pm	Community Hall					
Pangnirtung								
HTO Members	29 November 2012	1pm-3pm	HTO Office					
Hamlet Council and Staff	30 November 2012	9am-10am	Hamlet Office					
Iqaluit								
Iqaluit Council *	30 November 2012	2:30pm-4pm	Iqaluit Municipality Office					
Community Members	7 December 2012	4:30pm-5:30pm	Abe Okpik Community Hall					
High School Teachers*	11 December 2012	3pm-4pm	High School					
High School Students and Teachers	12 December 2012	9:45am- 11:15am	High School					
	Clyde River							
Hamlet Council & HTO Members*	5 December 2012	10am-12pm and 1pm-3pm	Hamlet Office					
	Pond Inlet							
Environmental Technology Students*	6 December 2012	10am-12pm	Arctic College					
Hamlet Council & HTO Members*	6 December 2012	1pm-4:30pm	Hamlet Office					
	Kimmirut	1						
HTO Members	10 December 2012	3pm-4:30pm	HTO Office					
Community Members	10 December 2012	7pm-8:30pm	School Gym					
Hamlet Council and Staff	11 December 2012	9am -10:30am	Hamlet Office					

2. Meeting Overview

The purpose of these community engagement meetings was to continue discussions regarding the proposed project and for a TGS-NOPEC representative to meet Hamlet and HTO members. The TGS-NOPEC representative provided a presentation on seismic surveys, which included updated information on the Project.

Meetings, which the TGS-NOPEC representative attended, are indicated in Table 1. Meetings, which the TGS-NOPEC representative did not attend, received a summarized version of their presentation on TGS-NOPEC's work in the Arctic.

2.1. <u>Hamlet Council and Hunters and Trappers Organization Meetings</u>

The following is an outline of meetings and discussions in the meetings with Hamlet/Council and HTO representatives:

- Introduction of everyone in attendance
- It was explained that the purpose of the meeting was to continue dialogue, and for community members to ask more questions on the Project and for the TGS-NOPEC representative to provide a more detailed presentation on TGS-NOPEC's work in the Arctic and updated information on the Project (communities already had an introductory presentation to the proposed project and seismic surveys in June or October).
- Two reports, in Inuktitut and English (electronic and hard copies) were provided to Hamlet and HTO representatives. References used in the documents were provided to the Hamlet and HTO.
 - October meetings. The supplementary report provided additional information (with references) on the topics commonly discussed in previous meetings. Information included a general overview on the operation of seismic surveys, the known effects of seismic surveys on fish, whales, and seals in the study area, and the proposed mitigation measures.
 - Question and Response Document: To facilitate sharing of information between communities, this document contains all of the questions asked and responses provided in the meetings¹ held in June and October 2012. The document was divided into three sections: questions on the proposed project, marine mammals, and seismic surveys.
- The TGS-NOPEC representative's presentation included the following information:
 - Visual representation (maps) and discussion of TGS-NOPEC's international work completed in the Arctic region to date.
 - Maps showing seismic survey work completed in both the Arctic region and Baffin Bay and Davis Strait (Greenland and Canadian waters).
 - A discussion on the seismic survey work completed off Greenland in Baffin Bay and Davis Strait occurred, which included information on exploratory well drilling.
 - Seismic survey equipment parameters that will be used in the proposed project were shown. If individuals had questions, they were encouraged to ask the TGS-NOPEC representative.
 - The current survey lines for the proposed project for 2013 were shown and discussed with the community.

¹ If the same question was asked in more than one community, it was only included once in the document

- Previously, a map was shown that had all the survey lines for the proposed five year project.
- With the aid of pictures and animations, it was discussed how air guns work and how information is acquired from the sound produced by the air guns.
- An animation was used to illustrate the length of time required to complete one seismic survey line.
- US Geological estimates for the amount of oil, gas, and natural gas liquids in Baffin Bay were provided.
- The meeting concluded with the opportunity for questions and comments by meeting participants on the Project.

2.2. Community Meetings

Initial community meetings were held in June 2012 in Iqaluit, Clyde River, Pangnirtung, and Pond Inlet. Initial community meetings were held in Qikiqtarjuaq and Kimmirut in October 2012; originally scheduled for June 2012, they were postponed due to weather conditions). The meetings included information discussed in the previous report submitted to the National Energy Board ("October 2012 Community Engagement Report"). Presentations were updated to include the current Project survey lines.

2.3. Pond Inlet Arctic College Meeting

A presentation was made to Pond Inlet Arctic College students in the Environmental Technology Program. Ensuing discussion dealt with the role of marine mammal observers and seismic surveys. The Environmental Technology students were attending the meeting with Hamlet Council and HTO members later in the day, so this meeting was used as an opportunity for students to ask questions and learn about work opportunities associated with the Project. The students were completing their year-end research projects and some of the students were researching seismic surveys. Topics discussed include:

- The effects (known and unknown) of seismic surveys on the environment,
- Strategies to address these effects (students were encouraged to provide their own solutions), and
- Marine mammal observers.

2.4. Igaluit High School Meeting

A presentation and discussion was held with students and teachers in the Iqaluit high school. This session was organized and facilitated to encourage discussion from the students. The NEXUS Team used an edited version of the community presentation and structured it to encourage participation from students. Topics discussed include:

- How seismic surveys work,
- Map of the proposed survey area
- Opportunities and concerns students associate with the proposed project
- Discussion on steps the students would take to address the concerns that they
 identified. Later it was discussed how the project is addressing those same concerns
- Discussion of the role of an Environmental Assessment in a project

3. Community Summaries

The following is a summary of the information sessions and meetings held in Qikiqtarjuaq, Pangnirtung, Clyde River, Pond Inlet, Kimmirut, and Iqaluit. These summaries identify the communities' concerns, comments, feedback, and questions, which will act as a guide for future community engagement activities.

3.1. Qikiqtarjuaq

One member from NEXUS arrived in Qikiqtarjuaq on the morning of November 27, 2012 and visited the Hamlet office to confirm the community meeting that evening at 7pm. She set up the chairs for the presentation and confirmed that the projector screen and refreshments would be provided that evening. An interpreter was confirmed for the community meeting and she was asked to make an announcement on the local radio about the meeting this evening. However, due to a winter storm, the other NEXUS member could not fly in to Qikiqtarjuaq. The meeting was rescheduled for the following evening (November 28, 2012) and the interpreter made an announcement of the cancellation on the radio and a sign was put up on the door of the Hamlet office.

Community Meeting

The community meeting was held at the community hall from 7pm-9pm on November 28, 2012. Approximately 40 community members attended the meeting. The Project was introduced and NEXUS's role in the process was discussed. The meeting was positive and provided the opportunity for community members to express their concerns, questions, and comments. The community was interested in knowing if there have been any published studies on potential impacts on marine mammals from seismic surveys in Greenland. The Engagement Team informed the community that no studies have been released to date but they will continue to search for published studies to provide to the community.

The Engagement Team was asked why the project proponents were not present for the meeting. The Engagement Team explained that the project proponents intend to visit the communities in January or February of 2013. Unfortunately, due to logistical constraints, they were unable to attend this round of discussion but did not want that to inhibit further discussions with the communities. The Project proponents have expressed their commitment to maintaining ongoing discussions with communities with continued face-to-face visits in 2013.

The Engagement Team recorded and answered the following questions from the community members:

Question: Why didn't PGS/TGS come?

<u>Answer</u>: There were logistical constraints, which prevented a representative from attending these meetings. However, representatives will attend future meetings held in January or February of 2013.

Question: The picture you see (image of 2008 Baffin Bay survey) – how deep is it?

Response: The seismic vessel will operate in waters that are anywhere from 5km, roughly 15,000 feet or as close as 500m, which is roughly 1500 feet from the ocean floor.

Question: How come there was a 2008 Baffin Bay seismic survey and we weren't notified?

<u>Response</u>: The National Energy Board provided a permit, which allowed a few lines to be surveyed in northern Baffin Bay. Communities were notified prior to the commencement of this work. There was an Environmental Impact Assessment conducted and community consultations are summarized in the EA, which can be found on the NEB website.

Question: What if the hunters notice that it is affecting the animals? Who do we complain to? DFO?

<u>Response</u>: NEB, DFO, or GN. The Engagement Team will look into this question and provide a response to the community.

<u>Question</u>: Is anyone going to drill? (Concerned that if they started drilling in the future – more sound will go underwater into the ground?)

<u>Response</u>: No, this project is a seismic survey. No drilling will occur during this project. A separate Environmental Assessment will be required for any oil and gas development work and additional community consultation and approval from the National Energy Board will be required.

Hamlet Council Meeting

The Engagment Team met with Qikiqtarjuaq's Hamlet council at the Hamlet office from 9am-11am on November 28, 2012. The meeting involved an interpreter. The meeting consisted of an introduction to the proposed project and NEXUS's role in the process. The Engagement Team explained the role of the environmental assessment process and how the project proponent is required to consult with stakeholders in the project. This meeting was intended to provide the opportunity for continued the dialogue to build a respectful relationship between the project proponent and communities. There was interest in the Project and the Council was generally supportive of development that could create economic opportunity for the Hamlet.

The Engagement Team recorded and answered the following questions from the Hamlet council:

Question: Is all the Seismic Survey outside territorial waters?

Response: Yes – it is beyond the 12km territorial boundary; the survey goes out to the international boundaries of Greenland. Greenland has been actively exploring oil and gas development. It was discussed at the Oil and Gas Conference held in Iqaluit that Nunavut already has risks but no benefit. If there is a problem on the Greenland side it will reach the shores of Nunavut. There is already drilling in Greenland waters- it was noted that during the Oil and Gas Conference held in Iqaluit earlier this year people had noted that Nunavut is already exposed to any risks from Greenland's oil and gas development without the benefit. If there is a problem on Greenland's side it will come over – it will not stay on the other side.

Question: Is the lack of benefit in Canada due to the poor preparation before companies come in?

Response: Nunavut is a territory, thus distributing much of the power to the federal government. The federal government is in control, not the people that live here. That is what the UN Declaration of the Rights of Indigenous Peoples is all about. Often the communities look at the company as the other side. Building relationships with companies can strengthen the community's interest with external organizations and agencies.

Question: Are you looking for support from the Hamlet Council?

<u>Response</u>: Not per se. The next step in this process is for the community to meet with Multi Klient Invest AS (PGS/TGS) as an important step in developing a relationship with them.

Hunters and Trappers Organization Meeting

The Engagement Team met with the Hunters & Trappers Organization (HTO) on November 28, 2012 at 1pm at the HTO office. Topics discussed included: potential concerns with the proposed project and the importance of hunting and fishing in the local community that could potentially be impacted by the proposed survey.

The biggest concern discussed during the meeting was the lack of communication between the different communities regarding the proposed project. Qikiqtarjuaq is a small community with no opportunities provided through government offices. The HTO noted that other communities may raise serious concern on the impact of the proposed project on narwhal populations but these communities are not a close to the resource and less dependent on the local marine mammal populations compared to Qikiqtarjuaq.

Questions were raised about the impacts on hunting and fishing activities in the area, as well as the bird sanctuaries. This is important, as 85% of the food the community consumes is traditional/country food. Also, there has been a decrease in the ring seal populations that the community depends on due to unknown reasons.

The potential impacts of the proposed project on narwhal populations are a concern for the community. DFO conducted a narwhal tagging study in the area; the HTO manager offered to provide the information to the Engagement Team. He requested permission from DFO to forward this information and has subsequently provided the information. The HTO informed the Engagement Team that there are 7 populations of narwhals in the area with a total of approximately 200,000 individuals overall. Narwhals are hunted 3 times a year in the spring, summer, and fall. The majority of the narwhal hunt takes place in the fall (75%) in 4 fjords and the summer (25%) in Home Bay. It was stated that the Qikiqtarjuaq HTO has a good relationship with DFO but there is a lack of communication with the HTOs in other communities.

The HTO also raised questions about the Project's impact on the turbot fishery – both offshore (approx. 30 miles) and inshore (approx. 5miles), which is fished from the end of July to early November. Qikiqtarjuaq has one 100ft vessel to harvest offshore quota for 4 communities: Qikiqtarjuaq, Arctic Bay, Grise Fiord, and Resolute. For the quota that is sold outside of the territory there are very little benefits given back to these communities, (for example very few crewmembers were hired from the community; most were from Newfoundland). There are members of the local community with the skills and capacity to work on the vessel, about 30 individuals with their Marine Emergency Duties and some have been trained as fishery observers. There is a definite interest in employment opportunities.

It was stated that HTO supports the proposed seismic survey as it can expose the HTO to new information about the area and can create new opportunity for employment in the community. The HTO representative noted that Canada is lagging, whereas Greenland is way ahead. He recognizes the importance for the community to choose the type of development they want to take part in. There is an opportunity to benefit from this study and there is a need to identify ways to protect the marine mammals and wildlife in the area.

The Engagement Team recorded the following statements during the meeting with Hamlet Council and HTO board members.

- The community would like to receive royalties for any impact on Inuit or the animals.
- Comment that people from the south do not understand the importance of traditional food such as narwhal.

- Want to see some kind of agreement established before the commencement of the survey.
- Inuit are taxpayers- do not want to see their tax money going towards projects that harm their environment and animals.
- Concern regarding the study of marine mammals. Believes that their land animals are "studied to death" already and now we are going to do the same thing to marine mammals.

3.2. Pangnirtung

Pangnirtung expressed the most concern about the project, which reflects their position on other research projects in the region. That said they are interested in learning more about the project and future benefits of collaboration between the community and the project proponents.

Hunters and Trappers Organization Meeting

The Engagement Team met with Pangnirtung's HTO at the HTO office from 1pm-3pm on November 29, 2012. About 8 people attended and the meeting was interpreted. The meeting consisted of an introduction to the Project and NEXUS's role in the process. The HTO was very interested to hear of the work that has been completed in other communities. The Engagement Team described what has happened to date in terms of community engagement initiatives. In addition, the HTO inquired if any other communities have supported the Project. The Engagement Team explained that they could not speak on behalf of the community but acknowledged that some communities had expressed their interest in the potential opportunities and how they have expressed a desire to continue discussions and work together moving forward.

There was some confusion as to organizational structure of the project proponents. It was explained the Engagement Team works for a company called NEXUS Coastal Resource Management. NEXUS was contracted to facilitate dialogue with the communities. Multi Klient Invest AS is the company that will be operating and conducting the proposed 2D Seismic Survey. The Engagement Team addressed the importance of continuing discussion between the community and project proponents. The Engagement Team told boardmembers that these meetings provide the opportunity for community members to ask questions, make comments, or express their concerns related to the proposed project.

One HTO member inquired about the involvement of the Nunavut Impact Review Board. The Engagement Team explained that, as the proposed survey would take place outside of the 12 nautical mile territorial sea, the Nunavut Impact Review Board in not involved. As the survey would take place in federal waters it falls under the regulatory authority of the National Energy Board².

The following questions were recorded and answered during the meeting with members of the HTO:

Question: The bottom line is that for a lot of us, the economic side is already happening in the turbot, shrimp offshore fishery. If there is any disaster we want to see compensation for our loss. Offshore fishing is a strong economic backbone in Nunavut. We have started to see a decline in catch – at some point there will be a loss?

² NIRB was provided with the project description and advised that this project was not within their zone.

<u>Response</u>: We have already agreed to look into the observed effects (if any) from seismic surveys on the environment in Greenland waters. There are declines in fisheries, but this can be from a variety of reasons. For example, the Newfoundland cod collapse resulted from a number of factors combined (environmental condition, predation, over harvesting, etc.) in an area where oil and gas development also takes place.

<u>Question</u>: Earlier you said they are planning to hire observers on the boat – do they need a Masters degree?

<u>Response</u>: No. People will be trained to work on the boat as either a Marine Mammal Observer or as a Fisheries Liaison Officer.

Question: If Greenland started drilling are there higher risks?

<u>Response:</u> No, the risks will likely be the same. There are international as well as national standards which must be followed. There has been considerable international attention on the drilling, and the industry is likely being very cautious because of this. That said, this Project is about seismic surveying, and not drilling, in Canadian waters

Question: Are you not having a public meeting this time?

<u>Response</u>: We had a public meeting in June. This trip we are speaking with HTO's and Hamlet council's. Additional meetings will be held with the Hamlet, HTO, and the public upon our return visit in January or February of 2013.

Question: Even if we are against this – are they just going to go ahead?

<u>Response</u>: The communities are not in a position to make the decision. That is a matter for the NEB. However, the NEB will seek feedback from communities in making their decision.

Question: Report goes to where?

<u>Response</u>: The report is prepared for RPS Energy and they send it to the National Energy Board. All documents associated with this project are posted on the National Energy Board's website.

The following comments were made during the HTO meeting:

- Understand that there is an opportunity to work together to ensure that long line inshore and trawl offshore fishery can continue if this proposed survey is permitted
- Important to understand that marine mammals, such as narwhal and belugas, are found all over the Arctic in the spring and summer.
- Understand that there are fisheries other than just turbot, such as shrimp and scallop. We do not harvest these species now but we could.
- Concern that we do not have the same rights as First Nations people; we fall under a different category. We pay taxes and have a say in offshore waters. That is why we want to put these issues on the table, we have a say not just for oil but for the fishery, too.

Hamlet Meeting

The Engagement Team met with the representatives from the Pangnirtung Hamlet from 10am to 11am on November 29, 2012. The proposed Project was introduced and discussed. Furthermore, the proposed survey lines were explained. The Engagement Team updated the Hamlet Council members in attendance on the progress of the proposed survey, explaining that the project proponents are finalizing their submission to the National Energy Board.

The Engagment Team discussed the steps that will be taken upon completion of this round of community meetings. This includes writing a report that includes concerns, questions, and

statements made regarding the Project. This report is submitted to the project proponents, who then submit the report to the NEB. The company will be holding ongoing meetings with the Hamlets, HTOs, and public in the six communities of interest in January or February of 2013.

The Hamlet Council made many relevant and important comments during the meeting with the Engagement Team. The Hamlet recognizes the push government is making to move the oil and gas industry forward. However, there is apprehension as they recognize that the Arctic is a sensitive environment. One Hamlet representative identified the oil spill that took place in the Gulf of Mexico, stating that the industry was not prepared for that oil spill. There is concern about the development that is taking place in Greenland and that they are moving forward before any plans to deal with a spill. The Hamlet identified the need, at the local and international level, to develop tools to mitigate these potential issues.

The Engagement Team recorded the following comments from Hamlet council members:

- Industry's idea of a consultation is nowhere near what we need in Nunavut. We have seen what they do the community has no information and the consultation is stacked. The concerns are the communities have no information and are unable to hire expertise. Communities are expected to interpret and analyze material we don't have the resources to properly deal with this, we need the government to provide capacity. Greenland's ice is melting 5 times faster than scientists thought in 2003 this has put more pressure on development and disaster. We can't mitigate that kind of disaster.
- Greenland and Nunavut should do something in the future.
- Risk Analysis if you have the most to lose you should have the most to gain. That is not the case. The federal government should seriously look at benefit sharing. You know the concerns we are so behind Canadian's level of infrastructure it would cost billions of dollars not going to happen. If the federal government was serious about benefit sharing we would have our share of the benefits. We have everything to lose and nothing to gain we would be crazy to support it.
- A practical example is putting mines into a community there is a split in the community

 pro and con development. But how can we benefit we have to look at our future –
 the job future of our community. This is sort of development jobs are so far from the north. See the state of our roads, infrastructure we want you to help with that.
- Going to be a slow economy for the next couple of years no housing development. Where are we going to get more resources? With this project out there resources and opportunities are going to be so far away unless something drastically changes involved in every process. We are hunters, politicians it is going to be opposed.
- We would be crazy to support we have everything to lose. Not sure the others understand that.
- We have a lot of commonalities with Newfoundland been interacting with them for a longtime. Greenland is so close but so far away – with Newfoundland we have had interactions since the 1700's.

3.3. Clyde River

Hamlet/Hunters and Trappers Organization Meeting

A joint meeting with Hamlet council and HTO members was held in Clyde River on December 5 at 10am. The purposes of this meeting was to provide the opportunity for a representative from TGS-NOPEC to present on the proposed survey for Baffin Bay and Davis Strait, as well provide more detail on seismic survey activity in the Arctic and a synopsis on the technology used in a seismic survey.

Eight Hamlet council and HTO members attended the meeting. An interpreter was involved in the meeting. Overall, the meeting was productive and allowed participants to openly discuss seismic activity and the proposed project. Council members thanked the Engagement Team and the TGS-NOPEC representative for returning and continuing discussion on the matter, reiterating the importance of face-to-face meetings. As well, the Hamlet council further expressed its desire to see new development opportunities for Clyde River, such as a newly developed port. The Hamlet Council noted that the proposed 2D seismic survey project could provide assistance to the Hamlet in this initiative.

One council member asked if it was possible for seismic air guns to sound like whales or other marine mammals believing that this would alleviate the possible impacts from the noise produced by air guns. However, another member voiced their concern with this idea, stating that it would be more dangerous because the animals would be more likely to approach the sound source.

A number of Council members commented on oil that is spilling out into Scott Inlet. A few members asked if this was linked to seismic activity. The Engagement Team informed the Council and HTO that there are three possible explanations for this oil. First, the oil could be leaking out naturally. Second, the oil could be leaking from a shipwreck or airplane crash that happened in that region. Finally, it could be a result of ships illegally dumping their bilge in the area. The most likely cause is that it is occurring naturally. One Council member stated that she believes that it is occurring naturally and does not blame any southerners for this oil as it has always been like that (she was born near Scott Inlet)³.

One council member made a request that should a marine mammal die due to seismic activity that it is delivered back to the community so that it may be used as dog food. During the discussion a number of Council members asked questions that had been asked in previous visits and meetings. The Engagement Team answered the questions as well as directed the individuals to the two documents (Supplementary Report and Question and Response Document), which provided more detailed information regarding their concerns.

The Engagement Team recorded the following questions during the meeting with Hamlet council members and HTO boardmembers.

<u>Questions</u>: The testing in 2013, what month would it take place in? Would it be year round? <u>Response</u>: The proposed seismic survey would occur in the ice-free months, most likely beginning in August or September of 2013, depending on ice conditions.

<u>Question</u>: There has been a lot of seismic activity in Atlantic Canada. Were there impacts on fishing activity?

<u>Response</u>: There is no evidence that seismic survey activity off of Atlantic Canada has had a negative impacted catch per unit effort. However, it is important to have a lot of discussions with the fishing industry as to avoid any negative interactions. Both industries understand the importance and need to work together.

Question: How often do you have to shut down operations because a whale has come within the safety exclusion zone?

³ See attached articles regarding the natural seep of oil in Scott Inlet

<u>Response</u>: There are Marine Mammal Observers onboard who are responsible for looking for whales that come within the 500m safety exclusion zone. It is not common for a whale to come within the 500m zone.

The Engagement Team also recorded the following requests made during the meeting with Hamlet council members and HTO board members.

- Want to see research and studies done on the impact seismic surveys have on marine mammals in the Arctic, as they will be more affected than humans.
- Want another public meeting updating the entire community on the project in January or February of 2013.
- Desire to see Marine Mammal Observers come back to the communities to report on what they saw during the study

3.4. Pond Inlet

Meeting with Environmental Technology Students

The Engagement Team and representative from TGS-NOPEC met with the Environmental Technology Students at the Arctic College on the morning of December 6th, 2012 at 10am. The purpose of this meeting was to establish open discussion with the students on seismic survey activity and other environmental issues. The students had insightful comments and questions on the proposed project and seismic surveys. The students expressed the need for more robust research to be conducted on the hearing threshold of narwhal, beluga, and bowhead.

Hamlet and Hunters and Trappers Organization Meeting

On December 6th, 2012 at 1pm, a meeting was held with Hamlet Council members and HTO boardmembers to discuss the Project. Students from the Environment Technology Program attended this meeting. Members from the Hamlet and HTO expressed concerns regarding the potential impacts from seismic surveys and the regulatory and decision-making process involved.

There was some discussion about removing survey lines closest to the opening of Lancaster Sound and Bylot Island but they understood that the final survey lines are still under consideration. In addition, Hamlet Council expressed concern about organizations overstepping their role and do not properly represent communities outside of Iqaluit. The Hamlet Council and HTO expressed their appreciation for face-to-face communication and want to continue to develop this mutually respectful relationship. Furthermore, they expressed the unique opportunity the project proponents have to work with a very capable community.

The Engagement Team recorded the following questions during the meeting with Hamlet Council and HTO board members.

<u>Question</u>: At the Oil and Gas conference there was another map that showed a survey. Was that a different survey? Or has the map changed?

<u>Response</u>: The map has changed to include less survey lines. The project proponents have taken into account community concerns and have adjusted of the survey lines.

<u>Question</u>: The Arctic is very unique, there is a lack of information on narwhal and seals compared to down south. Will there will more research on these species?

Response: Currently, to our knowledge there is no additional research planned on the interaction between narwhal and seals and seismic surveys. Marine mammal observers will be

keeping track of the marine mammals observed throughout the project. This information could be used as part of a larger research project on narwhal and seals.

Question: Have you learned of anything about marine mammals since the surveys in Greenland?

<u>Response:</u> We are unaware of published reports regarding the seismic survey activities and the impact on the marine environment in Greenland.

Question: Who gave permission for the 2008 survey activity? Why weren't we consulted? Response: The 2008 survey line was an extension of seismic survey work off Greenland. The National Energy Board provided a permit, which allowed a few lines to be survey in northern Baffin Bay. Communities were notified prior to the commencement of this work.

Question: What actual power does the community have in this process?

<u>Response</u>: The proposed seismic survey is occurring in the offshore of Baffin Bay and Davis Strait, falling outside of the 12 nautical mile territorial sea boundary. As a result, the regulatory authority for this project is the National Energy Board who will give the final approval. However, the community can voice their support or concerns.

3.5. Kimmirut

Hunters and Trappers Organization Meeting

The Engagment Team held a meeting with the HTO on December 10, 2012 at 3pm to discuss the changes made to the proposed 2D Seismic Survey study area. Eight HTO members attended the meeting and expressed their concerns on the potential negative impacts on marine mammals. A few of the members that attended the meeting held with the HTO on 16 October 2012 inquired about why the team was back. The Engagement Team explained that there is new information regarding the survey area as well as explained the importance of continued discussion on the matter. The HTO members were appreciative of the continued discussion. A few questions were asked regarding the impact this proposed project may have on the marine environment. The Engagement Team provided the HTO with the Supplementary Report and Question and Response Document, which provide further information on topics of interest.

Community Meeting

The community information session in Kimmirut was held at 7pm on 10 December 2012 at the school gym. Three members of the community attended the meeting. The Engagement Team presented the material on the proposed project to those in attendance. A few questions were asked in reference to the potential impact of the sound to marine mammals. The Engagement Team explained how a seismic survey vessel operates and emits sound. In addition, they provided information on the 500m- safety exclusion zone and referenced the two documents (Supplementary Report and Question and Response Document), which would be made available at the Hamlet or HTO. Community members present at the meeting were happy to hear of the 500m marine mammal safety zone and encouraged the Proponents to continue to take measures to protect the environment.

Hamlet Meeting

On December 11, 2012 at 9am, the Engagement Team held a meeting with the Hamlet Council. Eight council members attended the meeting. A few council members expressed their concern on the potential negative impacts from the sound on marine mammals. In addition, there is concern on potential impact the proposed survey might have on the food chain. The

Engagement Team explained what is known and unknown about the effects of seismic surveys on plankton, fish, and whales. Furthermore, Council members inquired about what kind of opportunities and benefits there are for the community of Kimmirut. The Engagement Team explained that this can be further addressed during the next visit in January or February 2013.

3.6. Iqaluit

Municipal Council Meeting

The Engagement Team met with municipal council at City Hall on November 31, 2012 from 2:30pm – 4:00pm. The municipal council members in attendance were thankful for the presentation as it clarified certain questions regarding the project and seismic survey activity. In fact, one member acknowledged that they thought seismic activity still used explosives opposed to the new technology that uses compressed air.

The Engagement Team recorded the following questions during the Council meeting.

<u>Question</u>: If there is an oil leak, how quickly does the material come to the surface, does it disperse?

<u>Response</u>: This was discussed at the Oil and Gas Conference held earlier in Iqaluit. The Team agreed to forward a copy of Ken Lee's presentation to the conference to the mayor.

<u>Question</u>: Are you the same company that did the work in Lancaster Sound Project – that was controversial?

Response: No, that was a federal government initiative.

Question: In the Baffin Island Survey did they see any oil?

<u>Answer</u>: The seismic survey does not find oil, but finds structures where there is a potential for oil to be found.

Question: Chances of having oil?

<u>Answer</u>: The United States Geological Service has made an assessment of the potential, and considering the evidence from Greenland there is potential.

Question: What are the next steps?

<u>Answer</u>: Right now, the project proponents are answering questions and concerns from each community. The NEB will visit the communities and review all documentation when deciding whether to grant a permit for the project. If the NEB provides a permit for the project, the project schedule will be confirmed. The NEB review process could start in January and February, in which they go to the communities. Benefit agreements with the communities are being looked at. The project proponent is committed to continuing engagement initiatives with the communities throughout this process.

Community Meeting

The community information session in Iqaluit was planned for 7pm on November 26, 2012. However, a blizzard shut down the city by 10am on November 26. Therefore, the information session was rescheduled to the next available time in the Engagement Teams schedule: the 7th of December 2012 at 4:30pm at the Abe Okpik Community Hall. Three people attended the reschedule session. A few questions were asked regarding clarification of the proposed start date and survey map of the project. The low turnout could be attributed to other community events that were going on that evening (Christmas tree lighting). A suggestion was made that

the next community information session should be held at Perish Hall, as most community meetings occur there. Another community information session will be scheduled for Iqaluit during the next round of consultations in January or February of 2013.

Meeting with High School Students

The Engagement Team met with the Environmental Club and other students from the local high school on 12 December 2012 at 9:45am to discuss the proposed project as well as seismic surveys in general. The Engagement Team wanted to ensure that students were engaged and participated in the discussion. Therefore, questions were posed to the students, asking them to express their understanding of seismic surveys. Students were asked what concerns they have with a seismic survey and the measures they would take if they were making the decisions. The Environmental Assessment for the Project was explained, which included a discussion on the known effects and mitigation measures. Teachers and students expressed their desire for the Team to return to the school to hold another meeting during our next visit in early 2013.

4. Other General Observations

There were several questions not related to the specific project; some of these questions included the experience of the meeting participants/consultants, other economic development activities, and the environmental assessment procedure.

There appears to be consistency in the issues of concern and the inquiries made by community participants. A number of them deal with the uncertainty of the decision making process, concern for potential effects that are based on lack of information, lack of research, and lack of engagement by managers at the local level. Recurring questions asked to the Engagement Team throughout the meetings (June, October, and November/December) include the following⁴:

Question: What does PGS/TGS stand for?

<u>Response</u>: PGS means Petroleum GeoServices. TGS-NOPEC is a separate company in which the initials do not stand for anything in particular.

Question: What is the distance from the land? (the proposed survey)

<u>Answer</u>: The distance in which the survey vessel is from land is at a minimum 60km from shore but at times greater than 100km.

Question: What does the company do if it affects the animals?

<u>Answer</u>: There are 2 marine mammal observers and a fishery liaison officer on the boat – it is expected that both of this positions will be filled with people from Nunavut. The marine mammal observer watches for whales and the fishery liaison communicates with the fishing industry and the fishing communities. The company abides by all the regulations put forward by the National Energy Board and follows the Canadian Standard of Practice in regards to seismic survey activity.

Question: Any kind of whales the seismic survey boat has to stop?

Answer: Yes- any kind of whales.

Question: When is the seismic survey going to be done?

Answer: Upon receiving a permit via the NEB the company is hoping to begin surveying in the ice-free months (July/September) of 2013. The purpose of these meetings is to collect information and comments from the communities to find out when would be the best appropriate time to survey specific areas that will not interfere with fishing activities etc. The same company has done work off of Newfoundland and has worked with the fishing industry there to determine what areas can be surveyed at what times.

<u>Question</u>: In Greenland they did some drilling – have you heard anything if it affected the animals? Want to find out what happened and if there were any affects.

<u>Answer</u>: As of right now there have been no published reports on the subject. However, we will continue to look into this and provide our findings back to the community through the Hamlet and HTO.

Question: How many times are there going to be seismic surveys.

⁴ A complete list of questions can be found in the Question and Response document.

<u>Answer</u>: Each survey line is surveyed once. The survey vessel will not go back over that line as they collect all the necessary data during the one pass.

Question: Would they have a fisheries officer onboard?

<u>Answer</u>: At all times, a fishery liaison officer will be onboard communicating with the fishing industry on survey location and updates.

Question: If there are federal issues in Nunavut do the communities have a say?

<u>Answer</u>: The NEB ensures that project proponents engage with communities on a proposed project prior to approving a permit. The NEB recognizes that although this is outside of territorial waters, communities have the right to be informed and consulted on the project. All comments, questions, and concerns are documented during these meetings and are included a report that is sent to the NEB.

Question: Can you provide us with this information?

<u>Answer</u>: Yes, we have supplied two documents to the Hamlet and HTO, a supplementary report that provides more information on topics of interest (such as impact on whales, etc.) and a question/response document, which outlines all questions that have been asked thus far with a response.

<u>Question</u>: Do you have maps of where the exact location of where they are planning to do the seismic survey.

Answer: Yes, we can email this to the Hamlet and HTO.

Question: When are they planning to do the survey?

Answer: The ice-free months of 2013