

PUBLIC HEARING TESTIMONY SUMMARY

EPA Region 10 Staff: Dan Meyer, Presenter
Natasha Greaves, Presiding Officer (NG)

Translator: Eli Nukapigna

PEOPLE PROVIDING PUBLIC TESTIMONY

LL: Leonard Lampe, Village of Nuiqsut
EdN: Edward Nukapigak, Nuiqsut Whaler and Hunter
RA: Rosemary Ahtuanguak, Nuiqsut Resident
TM: Thomas Napageak, Nuiqsut Whaling Captain
EK: Erica Kunaknana, City of Nuiqsut Cultural Coordinator
EIN: Eli Nukapigna, Nuiqsut City Council

Time Recorded Start Time: 2:50:25, Nuiqsut Hearing Recording CD

NG My name is Natasha Greaves and I am employed by the Environmental Protection Agency (EPA) in Seattle. I am the presiding officer for this evening's public hearing. It is my responsibility to ensure that anyone who chooses to provide testimony this evening has the opportunity to do so.

Dan Meyer, who presented to you earlier, will be assisting me as necessary.

Eli will be translating this evening from English to Inupiat. This hearing is taking place on Tuesday, May 8, 2007, in the Nuiqsut Community Center, Nuiqsut, Alaska. You most likely became aware of this public hearing event via word of mouth, perhaps over the radio. Written invitation to this hearing hopefully has been displayed at the Nuiqsut Post Office and at the Nuiqsut City Office beginning April 5, 2007. Notice of this hearing was published in the Anchorage Daily News on April 5, 2007.

Dan and I are here this evening to hear from you. We would like you to tell us what you think about EPA's preliminary decision to allow Shell to conduct exploration drilling in the Beaufort Sea.

Details of Shell's air pollution impacts and EPA's preliminary decision are documented in writing. EPA widely distributed on April 5, 2007 Shell's two applications, EPA's two proposed air permits, and EPA's accompanying support materials considered in the permit decision. A hard copy of the materials is available at the Nuiqsut City Office. The information remains available to you on the internet at the web address printed on these information cards. If you are interested, please check-in with Dan and he will give this information card to

Nuiqsut Public Hearing Testimony, May 8, 2007
Nuiqsut Community Center, Nuiqsut AK

you.

If interested, please pick up one of these information cards before going home this evening.

Your input tonight will help us finalize or modify the permits as currently proposed. We are most interested in your ideas about the air pollution resulting from Shell's activities and the terms of the two proposed permits. If you think EPA should deny Shell's applications, it is important for EPA to hear this along with the reasons why.

EPA will respond to everyone's testimony. Our response will be in writing and will accompany the final permit decision. If you provide us your contact details, you will personally receive a copy of tonight's testimony, EPA's written response, and EPA's final permit decision. You can provide us your contact details by filling out the Public Hearing Sign-In Sheet.

In addition to taking oral testimony, EPA is also accepting written comments. If you don't want to testify, you can provide us with written comments by using a Comment Sheet and EPA will accept those today.

EPA is accepting both spoken and written testimony. You have the option of providing spoken testimony, written comments, or both.

If you choose to submit written comments, Dan or I would be happy to take your written comments before the evening concludes.

You can post your written comments to EPA. Have them postmarked no later than May 12, 2007 if they are going to be considered part of the record.

Written comments can be mailed to the address on the information cards. If you need EPA's mailing address, please see Dan. EPA's address is also on the Comment Sheet. The information card also has an e-mail address. If you would like to submit comments by email, you can do so. EPA must receive the e-mail no later than May 12, 2007 to be considered.

We will now begin receiving spoken testimony. Please speak slowly and clearly so that the tape recorder can pick up your testimony. We will be using a tape recorder this evening to get an official record of the hearing.

As you begin your testimony, please state your name clearly for the record along with who you are speaking for.

It is now 9:05 pm and EPA will open the floor to take public testimony. You may speak up front and use the microphone to make sure that EPA gets a clear recording.

LL For the record, my name is Leonard Lampe Sr., I represent the Village of Nuiqsut. The Native Village of Nuiqsut has over 300 tribal members recognized under the United States Constitution. I also wear many hats in the Village, just for the record. Our Box Number is 269 Nuiqsut Alaska, 99789. First of all, I would ask for a second hearing to address the Clean Water Act (CWA). There has been a lot of discussion about the Clean Air Act (CAA), but none on the CWA. I believe that it is the responsibility of the EPA to provide the community of Nuiqsut with information on how EPA is going to keep the water clean in regards to these two permits by Shell Oil.

Direct Implementation Tribal Cooperative Agreement (DICTA) is a program that is regulated in the lower 48 for Tribes to address and monitor air quality. I would encourage that for the State of Alaska. Currently there is no program in the State of Alaska and I would really encourage the EPA to start this program. This program would allow the Tribes to train local people and purchase air monitoring equipment to be used in Nuiqsut. So I would like to encourage that.

Again, I am very disappointed about the level of information we got on the CWA. We also did not get all the information that we were asking for on the CAA. I want that to be in the record.

I opposed this project, because Shell Oil does not have a proven plan to clean oil spills in the Beaufort Sea or arctic water. There is no proven method in the world that a spill of any size can be adequately cleaned. So, I oppose this project.

Deferral areas. There are deferral areas for the Village of Barter Island. There are deferral areas for the Village of Barrow. There is no deferral area for the most impacted village of the project, which is Nuiqsut. I would encourage that the issue of a deferral area be revisited for the Village of Nuiqsut for their whaling grounds and subsistence resources.

I would like to comment on the vessels that are being used in the project. The majority of these vessels have never seen harsh climate or waters as exist in upper Alaska or the North Slope. None of these vessels have experience, nor staff with experience in these weather conditions. This would make it even harder for them to react or appropriately take care of their personnel as well as property if an incident did occur.

There is a Federal Act that NOAA (?) imposes to protect aboriginal sites, subsistent areas of a Tribe. This Tribe has proven documentation that Cross Island has always been used for subsistence resources as long as the Tribe has been in existence. This is another Federal Act that I think will be violated if this permit is approved.

Nuiqsut Public Hearing Testimony, May 8, 2007
Nuiqsut Community Center, Nuiqsut AK

The accumulation of discharge. There is no total discharge for Prudhoe Bay and Kuparuk area and this project will add to total discharge of air pollutants coming to the Village of Nuiqsut. EPA needs to take a closer and better look at accumulation of what is happening in the Village of Nuiqsut, or near the Village of Nuiqsut.

The discharge of human waste or air discharge is at a much higher level than we would like to see. We would like to see more restriction on daily discharges. Currently two tons or more is allowed to be discharged daily, or even more. These discharge rates will impact human activities and subsistence resource. There is no doubt that our way of life will be impacted or deferred.

Global warming is a real reality in the world. What is EPA doing to slow this down? What is EPA doing to protect our way of life when it comes to regulating and monitoring on site project? There is no regulation, no monitoring on site, which makes it a real concern for the Tribe as well as the Village of Nuiqsut. If anything can ease the people it would be regulation and monitoring so that we could have eyes and ears on what is happening to our ocean as well as the land.

We need total pounds of emission on Nuiqsut from all production and activity near and around Nuiqsut, especially in traditional grounds as Cross Island. I would also like to ask if Shell has a secondary plan if emissions are higher than planned or permitted. What is the plan to reduce air emissions?

These are some of the comments that I have today. I would like to keep the comments open until May 12, 2007.

NG Thank you Leonard. Is there anyone else that would like to come forward? I can bring the microphone to you also, whatever works, to best provide spoken testimony.

RA For the record my name is Rosemary Ahtuanguaruak. I have lived in Nuiqsut since 1986. I worked as a Community Health Aid in our Village Clinic for 14 years. I attended the University of Washington's Physician Assistant Medical North West Program. I graduated in 1991 and passed my National Boards in 1993. I am not currently working at the Clinic. I am a previous City Council member. I have been involved with the Inupiat Community of the Arctic Slope. I have been involved with the Native Village of Nuiqsut. I attend local community meetings about activities in our community. I research issues being presented to our community that are important to our lives in Nuiqsut.

These comments tonight, I give as an individual. I want to express concern about issues the Elders commented on decades ago. Their concern is our reality. Their concerns need to be reassessed. The life they lived is different from the lives we are forced to live today. That needs to be researched to validate what they predicted, the changes we see today.

One of the first issues I have is that the information presented in EPA's information session is too wide in scope. EPA presented on Shell's entire lease area. It is not project specific.

EPA is looking at resource development for industry. EPA is allowing industry to fill in the boxes and present it to them. EPA then builds regulations after they receive information from industry. This causes lots of problems in our community.

EPA does not look at all of the emissions. Mobile emissions are looked at separately and not as part of the entire development. There are cumulative effects that are not evaluated as part of this project that can help plan for future development.

The studies that EPA relies on are not in this area. This causes lots of questions for this community. What can we expect about what will actually happen here? EPA is not looking at existing conditions, but at condition in another area with changes to the numbers to quantify effects that are based on standards elsewhere.

No attempt has been made to assess changes. There have been lots of changes with monitoring. These changes are not included in EPA's analysis. Monitoring methods from years ago has changed from what is being done today. But, that information is not presented to our community to make it easy for us to understand and comment.

Lots of questions about real effects that are happening to our community exist. It is hard to explain cause. We know that lifestyle is a factor. Development and exploration activities cause emissions that result in a great impact. Our bodies are being filled up and overflowing and we can't take anymore insult. The level of impact our community is more concentrated here in Nuiqsut.

We are concerned about how emissions impact us. Emergency emission occurs without any reaction. Industry emits emissions and says that it is not a problem. We are concerned about how emissions are reported. Emergency emissions occur without any EPA reaction. Industry emits then categorizes them as emergency, routine. A lot is categorized as emergency but there is no reaction to industry in terms of these emergency responses. So we just continue to breathe what occurs to us. There are a lot of regulations regarding temporary monitoring to decrease the effects of emissions.

We are experiencing changes and there is no reaction to these types of things. We continue to attend meetings about problems and still there is no change. There is concern about concentrated emissions during inversions and its impacts to our community. This keeps happening without any changes. There is even a greater push because when the viscosity of the oil is high, the greater the push

there is to get it through the pipeline. There is an increase in pressure which results in emergency releases to decrease the pressure. This impacts the air that we breathe. There are a lot of broken promises regarding regulations that protect us.

The lack of monitoring that allowed the recent discharge to occur. There is a lack of enforcement, a lack of assessment of what is happening to us as a result of the recent discharge. There are expansions but EPA relies on a monitoring system from the 1970s, yet the impact and concentration of all these development projects continue to exist. There is no help to deal with it. The latest technology is not being used at development projects because of cost constraints. There is a lot of information being used in certain areas with lots of people to help decrease emissions. Because we have a small community here, they are not being used here. We are told that they are not cost effective for companies to implement.

There were three bad events that happened in 1989 that led to the CAA Amendments of 1990. A lack of enforcement by the Federal Government led to people being hurt, then a law was created. We have old documents based on standards currently being used for development. We fought for decades on these processes. Our elders fought for five years to get stipulations that would give us the ability to continue our traditional and cultural uses in these areas. Yet, with the development that has occurred in over five years there has been no enforcement and exceptions is given for factors that continue to have effects.

There is a concern about other issues such as noise. This causes changes for us as we do traditional use.

There is concern about staff that has been dismissed before because of their attempts to decrease emissions. Individuals working within the State and Federal Government who tried to do their jobs. But because industry felt that it was too cost constraining on them, these people were forced out for doing their jobs of protecting the environment. There is a lack of staff to monitor existing fields effectively with expansion and exploration. There is a lack of effective monitoring at North Star. There was a gas leak, which was a result of ineffective monitoring. That is not an old development, yet we are not effectively managing it. We already have emissions from North Star that were not planned because of a lack of maintenance. This causes increased risk factors for our community. There isn't an open book policy towards industry. Efforts in legislature regarding British Petroleum and monitoring of the breakdown in the system led to the recent discharges. It's hard to get records public. These should be open to the public. Yet, we are getting extension requests from industry as we try to assess what needs to be changed to prevent this problem.

There is concern about increased respiratory health problems, increases risk to heart disease, diabetes. Emissions based on scientific models, actual exposure

during bad events started this model, started the standards. But affected communities are still trying to prove impact and they are not even compensated. Is this the standard that we have to face if something catastrophic happens up here? There are plans for in-situ burning if there is an event. An actual event led to exposure in a community near Exxon Valdez. Pregnant women and children were not evacuated during this event. They are still not recognized as being exposed. This is a plan that is going to occur if there are spills, blow-outs or other factors.

Based on EPA's presentation, the rigs running 24/7 will cause emissions. Since they will not be pushing ice all the time, EPA looked at a medium. But, if you have a bad ice year and you have to run the rigs more, the exposure at that level is not evaluated and that causes community concerns. There is an issue of the cumulative impact of all the equipment being used out there. Everything is lumped together and not looked at individually in terms of emission factors. A lot of man contact hours could occur. But it is lumped together as part of the assessment.

There was some good discussion regarding global warming, but there is a lack of change to regulations that is needed.

There is a lot of information coming out about local effects with the judicial system. How is this going to affect what is being discussed here today? Are we going to be able to benefit from some of those activities based on old science from the 1970s. They looked at 96 hour bio-assays in which adult animals were exposed to oil. They only looked at the volatile organic compounds. They did not look at the black stuff. That was ignored in those earlier studies. Now we know from the Exxon Valdez that the black stuff is more toxic. And yet this was not analyzed during the opening of new development. New science is not being incorporated now. It is still based on 70s science.

There are international impacts from increased emission, yet the US fails to look at decreased emissions. We have industry lobbying that keeps the status quo. There is impact at the current level, yet there is more impact to come with increased development and exploration.

There is diesel emission changes in the lower 48 on busses used to transport kids with asthma, yet permits allow exposure to occur.

Regulations concerns with subsistence. There is a disconnect to traditional and cultural uses and the health and safety issue. We are proactive in educating our families in century old ways to live here and this presentation by EPA goes against teachings by increasing the risk to health and safety. With the level of disconnect the risk factors to local residents increase with activities coming to us. We have activities that support our village and this project is negative to the village needs. The level of disconnect is [in-audible] to us. It increases health

and safety factors in traditional and cultural uses.

Information is based on if the project is good, but if the project goes bad, then the assessments is on the low side. If there is a major blow-out, air dispersion factors are based on old information. In the past few years, our community has had industry presentations that show dispersion factors that are very different from what was used by EPA. We have information that dispersion factors are on the low side, but in reality, they are much higher if you consider newer information.

There is information that came from Prince William Sound because of the event there. That information is not included here. The efforts to reduce emission at the Valdez Port. Equipment was in place but there was a lack of enforcement to make sure that the equipment was used to reduce emissions. Discharge to water occurred. Some of the water treatment was supposed to occur, yet, there was no assessment or monitoring. That allowed piping to be put in that bypassed treatment to decrease cost and their emission still continues.

Health effects in our village to bad air. Health effects in our village in increased calls to the clinic, increased severity of calls, increased concentration of the severity of calls, there is increase cost to supplies, increase cost to transportation, increase cost to the pharmacy, increase emergency refills, increase cost to village members, increase cost to travel, increase cost to family support, increased cost to village structures. These people have hats. When they go out, all of their hats go with them and our structure looses when they are gone. Loss to village resource needs. Key hats are absent at important meetings. Costs to overall heath care. Increased risk to complications, increased risk to village wide problems. We have a lot of kids sent out this year and a lot of elders sent out in the past few years.

Decreased ability to work away from the village, decreased ability to do basic life needs. When you have increased respiratory problems, it increases your risk factors for hypertension, hypersensitivity, heart disease, diabetes. We have increased problems with thyroid disease. We have people developing chemical sensitivities. There is a lot of increase in asthma, upper respiratory, bronchitis, pneumonia, [in-audible], COPD, emphysema. They are concerns about leukemia and cancer. We have increased social ills, increased domestic violence, increased drugs and alcohol use. These are all increased village costs and increased village loss. When you increase childhood illness, you decrease adult health. You increase your loss to elder preservation. All these factors affect our family and our community. All these factors increase clinical provider's burnout. You increase the difficulty in recruiting providers. You have increased ambulance calls, increased amount of health care providers needed, increase number of providers, increased number of follow-up visits, increased support needed. All of this comes back to impact our community.

The concern about air quality is increased, yet we have to accept it because Washington DC has this same level. Before it was better, but it has been left to deteriorate because other areas are worse. This is bad for us. There is concern about elder's stories which is different from our stories. Changes are occurring, impacting what we do and how we do things. Other countries control industry. They do not let them write permit applications and make the regulations. We have to fight for the small things we get and our local corporation gets minimal profit. And yet, we have the biggest impact.

There is drilling discharges to the ocean and a whole level of changes that is going to occur to the water quality, temperature, turbidity, salinity, turbulence, changes to the water, changes to the uses of water, microscopic changes, the animals that use them and the people that use the animals. Exemption to emission occurs in a standard way and yet we are continually impacted by the, There is a good video by the Sierra Club that looked at the social effects of Exxon Valdez. It looked at community wide effects. Those are real factors that EPA should consider as part of their assessment. There is a book written by a toxicologist that moved to Cordova, Sound Truth Corporate Myth that should be reviewed and incorporated into this.

Lease sales based on science from the 1970s. Nine-hour bio assays did not look at life stages and the two parts of oil. It only looked at impact and the worse part was not looked at. Studies have been done since then that needs to be reviewed and incorporated into this process. There needs to be a push towards new standards for development. New science shows long term effects but they are not put into these documents. The burden of proof has been out on the local area. That needs to be stopped. We need to be on a precautionary principal. We don't want to wait for an exposure to occur. We need to be aggressive in preventing that exposure to occur. It needs to be done with engineering, reduction, and recycling. We need to stop all persistent organic pollutants from being discharged during development and exploration.

Historical information results in a change in risk factors, but current information, actual changes, makes EPA's approach conservative. The lack of ice coverage and lack of protection that is in early documents isn't the current pattern we have and the risk factors are much higher. Changes to Title 19 and the Costal Zone Management Plan results in concern. There is a comprehensive plan that has been put through the North Slope Borough. These regulatory changes have not been well assessed. There has been presentations by agencies in our community that raises questions on how agencies are going to enforce some of the issues raised. There are division changes that occur that affect these documents. Who is supposed to manage changes that occur and make sure that it is effectively done the right way. Changes in the regulations are not well understood, they are broad and they are making it difficult for us to look at how we are going to prevent the things that are going to occur. Industry is allowed to affect a project instead of looking and developing resources in a safe effective way.

Nuiqsut Public Hearing Testimony, May 8, 2007
Nuiqsut Community Center, Nuiqsut AK

NG Thank you Rosemary. Would you like to comment?

TN Hello, my name is Thomas Napageak Jr. I am a Whaling Captain in Nuiqsut. I am also KSOP, Kuukpik [in-audible] Subsistence Oversight Panel. I am on the Board, I am the Chairman. I am opposed to offshore drilling, to the two permits for the Kulluk and Frontier Discoverer, because of impact to whaling subsistence. The use of 13 vessels in the Beaufort Sea will create an impact on our subsistence. I have seen one boat impact our whale hunt and that does not do us any good. When will we have this conversation with Shell about [in-audible] cannot compensate for the subsistence hunt for Nuiqsut. It is not right! On behalf of my whaling crew, I am opposed to Shell Offshore Drilling. I would appreciate EPA's review of their decision. Thank you.

NG Thank you Thomas. Is there anyone else that would like to provide testimony tonight?

EdN My name is Edward Nukapigak, I am a Nuiqsut whaler. I would like to address my testimony. Earlier we saw that Shell is planning to drill during the whaling season, from July 1 to November 1. I would oppose that because whaling has been our livelihood. It will effect the migration of the whaling. It is not easy to go out and hunt what we harvest. From time to time this has been addressed with Shell. Yet, Shell is still proceeding with open-water offshore drilling. EPA and the Minerals Management Service (MMS) needs to understand and the Department of Interior (DOI). EPA has to answer to the DOI. Therefore, the drilling should not occur during migration of the bowheads and the seals that we hunt. [in-audible] occurs at the 60-meter mark, which has been back in 86. Shell has been gone for 20 years and [in-audible] they are probably going to recap and put that online. The community has spoken from time to time.

We were told that the testimony was supposed to be on air quality. But the whole thing cannot be on air quality. It includes the marine mammals that we hunt. This is what we harvest. The Kulluk will be close to [in-audible] and Cross Island. Shell's plan is to enter through the [in-audible] entrance, then landfall to Point Thompson. This is according to what I have read on Shell's presentation and the newspaper. How can Shell go there and do drilling then the Department of Natural Resources has terminated Point Thompson? That was Shell's original plans for the land fall.

During whaling season, Shell should not, by all means, do any seismic or any open sea water. Shell has heard that loud and clear. Air quality is the other issue that has to be addressed. It will eventually affect the community, the sea mammals and the water [in-audible] which the community depends on. EPA does not have answers for some of the issues raised earlier that. The fact that EPA does not have answers leaves this community up in the air. The community has spoken. EPA needs to go back to the drawing board. EPA needs to go back

to gather all the information. The data that EPA used could be from 1986, or it could go way back to the 70s. It is not the new database that Shell has documented, according to the draft Environmental Impact Statement (EIS) for the Outer Continental Shelf (OCS). The draft EIS was not in-house. The community of Nuiqsut has not been given a chance to get their comments in and document their concerns to the draft EIS for the OCS. That leaves this community out.

As Nuiqsut whalers, and Nuiqsut hunters, EPA should strongly consider the drilling that is going to be continuing during whaling season. Just imagine a hammer head can be heard even if the platform is not visible. Some of the ice packs that we have encountered in the past are not natural muds, it is the muds from platforms. We have encountered those when we are out scouting for whales. So where is all of this coming from? [in-audible] coming from those platforms. Those were addressed. Regardless of the output of this public hearing, what is going to happen? Is EPA going to come back and give a presentation to this community with the whole nine yards? Or is EPA going to go ahead and leave the community and do their part at and issue the permits to Shell. EPA has heard a lot of strong comments and issues based on the question that came up earlier during this meeting.

Without having proper updated data before us, we have no idea what is going on. Anytime EPA calls a public meeting, we like to see the data so that those who are here can read and make a proper presentation. Instead of just coming here to have a public hearing. What is a public hearing? What are the topics? You need to put this in black and white so that we can review it before a public hearing. This public hearing is a very short notice. The issue that has been raised is that we are strongly oppose to offshore exploration for a time, until EPA and the MMS and OCS have given the community information, in black white, so that we can review. Right now, everything is up in the air. It is just an oral testimony. What EPA has presented in not enough to say go ahead and issue a permit to Shell Oil or a portion of the permit to Shell Oil.

Of course the pollution is man made. It can be seen during winter months, early spring and in summer. They may look like clouds but it just hovers. These clouds are just going back and forth by the wind, from east to west, south to north. They are not going anywhere. It is polluting our atmosphere. And part of that atmosphere is what impacts us. We are the ones breathing it. We are the ones breathing it when we are out hunting. We have a big impact.

So how can you help us? How can EPA or the agencies go ahead and approve Shell's permit. If EPA is going to approve Shell's permit, then this community had [in-audible] offshore mammals, then this community should be compensated individually because we are the one that is impacted. The air quality, the same as the water, is both the same. What is being discharged has to go up, regardless of whether it is domestic water, grey water. It is still being transported into

humans through our mammals. I am opposed to what Shell is going to do here with the Kulluk and the other offshore platform.

As a community as a whole that depends on the land and sea. We have short seasons during summer. That is the time that we harvest for the long winters. EPA should understand that during whaling season, based on what I know or may have heard from Shell, is that Shell will not do any seismic or exploration during whaling season. Now, what is presented here is that they want to drill from July 1 to May 1, I mean November 1 right through whaling season when the bowheads are right on the path of Hammerhead. The whales are on the 60-meter mark. That will divert the whales further north, making it difficult for the whalers to go out and pursue them and harvest their quota. This should be considered as priority and Shell should not drill during whaling season. From what I saw, from July 1 to November 1, Shell wants to drill. From July 1 to November 1 Shell wants to do seismic, not giving this community a time to harvest. EPA needs to understand that we have a short season. The oil industry has all the time to drill during winter.

The community goes way back, when there was an Elders' Conference in Barrow in 1978. The oil companies when to Barrow to find out what the ice conditions were east of Barrow, during the Elders' Conference. They did not know that they were going to drill offshore. A lot of issues have been raised by the elders that have left us. They have interest on the current shifts, on how the ice moves in this area. They are talking about Flaxman Island, Cross Island, Camden Bay. Those were addressed by the elders that left us a while back. Some may still be alive. They asked questions about the ice and sea conditions east of Barrow, knowing that the oil companies have interest going offshore. They collected data from those elders in Barrow.

Right now, I fully oppose the proposed activities. I strongly oppose the open water seismic and staging of exploratory wells during the migration of bowheads. At the earliest, the bowheads migrate during the third week of August. Barrow is already hunting the second week of April. The migration of the bowheads is occurring earlier than the last part of April or the first week of May. In this area we do have a short season.

EPA have any answers to the questions raised by the community at any time did. EPA needs to come back and address all the questions and comments raised earlier. Not just folks from air quality, we need to see those from water. Right now, I am fully opposed to what is going to be going on until we have a complete study of that area and accurate answers to issues raised earlier.

I fully oppose what is going to be going on east of our village. Flaxman Island is also a place where our folks have used for seal [in-audible]. They can go as far as Flaxman Island or [in-audible] Island to harvest their bowheads and now they are coming back. Offshore platforms will divert the bowheads making it

difficult for us. We have to travel further north just to harvest or fulfill our quota.

EPA does not have some of the answers to some of the questions raised here today. So, EPA needs to come back. Some of the issues that are unanswered need to be answered clearly. As of now I am opposed to the offshore open water season. We have spoken from time to time and Shell has heard our concerns and our issues. And still they keep coming back to this village wanting the EPA and MMS to craft their permit. Those have been addressed from time to time. They will keep coming back until they convince the State and Federal Governments to issue their permits to process and startup production of the exploratory wells, and possibly have discovery on line while the price of oil is up in the \$60s plus more. When you see Shell on the news and read the newspaper, they are desperate to make a discovery and build pipeline once they have their permits. The permits should be delayed until we have clear answers about our concerns and issues. As a Nuiqsut whaler and hunter, I am opposed to what is going to take place. Thank you.

NG Thank you Edward. Is there anyone else that would like to submit testimony for the record tonight?

EK Hello, my name is Erica Kunaknana. I am the Cultural Coordinator at the City of Nuiqsut. I would like to say that I am opposed to the exploratory plan and drilling Shell wants to do. Our people have relied on this land for many years, and we have many generations to go. A lot of kids that do not know about subsistence, but are willing to learn. With EPA here drilling around, it will be hard for them to learn.

I just want to say that I am opposed to offshore drilling.

NG Thank you Erica. Is there any one else this evening that would like to submit testimony?

EIN Hello, I am Eli Nukapigna with the Nuiqsut City Council. [in-audible] I reside in Nuiqsut [in-audible] planning and wildlife. We have had so many meetings in Nuiqsut that it becomes frustrating in these kinds of meetings and hearings. Shell's exploration is in the heart of the migration of whales and seals, all the marine mammal go through the 30-60 meter mark.

The current goes through these areas [in-audible] in our arctic water. New currents are also in the path of big icebergs moving in and out. The ice [in-audible]. Now, when you break up the motion of the ice, it shifts towards our coast line. The increase of ice that we have seen in the past five years is multiyear ice, ten or more years not [in-audible]. This multiyear ice is floating in the arctic ocean that sometimes covers the whole arctic [in-audible], so many weeks. What will happen if a big iceberg hits the drill ship [in-audible] late 40s

or 50s? What will happen if a big iceberg hits one of those [in-audible] where the currents are really strong? What will happen if 200,000 gallons of diesel spill? We know that there will be devastation if this happens. Devastation of our living and rapid devastation that we do not know what we are going to do after this happens.

I will support the community and my best interest because [in-audible]. I support our [in-audible] to the Whaling Captains and the crew. I fully support comments and also support community when they speak. Cumulative impact has never been addressed. We need more answers questions raised in this hearing. Can we have other agencies, MMS, EPA, [in-audible], all the Federal Government agencies to come to this community. I invite them all to hear some of these issues that have been raised to EPA and provide answers. Some of these answers have not been provided as yet, but we need to know because are concerned.

The arctic culture is our [in-audible] and we cherish the food that comes from the ocean. We need to pass it down to our younger generation that is trying to learn how to hunt in the arctic ocean. How are we going to teach them when there is a big drill ship in the heart of where we do our hunting? How are we going to teach our younger generation the Inupiat culture and way of life that is part of our people? I was brought up of Barrow in the early 50s in [in-audible] before new machines came around. I know the old people stories that have been passed down to me. How am I going to teach our younger people that kind of stuff, if this arctic ocean is now being explored and developed for the sake of our national security? I oppose Shell offshore and I hope that EPA comes back with other agencies to answer some of the questions that have been raised for the last 35 years. Thank you.

NG Thank you Eli. Is there one else that would like to provide spoken testimony tonight? Seeing that there is no one else left to testify, this hearing is closed at 10:10 pm. Thank you.