# **PUBLIC FORUM ON URANIUM**

**Summary Report** 

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"What was said about Uranium in Nunavut."

Public Forum On Uranium

## **CHAPTER 1.0 – INTRODUCTION**

Uranium mineral exploration began in what is now Nunavut in the 1970's and has continued off and on in the territory since then. The Government of Nunavut is aware that Nunavummiut have questions, opinions or concerns about uranium mining in our territory. That is why the GN is now working to move beyond the 2007 "Six Principles of Uranium Mining" to develop a position and policy regarding uranium exploration in the territory.

The GN undertook efforts on two fronts to help it create a new position and policy. First, it commissioned a formal study with experts in the field. The resulting report, <u>Uranium in Nunavut Review</u>, was completed February, 2011. Following that report, the government sought opinions from Nunavummiut. Public forums were held in Iqaluit, Baker Lake and Cambridge Bay in the spring of 2011. In addition, people across the territory were encouraged to send in questions and comments via phone, fax, e-mail, website submission or by mail. The following is a summary of those public comments and questions regarding uranium mining in Nunavut.

## **CHAPTER 2.0– SUMMARY OF CONSULTATIONS**

## 2.1 WHO PARTICIPATED

A total of 107 members of the public participated in consultation in various ways through speaking out at the public forums held in Baker Lake, Iqaluit, and Cambridge Bay, and/or by providing comments in the drop boxes provided at the forums or through submissions by e-mail, on the website, or by telephone.

Following presentations by the panellists, public participants were provided opportunities to express their perspectives and concerns and to pose questions to the panel. Roughly 40% of all dialogue following the presentations arose from panel members.

## 2.2 WHAT PEOPLE TALKED ABOUT

All the comments and materials were reviewed and sorted according to the things that were being talked about. These detailed topics were then grouped into nine major "topic categories." These categories are listed in Table 1, along with the number of people whose comments were included under that topic.

The most frequent type of comment were those that expressed support or opposition to uranium mining. Over half of all participants provided this kind of input. Of equal frequency are comments related to the consultation process and to issues around employment and economic development. Environmental concerns were raised by onethird of all participants. Comments related to the regulation, policy and technology associated with uranium mining, as well as to the end-use of uranium were also raised with high frequency. Other comments dealt with public safety, sustainability and cultural changes, and to the perceived trade-offs and risks associated with uranium mining.

#### Table 1

Summary of the topics people spoke about (number of people who raised the topic)

Topic Category	Members of the Public			
Consultation process	52			
Employment and economic development	50			
End-use of uranium	25			
Environmental concerns	38			
Expressions of support or opposition	56			
Policy, regulation, and technology	32			
Public and workplace safety	13			
Perceived trade-offs and risks	15			
Sustainability and cultural change	15			
All materials	107			

Source: NVivo coding of consultation materials and transcripts carried out by Doug Brubacher, 2011.

What people had to say about these topic areas is presented in Section 3.0, below.

It is interesting to note that while both the public and panellists had plenty to say about the consultation process itself, comments related to employment and economic development and to environmental concerns were largely made by members of the public. Panellists spoke a lot about the regulation, policy, and technology associated with uranium mining and with public and workplace safety (Table 2, below).

Table 2	Summary of the topics people spoke about
(number of w	ords spoken about the topic)

	Panellists	Public
Consultation process	5556	7408
Employment and economic development	2044	8589
End-use of uranium	2576	2606
Environmental concerns	3242	6031
Expressions of support or opposition	878	3843
Policy, regulation, and technology	7494	5277
Public and workplace safety	4478	1903
Perceived trade-offs and risks	539	906
Sustainability and cultural change	266	3250
All materials	23474	32259

Source: NVivo coding of consultation materials and transcripts carried out by Doug Brubacher, 2011.

## 2.3 REGIONAL VARIATION IN WHAT PEOPLE TALKED ABOUT

The issues and concerns varied somewhat by region (see Table 3 and Table 4, below). For example, many participants at the Baker Lake forum in the Kivalliq region spoke about their environmental concerns, while much of the public comment made at the lqaluit forum concerned support/opposition to uranium mining. This was also the case for the input received through the anonymous feedback options (Web, drop box, e-mail, telephone). Comments related to the consultation process were made frequently at all three of the public forums.

Topic Category	Web, drop box, or call-in	Kivalliq	Kitikmeot	Baffin
Consultation process	24	18	10	9
Employment and economic development	23	19	9	7
End-use of uranium	16	3	5	7
Environmental concerns	23	15	4	4
Expressions of support or opposition	42	10	0	10
Policy, regulation, and technology	18	10	4	6
Public and workplace safety	10	5	1	5
Perceived trade-offs and risks	8	5	3	1
Sustainability and cultural change	7	5	1	3
All materials	64	28	13	16

Table 3Topics people spoke about, by region(number of people speaking about the topic)

Source: NVivo coding of consultation materials and transcripts carried out by Doug Brubacher, 2011.

## Table 4Topics people spoke about, by region(number of words spoken by members of the public)

Topic Category	Web, Drop box, or call-in	Kivalliq	Kitikmeot	Baffin
Consultation process	2742	3068	1503	1485
Employment and economic development	2335	3549	2123	1068
End-use of uranium	1777	244	720	764
Environmental concerns	2789	2690	534	608
Expressions of support or opposition	2262	451	0	1992
Policy, regulation, and technology	1810	1047	1310	2244
Public and workplace safety	1043	262	178	1179
Perceived trade-offs and risks	453	255	244	44
Sustainability and cultural change	1619	1128	118	415
All materials	13902	9869	5375	7993

Source: NVivo coding of consultation materials and transcripts carried out by Doug Brubacher, 2011.

## CHAPTER 3.0— HIGHLIGHTS OF WHAT PEOPLE SAID

This section presents a summary of the comments that were presented during the public forums and through the various electronic feedback opportunities that were provided. Not every comment has been presented here. However, an effort has been made to capture and reflect all of the key points that were raised. These comments have been organized according to the major topics that emerged from the public forum transcripts and electronic feedback materials.

#### 3.1 GENERAL COMMENTS AND INSIGHTS INTO THE PUBLIC FORUM

A number of people made observations about the uranium consultation process itself. These sorts of comments were made mostly during the Kivalliq public forum as well as through the various private formats (web, drop box, call-in and e-mail).

## 3.1.1 Some clear questions about uranium

A number specific questions were posed to panellists at the public forums. These related to the characteristics of uranium and to radioactivity left behind from uranium mining.

#### What is uranium and what are its traits?

During the Iqaluit public forum, one participant spoke about how there had been DEW line sites near his community of Qikiqtarjuaq and that they we were never told of the safety issues or the dangers of those sites. "But after the sites were closed we could not approach the buildings close to them and that was when the DEW lines were closed." So the question he posed to the panel was, "What is uranium, and its physical look and traits?"

Keith Morrison (NTI) and Grant Feasby (Chamber of Mines) described uranium as a metal that is silver in colour but that is found in nature as a black oxide. They noted that yellow cake is a compound of uranium that comes from processing. Fred Throassie (Saskatchewan resident on behalf of the Chamber of Mines) then spoke about how he had visited Nihim Lake where uranium exploration is going on and had drank the water and "is still here." He noted that an Elder of 82 years is still active out there and is healthy.

Ramsey Hart (Makita) then suggested that no one had yet spoken about the most important physical property of uranium—the fact that it "decays" into other forms and releases radiation in the process. He noted that "this happens in nature all the time, but when the uranium is in rock deep under the ground our exposure to that is limited. But when we bring it up and grind it up and turn it into a fine powder and ship it around, then our potential exposure to that increases. So that is an important part of the description of what uranium is."

## What are the dangers associated with uranium?

A participant at the Baker Laker forum wanted to know what it is about uranium that makes it dangerous: "I wanted to know why our people are scared, what are the dangers of uranium? We hear it is dangerous. I came to find out why, can anyone tell me?"

Two panel members responded to this question. Ron Barsi, Golder & Associates, noted that radiation exposure and tailings are two issues of particular concern. He pointed out that radiation is regulated "to make sure that the exposure the people will get is below the levels that we believe are safe." With regard to tailings, Ron noted that "It is important that tailings are safely managed and safely kept, and that the water that comes from the tailings is properly managed. So we need to make sure that the water that goes back into the environment is clean. So when the water that comes from the mine is treated it needs to be cleaned before it goes into the environment."

Jamie Kneen, Mining Watch/Makita, noted that he disagreed on two of Ron's points. First, he suggested there is no "absolutely safe level of radiation, …low levels of radiation are also harmful." Jamie noted that people already get exposed to "background radiation" from sources such as the sun, and that this exposure can already lead to things like skin cancer. For this reason, he suggested that it is good to avoid *any* additional radiation exposure.

On the second point, regarding tailings, Jamie noted that the tailings and the waste are "particularly dangerous" and that they "stay radioactive for tens of thousands of years." While "the engineers and the mining companies and the regulators" may do their best to manage tailing and water coming from the mines, humans simply do not have a track record that demonstrates an ability to create structures that can last over the time periods involved with radioactive tailings. "I am not sure what kind of confidence we can have that these structures will work, and continue to contain that radiation for another 100 years, another 1,000 years or 10,000 years. And that is a responsibility that we are leaving behind. Our children and grandchildren will have to look after it, yours and mine."

## How long do tailings remain radioactive?

Another member of the public (Iqaluit forum) asked the panel how long tailings remain radioactive after a uranium mine closes.

Steve Mihok, Canadian Nuclear Safety Commission, responded that they remain radioactive "for a very, very long time." He added that, "the radioactivity is contained and exposure of wildlife and people and so on is essentially either not occurring or occurring at such a low level that it is hardly any different from what you would get if you were walking or living a traditional lifestyle in any other area. So if you are near the tailings, on the tailings or far away from the tailings the air you breathe, the water that you drink, the country foods that you eat, the presence of the tailings is not important in a properly managed system, and it remains that way for a very, very long period of time."

Steve added that, "The main element of radioactivity in tailings would be radium, with a physical half life of one thousand two hundred and sixty years, that means the time it takes for that radium to be half the size of its original activity, and this continues until you have a very, very small amount. How long does it matter? It does not even matter initially if it is properly managed. So in the long run it is essentially of no impact."

#### 3.1.2 Comments regarding the consultation process itself

A number of people made observations about the uranium consultation process itself. These sorts of comments were made mostly during the Kivalliq public forum as well as through the various private formats (web, drop box, call-in and e-mail).

#### "We have a connection to this land"

Several residents at the Baker Lake forum noted their personal relationship to the lands that are within the proposed uranium mining areas. For example, one resident from Baker Lake noted, "I know all that area pretty well, because my parents, my grandparents, and my ancestors and myself personally have lived there. Not only that, my very own mother is buried there where the mine is going to be built." Others noted how they continue to use the land for hunting and travel and have concerns that the land be well looked after for future generations.

#### "Don't trust what companies tell you"

Several people suggested that Nunavut residents need to be careful as they seek to become informed about the risks that may be associated with the uranium industry. For example, one person felt that while Saskatchewan was being presented as a model for safe mining of uranium, there have been incidents there that have not been publicized. Another person indicated that Areva had been singled out through a "Public Eye Award" in 2008 for "not informing Nigerian miners of the risks of uranium mining and for the contamination...that subsequently caused their health problems."<sup>1</sup> As a result this person suggested, "...It is important for us to research it for ourselves. Learn from what has happened elsewhere, ask questions, and decide what is important." Another person asked, "...do we think...[they] really care what is best for us? No, they are in the business of making money..."

#### Did the consultation provide balanced information and opinion?

Numerous participants expressed opinions that the information being provided to the public was mostly coming from people who were supportive of uranium mining:

<sup>&</sup>lt;sup>1</sup> Website submission 52. See: <u>http://en.wikipedia.org/wiki/Public\_Eye\_Award</u> for a listing of "Public Eye" awards over the years.

"We are being tricked when only the ones that are pro-mining get to speak." – Baker Lake forum

"To hear from representatives from other provinces or countries that have banned uranium development would give us other points of view and knowledge." – Iqaluit drop box submission

"The panel that went to the communities did not bring the negative sides of the industry—the people who work in the field where the impacts are felt, health care, social services, policing or communities already impacted by the industry." – Website submission

"The panel is unevenly stacked. If there were equal representatives from both sides, this would be a more responsible and equitable consultation. ...When mining companies come to town to present benefits, it is a one sided story we hear. It should be mandatory that we have an independent voice for the environment, water, air and animals. Both sides create the best choices." – Cambridge Bay drop box

"There was an Aboriginal [person] speaking about good effects of mining. Where was the Aboriginal [person] from the contaminated reserve in the States that is experiencing ongoing problems due to mining?" – Cambridge Bay drop box (same individual as the previous comment)

"It feels like the panel here is looking past us, and looking at our land and what they can get from it. What about us? What are we worth to you people? ...And give us a chance to think about whether or not we want to even have the uranium mine. It seems like it is being pushed upon us." – Baker Lake forum.

"The panel is six people that are pro-uranium, in my opinion, and two people that are against, which is a bit disturbing if this is the way we are trying to share information." – Iqaluit forum.

"The uranium mining industry has done a lot of PR [public relations] to promote uranium mining. The only ones we have been hearing from in our community for several years. How it is going to help our community, how there is going to be lots of jobs, and how we are going to have lots of money. ...we had a lot of people that started to support uranium mining. They started to believe that what we are hearing, that [with] today's technology, all the risks have been eliminated, that is what we have been hearing." – Iqaluit forum

"We are still illiterate about uranium mining and its risks so what do we do? We have heard so many different stories, so we do not know who to believe, like someone said before, there are pros and cons, so what do we do? We watch the rest of Canada. For the last few years we have heard about Ontario opposing any kind of uranium exploration, same thing with Quebec and Nova Scotia and BC. So we watch them, if they do not want uranium mines in their provinces why do we have to have it in Nunavut? Is it less dangerous in Nunavut? Or are we so illiterate and broke that we will say yes to anything? – Iqaluit forum

"The flaw with the panel that went to the communities...[they] did not bring the negative sides of the industry, the people who work in the field where the impacts are felt, health care, social services, policing or communities already impacted by the industry not just Saskatchewan but other aboriginal communities that are not only for the industry, e.g. Navajo nation in Arizona or aborigines from Australia. The whole picture needed to be brought forward not just Industry." – Website Submission

Two of the panellists also suggested the public was getting more information from sources that were trying to generate support for uranium mining:

"We have been listening to the good qualities and the benefits of uranium mining for us this evening. They have been trying to make us say "yes," or "go ahead." ...We mostly hear from the mining company and those pro-mining about the benefits. We hear little of the harms and dangers. ...Let us hear of the dangers from those that are not a part of the government or the mining companies." – Sandra Inutiq, panellist, Baker Lake forum

"I cannot just sit here; you guys are talking to us like we do not know what you are talking about. This man from Saskatchewan he will not tell you about the harmful effects to our bodies, and the representative from NTI, on the NTI policy, they bought shares; they are part of the uranium mining. They have invested money, so they cannot tell you about the hazards." – Sandra Inutiq, panellist, Iqaluit forum

"I am consistently disappointed with the CNSC [Canadian Nuclear Safety Commission] in their lack of precise information about the impacts of uranium mining. They tend to gloss over negative impacts and focus on generalities and the positives. That has been my experience, you can judge for yourselves, but it makes me really question the objectivity and the neutrality of the people that are supposed to be regulating the mines." – Ramsey Hart, panellist, Iqaluit forum

#### Frustration with uncertainty

One woman from Baker Lake expressed some frustration about the uncertainty of the message: "It seems like we are just talking and talking—let us know for real if it is dangerous or not."

#### Role of the public forum in decision-making

The role of the public forum in the decision-making process was not clear to some residents who attended the meetings. One resident noted:

"I also wanted to ask about this whole process happening here and in Iqaluit and in Cambridge Bay. How is this going to decide what is going to happen?" – Baker Lake forum Another individual pointed out that the formal project review process is the process that should be used to consider projects such as uranium mines:

"...the GN, of course does not have the jurisdiction to approve this project or indeed to regulate land and resource management in Nunavut. ...at the moment, the regulatory process is as set up in the Land Claims which is constitutionally protected and was negotiated over many years. The process is that there will be a review by co-management boards, recommendations to the minister and a full public hearing process with technical experts. ...And we also know on top of that for uranium mining and any project there is the Canadian Nuclear Safety Commission, which is also an independent, quasi judicial board...I was surprised as well that it was recommended tonight that there should be a public vote on uranium mining in Nunavut. With all respect to Nunavummiut, the holding of a vote on uranium mining in Nunavut would not be respectful or in compliance with the Nunavut Land Claims Agreement. And if NTI was to hold that vote it would probably not be in good faith for NTI to change the rules for a project that has already begun to enter in the first steps of the regulatory process." – Iqaluit forum.

#### Youth and children

A comment was made that some communities—Chesterfield Inlet and Rankin Inlet were mentioned—were not present at the public forum in Baker Lake. Another resident noted that there did not seem to be many youth participating in the meetings. This idea was further developed by a second Baker Lake resident who suggested that perhaps a youth forum might be organized for youth:

"My priorities will not necessarily be the same as my children. As long as there are benefits I will support it, but my children might have other thoughts... I know they have knowledge, ...[but] they will not talk in public... Let us also have a youth forum!" – Baker Lake forum

Some participants suggested that they were concerned for their children. One person described how her perspectives have changed as her children and grandchildren have grown up:

"For many years our children were little, now they are adults, so my mind has changed in the past. In the many years past we were against uranium mining and mines, so we have lost something, and we were against energy exploration, but nowadays I might have changed my mind. My grandchildren are many and they think different from what I do. Some want to go ahead and I do not try to discourage them. And no one is trying to change my mind either, even though they are my children or grandchildren. We are three generations, if it was just me and my husband and we had no children I would not be here. I would be home watching TV. But because I have children I do not want them to be without a livelihood." – Baker Lake forum

#### Need for public involvement—consultation, polls or plebiscites

Some participants expressed appreciation for the opportunity to express their views. "I am glad the GN is looking into this and having a public forum, so they can have precision on uranium mining in Nunavut." – Cambridge Bay forum

"We can discuss this, talk about it, write about it. If you come here to our land and talk about this and listen to our concerns I am very grateful for that." – Cambridge Bay forum

Others suggested that some residents may be hesitant to speak out in public:

"Because Baker Lake will be impacted the most by uranium mining, there should be a plebiscite to determine what the people actually want. Some people are afraid to speak out against uranium mining, for fear of losing jobs, community blame and so on." – E-mail submission from Baker Lake

"I think the people of Nunavut should make the decision regarding Uranium Mining in Nunavut, via a plebiscite. I live in Kivalliq and there is an atmosphere of not wanting to speak out for or against uranium mining because of public backlash. This fear will prevent an honest evaluation of the subject." – E-mail Submission

Sandra Inutiq, a panellist at the three forums, also spoke about the key role that Inuit had in decision-making:

"The communities are able to have input to the [NTI] policy. In Kivalliq, on the land use planning project, it says that the Inuit will decide. The decision has to come from Inuit. Only if the communities say they will support uranium mining. It will have to be done through motions, resolutions. They [NTI] passed the resolutions without consulting the people in the communities. I will tell you that there was huge opposition in Baker Lake... How was this able to proceed?" – Sandra Inutiq, panellist, Iqaluit forum

#### Public power to influence decisions

Some residents felt that mining can't be stopped in Nunavut. One Elder at the Baker Lake forum observed that it was the Elders who opposed uranium mining in the past and that as the Elders pass away, this opposition will run out. Others, however, felt that public opposition might stop a mine from opening. This view was expressed by some residents who supported the idea of uranium mining.

#### Need to educate people so they can participate

Several comments suggested that full participation in the consultation process requires time, education, and vocabulary that may not be readily available to all residents:

"There should be a moratorium on Uranium mining until there is enough Inuktitut vocabulary to educate people so they can make informed decisions." – Website submission

"For many who are struggling with literacy, keeping their children safe and fed, and many other challenges, being able to take the time to become informed and voice opinions about uranium is neither possible nor a priority. It is up to you and other elected officials to make decisions in the best interest of future generations." – Iqaluit, E-mail Submission

"During this "consultation process" I have not seen any true attempts by the Government of Nunavut to educate Inuit about the risks of uranium mining, or any of the resource extraction projects happening in Nunavut for that matter." – Iqaluit, Website Submission

"I would like for my community to know more, to have access to information regarding both the pros and cons of uranium mining—unbiased information, that is presented ...in ways that allow people to see more than one side of the story. It isn't just short-term jobs vs. potential environment damage, people need to understand that there is much more to it than that. I am from Baker Lake and can easily say that the majority in our community knows very little about uranium mining. People need to be well-informed before any decisions are made about uranium mining." – Baker Lake, Website Submission

#### 3.2 EMPLOYMENT AND ECONOMIC DEVELOPMENT

Many people spoke about issues related to employment and the economic benefits that may arise from uranium mining. In addition, though, some people raised the point that there are other ways to make a living that don't involve uranium mining. Observations were also made that the pace of mining development should be managed—if too many mining jobs are created all at once, the companies will end up hiring workers from the south since there won't be enough Nunavummiut available to work. Related to the issue of employment is the need for training and education and several comments were made along these lines.

#### Need for jobs and opportunities

Many people spoke about the need for the kind of employment and business opportunities that would be created by mining developments, including the proposed uranium projects. Some of these comments related to the growing population and the need for economic growth in order to create adequate new employment opportunities for youth and the generations coming up:

"...our coming generations have to have an income and meaningful employment. One place [mine] will get shut down and a new one will be opened. I am mainly here to show support to the people here." – Baker Lake forum.

"I am really supporting the mine to open, as long as it provides job opportunities, and so I am noticing —especially in the community where I have noticed brighter faces and people are a lot happier, you know. They have been well provided, there are more snowmobiles, and I cannot wait for this to happen. " – Baker Lake forum "There is getting to be more children, and not very much employment in our land. So the person that is working will not just give their job to a graduate, but the graduates need employment. I also have a brother, a sibling, my youngest, and we lived on the land. He used to go trapping, but he stopped, he could not continue and he committed suicide because there was no job. We cannot try to survive by trapping. ...Our grandchildren will want jobs, and will ask why did grandma not encourage or close this deal. So I want it to be opened, not only this, but any kind of job opportunities..." – Baker Lake forum

"When you have no employment there is really lots of drinking and drugging in the communities and depression and violence, you name it. There are more deaths, like suicide and I would like to avoid that..." – Cambridge Bay forum

Several people noted that employment provides not only economic benefits but that the independence that is gained by becoming economically self-sufficient through employment or business also provides political benefits in the form of a stronger "voice":

"Last year I started something else, another business, and got a contract so I am making stakes, and will now be given another contract. So this has improved my life. Before this I did not have a building, now I have my own house, and three houses, five televisions, and computers. The company helped me in contracting me." – Baker Lake forum

"Inuit used to be very independent and have now tried to depend on our government, and you can not be listened to when you depend so much on social assistance. Those are not the lifestyles Inuk would like to live. We would like to be heard, but government is not going to listen to us when we are depending on social assistance. We are proud people, and we would like to go forward." – Cambridge Bay forum

#### Alternative ways to make a living

Recognition of the need for livelihood opportunities, mixed with concerns about uranium mining, led to many comments to the effect that there are alternative ways to create jobs and support economic development. Uranium mining is not the only option available. These comments fall into two main groups. The first is that there is lots of mineral potential in Nunavut and so other mines will create jobs that do not involve working with uranium. The following is a sample of these sorts of comment:

"There is no work, no employment, so I am going for this to go ahead...but...maybe there could be another project that could go ahead that is not so dangerous." – Baker Lake forum participant.

"...in that area there might be other opportunities, not just uranium. Other things like gold and things for medicine... I want people to have jobs, but I say go for something else than uranium." – Baker Lake forum participant.

"The risks of uranium last forever. I am not against mining. Mining brings jobs, investment and infrastructure but uranium is not anything we want in Nunavut!" – Iqaluit Drop Box submission.

"There are many other resources that Nunavut can extract. Uranium is not one of them." – Website submission

"I feel Nunavut should ban uranium all together and concentrate on the other mines that are in process. Start with these and work with them to be the best, environmentally, commercially and culturally. Start with the three and work with these—Meadowbank, Baffinland (potential), Meliadine (potential)." – Website Submission.

It should be noted, though, that an alternative view was also expressed by one individual who suggested Nunavut should proceed with uranium mining since blocking this could be a slippery slope:

"Canada's' economic is resource driven and if Nunavut wants to be part of the economy we must start producing products that the world wants and we have the resources in the land to do this. If we say no to uranium what's the next item we say no to, gold? diamonds? zinc? etc. They all come with their pros and cons." – Website Submission

A second group of comments was that there are other ways to make a living than working at a mine.

"This project is not the only wealth that we have here in the North... Why are you not investing in sustainable development, such as promoting eco-tourism? Or you could spend money on training towards teaching traditional ways...there is more to us and our land. ... How much do we really know about this project, saying it is so clean and wonderful. Sure we need jobs, I understand that, but have we looked at our options?" – Baker Lake forum.

"Now with uranium I am unsure, I know there are other ways to make money..." – Baker Lake forum

"There are other ways of money, but we do not use these anymore because our children do not want to, we can not return to our customs, we need to think of how our descendants are going to make money, not just through mining, but other ways they can make a living. We will not be deciding for them, they will decide for themselves when they grow up, if they can make money and help on the land it can be viewed as something positive." – Baker Lake forum

"We as Inuit cannot seriously believe that uranium mining will bring more jobs, instead it will bring more non-Inuit colonizers into our communities as "consultants", but it will not empower Inuit through employment in a sustainable way. ...Taking resources from our ground will not bring solutions to social problems, but will add to them by forcing even more of a capitalist mindset and way of life upon us, and will further distance us from our land. ...Going to work in a mine will not bring us closer to who we want to be as Inuit, it will simply provide pay cheques to a few people over a short period, while most other Inuit will suffer the consequences in silence." – Website Submission

#### Manage the pace of development

The scale and pace of development was also raised by a couple people who provided input through the Web. One former Nunavut resident suggested that the scale of the proposed Kiggavik project means that workers will have to be flown in from the south. The solution proposed by this individual would be for the GN to control the pace of development to match territorial capacity:

"The GN should play a major role in developing 'pace of development' policies for all mines, not just uranium. It is not a question just of whether to mine uranium, but how much, when and where that the GN must address." – Website Submission

Another Web Submission provided a similar perspective, "There is enough mining activity proposed in the future of Nunavut to provide economic development opportunities for Nunavummiut without getting into uranium mining." – Website Submission. A third writer suggested that while uranium mining could have some benefits, the proposed project "is way too much, too fast." This person suggested that it would be better to start small in order to "test how it will affect the environment and the wildlife." – Website Submission

#### Royalties and tax revenues

The allocation of royalty income generated by mining activities was raised during the Baker Lake forum by a participant who wondered how NTI would allocate the money and whether it would be divided to everybody in the community, not just "the business people from the community, or workers."

Some perception was expressed that since Nunavut does not have devolution, the territory would not gain much in the way of financial benefit from mine developments: "...all the monies will go to Ottawa and we will have to beg for money..." Others, however, understood that mining-associated economic development might benefit the people of Kivalliq and Nunavut through the building of new arenas and other facilities.

#### Training and education

The importance of education was noted by several people, both in terms of the ability of Inuit to gain access to jobs created by mining projects, as well as a means to pursue personal interests. One participant expressed an understanding that education requires opportunities as well as schooling:

"I am a supporter of education, and we have got a chance here today with an opportunity to learn, we should not just let it pass by... I really feel this will open up new options for education opportunities for the young." – Baker Lake forum

"I think that we are only to look forward and prepare our young people for more opportunities in the future and mining has a lot to do with that. Training and employment opportunities come with that..." – Cambridge Bay forum

A perception was also expressed that mining proponents would provide training so that residents could gain access to employment in various trades:

"What types of trades or training will you provide? What levels [of education] do you expect them to have if they are interested in a certain trade or want to become a biologist or whatever it may be?" – Baker Lake forum

#### 3.3 ENVIRONMENTAL CONCERNS

Many comments were made that related to the perceived environmental issues associated with uranium mining. The most frequent of these comments related to concerns about potential impacts to caribou populations. Concerns related to tailing storage and potential contamination of water were also frequently raised. Numerous comments related to other environmental considerations were raised, mostly through the electronic/anonymous methods. Some of these concerns would also apply to other mining projects that do not include uranium. In some cases this general relevance to mining was explicitly noted by the person who made the comment.

#### 3.3.1 Concerns related to caribou

Most comments about the effects of uranium mining projects on the natural environment concerned caribou. These were mostly raised during the Baker Lake forum and by means of website and drop box submissions. Numerous people noted how important caribou is to the traditional Inuit diet, particularly amongst inland Inuit who have less access to marine mammals. Several participants noted that while younger Inuit may be consuming more southern foods, caribou continues to be a critical food source for the Elders. In addition, the cultural importance of caribou for Inuit was raised.

#### Caribou movements and roads

Many comments related to concerns that more roads would interfere with caribou migration. The fairly recent construction of the road between Baker Lake and

Meadowbank mine generated some debate, with some participants feeling that it has served as a barrier to caribou movements:

"This year especially we had no caribou near the community. Many hunters think, including myself, the all weather road may be the culprit..." – Baker Lake forum

"In the Baker Lake meeting there are more elders than anywhere else. So we are using them as toys? No, we respect them, and listen to them... Like the example with the caribou, we do not know why they are not around. I am with the HTO board. They keep talking about the road to Meadowbank, that the road is too high, and the flags and scent and too much dust, and caribou are moving away, also because of the blasting. Do we respect what these HTO board members said, or do we not listen to them? Or respect them?" – Baker Lake forum

"I make a living as a hunter and also teach hunting skills to adult offenders. I have noticed since the Gold Mine in Baker Lake built the road the caribou are acting different. Female caribou are known not to cross roads with calves. There are also huge 15 to 20 foot cliffs of snow from plowing the road and caribou can't cross. Last year's hunting was showing a much higher number of females with no calves. This Spring there are many more females on the west side of the community because they can't cross from the huge piles of snow left by plowing." – Website Submission.

Others, however, suggest that a recent scarcity of caribou in the Baker Lake area is explained by other factors that are part of a natural cycle:

"There are lots of places the caribou can go to...caribou will always move from one place to another." – Baker Lake forum

"The elders will not talk about Meadowbank when talking about why there are no caribou this year. They will talk about the weather, the caribou lichen, the growth of it; they are going to talk about migration patterns. So let's be careful about how we treat our elders, treating them as ignorant people we are abusing them." – Baker Lake forum

Another participant expressed confidence that the regulatory entities would be able to look after these concerns:

"Yes, we cherish the land and the animals, but they have their own protectors, it is not like long ago when we had to do everything for ourselves. There are now bodies that can manage this and protect them." – Baker Lake forum

One person asked about how hunters would be compensated for impacts they might experience:

"I am just thinking if there is an all season road from Baker Lake to Kiggavik, and there are vehicles travelling through there 24-7, and that is a migration road, the caribou are going to go that much further and we will have to go that much further to go and get them. ...how am I going to be compensated for having to travel that much further, who is going to compensate me?" – Baker Lake forum

## Contamination of caribou

In addition to concerns about the impact on caribou of roads and other mining activities such as blasting, people also expressed concerns about contamination of water and the management of mine tailings. Some of these comments focused on the potential for contamination of caribou, especially radioactive contamination that caribou might be exposed to through contaminated dust or water arising from uranium mining activities:

"I am an elder, maybe 72 years old. I am curious about uranium, something that is dangerous, because I do not understand. I am genuinely scared because I do not understand, and I rely on food from our animals. They drink from any water, what if the caribou ate uranium, and I ate a radioactive caribou. What would happen?" – Baker Lake forum

"I don't like the fact that radiation can be spread so easily. When uranium is mined the rock is ground up really fine and only a portion of the uranium is extracted out of the rock. The radioactive dust is able to be carried in the wind, settle on the land and water, and enter the food chain." – Website Submission

## 3.3.2 <u>Water contamination and tailings management</u>

Considerable comment was raised about the potential that contamination from mine tailings would enter the water and find its way to drinking water sources:

"Many creeks and streams are connected from the proposed area to Baker Lake. And they drain down to our very drinking water, through many lakes and streams." – Baker Lake forum

"I do not know how uranium in its raw form, how dangerous that would be. But if it went into our water system and you do not catch it or cannot contain it, who is affected? Me, down here." – Baker Lake forum

In addition, several people noted that the Nunavut environment is unique from other regions. In particular, high winds and lack of trees may lead to dust being carried far from the open pit mine operations. The nature of water flow through areas of permafrost was also raised as a unique consideration:

"I believe mining should only be done where communities are not in too close a proximity to the radioactive particles that will be swished around during a mid-winter blizzard or during a summer storm. ...The proposed Kiggavik seemingly seems to be a bit too close to Baker Lake and is an important calving ground for the Beverly Caribou. A sacred ground for the caribou. Once mined, the ground shall be deemed as hazardous for eons to come, never to be stepped on again." – E-mail Submission

"I think a comprehensive study should be done on Nunavut's lands. In terms of how permafrost can be a conductor in leakage of contaminants to a wide area (land, water)." – Iqaluit Drop Box Submission.

These concerns related to tailings and ground water management attracted lots of response from panel members. Essentially the message from most of the panel was that the technology would address any problems. The situation would be well looked after. Some forum participants, though, were not as trusting of the technology:

"Even though it is being looked after very well, you never know what is going to happen. ... I am sure the contaminants will flow down the river to where we have our livelihood and where we catch our fish. We do not know what to do, if contaminants were to flow to our sea. ...I am in agreement with mining coming up. Even gold mining, I am in agreement with those. But the uranium mine I am having a really hard time saying yes to it, because the risks are too high." – Cambridge Bay forum

"Similarly with tailings, while we know we try to use the best technology to ensure that the toxic waste is contained, nonetheless, we also recognize that tailings are breached." – Iqaluit forum

#### 3.3.3 Heritage Rivers

A couple people noted the value that pristine environments hold and the fact that several rivers in the area have been designated as heritage rivers. This is perceived to add additional significance to the decisions being made regarding uranium mining. For example:

"The Thelon basin is obviously an abundant source of Uranium. If Areva is allowed to proceed it will open the area up to the others that are waiting in the wings. While Kiggavik itself is not on a heritage river, other potential developments are. A majority of the uranium exploration is around the Thelon and Back Rivers, but Lac Cinqante, (among others), would affect the Kazan River. The Thelon and Kazan Rivers were designated as Canadian Heritage Rivers 20 years ago based on their cultural, natural and recreational significance to the region and Canada. They were designated with full support of the communities and were designated as pristine features that are rarely found anymore." – Website Submission

#### 3.3.4 Comments about mining in general

Many participants provided comments that reflected their concerns about mining activities in general. During the Baker Lake forum, five people spoke about their concerns that caribou are being affected by roads and that more mining will lead to more roads and therefore more effects on the caribou. This concern was also raised during the Iqaluit forum and in one of the Website Submissions.

Another theme was that any kind of mining is going to create contamination and impacts on the land. One Baker Lake participant noted, though, that unlike in the 1950s, modern monitoring methods can help to reduce the mess left behind. A participant at the Iqaluit forum expressed opposition to any kind of mining since it

defaces the land, "I do not like to put a hole in my mother's face. I do not like to put a hole in my mother's breast. If we see mother nature as a mother, then it is not okay to put holes in her."

A comment was also expressed during the Cambridge Bay forum that mining leads to negative impacts in communities, particularly related to alcohol abuse associated with fly-in/fly-out work rotations.

However, along with these comments suggesting that mining impacts are similar regardless of the mineral being mined, a distinction between uranium mining and other types of mining was also noted. One Cambridge Bay forum participant suggested that they could support the risks associated with many types of mining, "even gold mining," but not uranium: "I am in agreement with mining coming up. Even gold mining, I am in agreement with those, but the uranium mine—I am having a really hard time saying yes to it, because the risks are too high."

#### 3.4 PUBLIC AND WORKFORCE SAFETY RELATED TO URANIUM MINING

Panellists at the three community forums provided considerable discussion about public safety and worker safety associated with uranium mining. Some comments along these lines were also made by public participants. These public comments were mostly related to public safety and were more frequently made in the form of electronic submissions. Several people at the Baker Lake and Iqaluit forums did, though, address this issue.

Questions were raised about the risks of radiation associated with uranium, both for the general public as well as for the workers who are directly involved in the industry. Most of these comments related to safety of the general public:

"I wanted to know why our people are scared, what are the dangers of uranium? We hear it is dangerous. I came to find out why, can anyone tell me? ...I have grandchildren, so that is why I really wanted to understand this...I wanted to know if they are going to be looked after, their health and everything..." – Baker Lake forum

Comments from residents during the public forums attracted considerable response from the panellists who generally suggested that the health risks were negligible and well managed:

"It is radioactive, and gives off radiation, and if you get exposed to too much radiation it is not good for you. So a lot of radiation increases your chances to get cancer. So that is why uranium and radioactive things are dangerous. So the whole idea why we regulate it is to make sure that the exposure the people will get is below the levels that we believe are safe. [Also] ...we need to make sure that the water that goes back into the environment is clean. So when the water that comes from the mine is treated it needs to be cleaned before it goes into the environment." – Ron Barsi, Golder, panellist, Baker Lake forum "Workers are protected by well designed facilities, training, work planning, and radiation protection practices. We use management control of radiation, radioactive materials, engineering designs and measuring and recording the radiation doses, and environmental monitoring data." – Kevin Scissons, CNSB, panellist, Iqaluit forum

However, other panellists suggested that it may be too early to have so much confidence: "...these tailings and the waste is particularly dangerous. They stay radioactive for tens of thousands of years. ...I am not sure what kind of confidence we can have that these structures [designed to manage the tailings and water] will work, and continue to contain that radiation for another 100 years, another 1,000 years or 10,000 years. And that is a responsibility that we are leaving behind. Our children and grandchildren will have to look after it, yours and mine." – Jamie Kneen, Makita, panellist, Baker Lake forum

Other comments by the panellists compared the risks associated with radiation that miners receive with other sorts of risks:

"In the last twenty, thirty years the workers in Saskatchewan, which are the only real operating uranium mines, have been receiving less radiation on the job than they receive at home. If you look at their total exposure on the job, and look at their total exposure from Radon in their homes, from the radiation from the sun, you get that they get more from the background than they did on the job. ...There are dangers, life always has dangers. There are about 5-6,000 miners in Saskatchewan, of all kinds. And once a year, one of those workers would die on the job. Rock falling on his head, driven over by a vehicle. ...but if you look at the accident rates in the Saskatchewan mines they were about half the accident that the average worker in Saskatchewan..." – Ernest Becker, Golder, panellist, Baker Lake forum

"I am a uranium miner for the last 35 years. Yes to us aboriginal people, uranium is scary and also to the people. But I am more concerned about my cholesterol level than the effects uranium has on me." – Fred Throassie, Saskatchewan, panellist, Baker Lake forum

"A lot of people died during Chernobyl and that was an accident, a lot of people die in a lot of accidents. The estimate is that between 50 to 100 thousand people will die in North America every year from inhalation of coal particles. Also as soon as I step outside and I do not put on my jacket I could start dying. We all take risks...Is something worth the risk compared to something else? It is a hard question and it is the same with the issue we deal with here with mining. In some cases the judgment may be that it is worth it, and in other cases it absolutely is not. But you have to make that on a case by case decision." – Keith Morrison, NTI, panellist, Iqaluit forum

Interestingly, while in other contexts the consultants put considerable stock in the ability of modeling to predict safety for tailings management, one suggested it is not possible to attribute health effects to mine-generated radiation. In response to a question about the death rate due to radiation, the following response was provided:

"How many of them died of the radiation they received on the job? It is certainly not measurable, because how can you measure something that is already naturally occurring? You can do some mathematical calculations and you might come up with maybe one, but that is just mathematical theory..." – Ernest Becker, Golder, panellist, Baker Lake forum

However, during the same forum, another panellist provided an alternative perspective on how risks associated with uranium mining might be considered:

"...the cancers that are typically a result from radon gas exposure in a uranium mine often takes 15 to 20 years to develop. Over the history of the industry, what has happened is that as the miners get sick and start dying, then the limits are revised. So they make the limits stricter. This has gone through a number of cycles now. ...I do not know if the current levels are sufficiently strict... to ensure that there will be no, or minimal, additional deaths from working in those mines at this point. We will have to wait and see." – Jamie Kneen, Makita, panellist, Baker Lake forum

The idea that risks associated with radiation take time to emerge was expressed by a participant at the Iqaluit forum:

"I don't think we are going to have a sudden spike in cancer rates that are going to happen five years later around Baker Lake. That is not going to happen. So let us not fear monger. However, anyone who knows about radiation knows this is a slow issue. If you are exposed to radiation as a child that cancer is going to show up when you are an adult, most likely... It is dose related, so if you have tiny little bits and it is absolutely safely controlled you are probably not at risk. So probably the community around the new mine, if it happens will be okay. The same cannot be said necessarily for what is evolving in Japan or where nuclear power generation happens around the world. And as we said, it is really hard to pinpoint where a cancer came from. I truly believe it's most likely the reason there has not been definite, actual studies that show that living around nuclear power plants or big spills have not caused a problem. But I bet that data is coming..." – Iqaluit forum

## 3.5 COMMENTS RELATED TO URANIUM POLICY, REGULATION, AND TECHNOLOGY

#### 3.5.1 Trust the process, allow it to do its work

Numerous comments from some of the panellists suggested that the existing regulatory regime is capable of ensuring that if a uranium project is allowed to proceed, it will be safe. Some comments from the public also expressed trust in the established process. For example, during the public forums there were several occasions when panellists encouraged people to allow the normal project review and regulatory process to do its work:

"So the NIRB process is the way to do it, to get this information out. Our policy, the mining and uranium mining policy say the same thing. There is a process that should be followed and that is the best way for us to get this information so that

people can make a decision. And yes at the end of the day, the project might not be approved." – Keith Morrison, NTI panellist, Baker Lake forum

"...AREVA is bringing in independent analysis with top research institutes to make sure they are right. Because tailings are really, really and very important and the management of them is very important, but the industry is approaching it in a very responsible way." – Ron Barsi, Golder, panellist, Cambridge Bay forum

"I am a regulator. And I do not really believe anything anybody is telling me. I am a doubting person. So we think we understand what is going to happen in these tailings areas, but what if it does not work that way? That is always the question we are going to ask. And I do not think it would be a disaster, they would drill wells and pump water and treat water if they had to. We do not think it is ever going to be necessary, but there are things that you can do." – Cherry Gunning, CNSB, panellist, Cambridge Bay forum

"There cannot be significant impact to the environment or else they will not get an approval to mine. I just wanted you to know that." – Cherry Gunning, CNSB, panellist, Cambridge Bay forum

This was echoed by several participants as well:

"We are not going to see mining outweighing the environment and the wildlife. And people need to be healthy. I am glad that when we settled the land claims the NIRB and the Nunavut Water Board were born. There was a mining company that made a proposal to open a mine. They went to the Nunavut regulator and the regulator sent them back to the drawing board because their environmental assessment proposal had not been right. I am proud of that. They are not going to do decisions blindly." – Cambridge Bay forum

"...So allow it [the NIRB process] to do its work. And allow it to make sure that we the people of Baker Lake have a very real say in that NIRB process, wherever it goes. Who knows, maybe at the end the day, NIRB will say no..." – Baker Lake forum

"...God will not lead us through dangerous areas. And there are lots of places that the caribou can go to....As long as the water, and the Water Board ensure it is clean and looked after, and as long as the wildlife is going to be looked after, I feel that whatever little hardships will surface we will deal with, and I know NIRB works very hard, and so I would like to say think of the one that have no jobs now." – Baker Lake forum

"KIA is aware that to the current co-management institution of public governance created to thoroughly review any mining project such as Nunavut Impact Review Board [and] Nunavut Water Board, that there is additional scrutiny in uranium developments required by the Canadian Nuclear Safety Commission and other agencies... KIA actively participated in and approved the NTI policy regarding uranium mining in Nunavut. KIA was informed about uranium mining issues during the development of this policy. The policy provides high considerations for environment protection, Inuit benefits and protection of human health." – Cambridge Bay forum

"[During the recent Meadowbank hearings in Baker Lake] I certainly found out that the Nunavut Impact Review Board has to be convinced that everything a mine has to do have to follow, and it is a good reassuring feeling that we have an organization like the Nunavut Impact Review Board that will really listen to concerns." – Cambridge Bay forum

"We have our own government, we have our Land Claims under NTI, and we have many organizations that will protect the environment, the culture, wildlife and lots of other things communities care for. I think we all know that Nunavut has a potential for economic prosperity, and the one on the top of the list is exploration and mining companies..." – Cambridge Bay forum

"With all respect to Nunavummiut, the holding of a vote on uranium mining in Nunavut would not be respectful or in compliance with the Nunavut Land Claims Agreement. ...I believe that we should put our faith in the institutions that have been established, and the public process of the NIRB has not yet started. ...There will be full public hearings and full opportunities for the public to be involved." - Iqaluit forum

"I believe uranium is just another commodity that can be mined safely and to the benefit of Nunavummiut. There are strong processes in place through NIRB that will make sure this happens." – Website Submission.

#### 3.5.2 The project review and regulatory process is not sufficient

Not everyone was confident in the ability of the regulatory process to protect people and the environment. For example, several comments suggested that risks associated with uranium mining may be difficult to address, in spite of the assurances provided by regulators and others involved in the industry:

"It is very easy for us to say that we are going to minimize the risks and that we want to maximize benefits. But what exactly does that mean? ... legislative protection only goes so far... often we have learned too late when the problems arise that legislation and the regulations did not do their job, and did not protect us. ...It is not just what risks are we prepared to bear, but what risks are we prepared to put out there? ...nuclear power is often told to us that it is clean and that it is safe. The fact is that it is true—until it is not." – Iqaluit forum

"I think uranium mining in Nunavut is risky business. I understand that there are strict safety regulations and procedures when it comes to uranium mining.

However, I still believe that the potential risks are far too high, especially in our environment where uranium mining has not been 'tested'. It almost seems like a big science experiment, with hopes that things will turn out well." – Baker Lake resident, Website Submission

A comment was provided by a former resident of Nunavut that there are serious gaps in the regulation of uranium mining:

"...the CNSC [Canadian Nuclear Safety Commission] does not have federal standards for the protection of the environment from uranium mining. Federal standards relate only to human health... There are no radiation protection standards that are directed at, for example, caribou protection from radiation. Caribou are known to eat lichens and become contaminated from radiation in the lichens. Yet, the CNSC has no standards applicable to uranium mines in any regulations for the protection of caribou (or any wildlife) from radiation. The CNSC uses derived release limits for radionuclides that are for the protection of human health ONLY. In other words, the impact on the caribou is not taken into account except to the extent that models assume people eat the caribou. Wildlife population impacts are not included in the regulations." – Website Submission

One person noted the poor track record from past mines and suggested that only when northerners are fully engaged in regulatory oversight will Nunavut be protected:

"Nunavut should only do this [uranium mining] when we are really in control of our own land. INAC always does a bad job of taking care of the land. All the old mines caused big problems to the environment. Our government should stop this until we have Inuit engineers and accountants and lawyers and biologists who can watch to make sure that this mine is good for Nunavut, not just for someone else to make money." – Website Submission

Another participant noted that the process of project review tends to focus on the many small pieces of a big project, rather than looking at the big picture:

"...the whole puzzle must be taken into account, not just pieces like NIRB is doing now." – Website Submission

This was also expressed by one of the panellists during a community forum:

"...this issue is bigger than an individual or any one project review. The NIRB can look at the cumulative project, or in the case of Kiggavik, of five mines and a port and a road, ... But it is not equipped to look at the bigger issues. That is not what that process is designed for. ...so that is why the initial call for an inquiry into uranium mining policy was made, and the reason the Government of Nunavut has undertaken this process. People will participate in the project review through the NIRB, but there are also larger issues around it that we have begun to explore..." – Jesse Tungilik, Makita, Cambridge Bay forum

#### 3.5.3 <u>Technical design is one thing, error-free operations over long time periods is another</u>

An interesting point was made by a contributor who, in talking about disasters that have occurred in non-nuclear industries, distinguished between technical design requirements for safety and the ability of human managers to ensure that operation of

requirements for safety and the ability of human managers to ensure that operation of this technology is consistently carried out:

"...one might look at it in context of the Gulf of Mexico oil spill disaster of one year ago. Cited as the world's worst spill, analysis is showing that it wasn't created by poor technology, rather poor practises." – Website Submission

Another observation related to the challenges that may arise in the actual operations of a facility was raised by an Elder from Baker Lake:

"...we have severe storms in the winter and there was a spill and fire accident at the Meadowbank [mine]. We cannot always be there to make sure something is not happening and that everything is fine." – Baker Lake forum

The reliance on technology to ensure safety was also mentioned by one of the panellists:

"I would encourage you to look at examples of development that do not require human hubris, and engineering on top of engineering to keep your environment safe." – Ramsey Hart, Makita, panellist, Iqaluit forum

The issue of how the "human element"—alluded to in these comments—is addressed in the project review process was not directly raised nor addressed during the public forums. Some reference was made to "accidents" but this was not really pursued in any detail. For example:

"Yes you are right in that it is safe until it goes wrong. In some cases with nuclear if it goes wrong badly it can go really wrong and no one denies this. The question is over the large scale there have not been enough accidents to make a judgment." – Keith Morrison, NTI, panellist, Iqaluit forum

## 3.6 COMMENTS RELATED TO THE END-USE OF URANIUM

The use of uranium came up as an issue during some of the public forums, particularly the Iqaluit forum. However, half of all comments related to uranium use were raised in the various electronic means provided. Much of this discussion related to the use of uranium in nuclear weapons and the ability or inability of Canada to ensure that "Canadian" uranium did not end up in bombs. Interestingly, one person noted that if people want to avoid mining uranium because it might be used for weapons, then "what's to stop them from trying to block iron or zinc which are also used in weapons, or copper which is used in bullets....it's a slippery slope."

The use of uranium as a power source was mentioned by some as a means to reduce green house gas emissions. A comment was raised, though, that since the issue of longterm storage of radioactive nuclear waste has not been figured out yet, nuclear power should not be widely adopted. A related comment was that if Nunavut becomes a producer of uranium, pressure might be exerted on the territory to provide storage of nuclear wastes from power generation stations located across Canada.

#### 3.7 SUSTAINABILITY AND CULTURAL CHANGE

A number of people described how they see Inuit livelihoods changing from one generation to the next, and how mining activities play a role in this change. In one case, this change is described as something that has already happened:

"We know that the mining can not be stopped in Nunavut. We know that there will be pros and cons and separations of wills. But we the elders will start to run out of opposition. We have to start thinking of our children and our descendants. We started talking about uranium 25 years ago, and now we are starting to talk about it again. So it will continue. In that time those that were opposed have passed on, and in the future it will be so with mining. I wanted to explain this, things are changing, our customs and livelihood is changing and some of it is abandoned. We love the land and cherish our culture, but we cannot return to the old ways. And we can no longer live where we used to live on the land. If we think of our children and descendants, we do not teach them about the land anymore, and they do not really want to learn too much, even though there is money involved. There are other ways of [earning] money, but we do not use these anymore because our children do not want to, we can not return to our customs, we need to think of how our descendants are going to make money, not just through mining, but other ways they can make a living." – Baker Lake forum

An Elder described how she continues to rely on traditional foods while her grandchildren have different needs:

"Our old person pension is only once a month and it goes very fast. I have a twostorey house, and I have to use the money for the house. So we have to catch caribou and traditional food to survive. Young people are different, but I have to eat traditional food and have tea. I am afraid about radiation in my food, although I encourage them and want employment, I want my grandchildren to be whole and complete, and see healthy children. I do not want to see them born sick or with missing parts because of radiation." – Baker Lake forum

Several people perceived that mining will lead to a loss of Inuit culture. For example, one person noted that mining uranium will lead to a permanent loss of traditional lands for some families and suggested that allowing this to happen is at odds with Inuit cultural values:

"The Inuit have fought the government for many decades. Demanding their rights be recognized when everyone lied and said we didn't have any. ...We fought so hard to have say in what goes on in the Nunavut territory. Fought to have the land taken care of, organizations formed to maintain sustainable hunting, and to ensure that everyone is keeping the land clean. Why would we throw all of this fighting and victory away with the building of an uranium mine? ...On this piece of land, Inuit

families of Baker Lake and surrounding areas were born, found their food, and did what they could to survive. Building this mine by these outsiders, you are kicking these families out of their homeland once again. They were forced into the communities, not allowed to live the life that they knew. Building the mine means you are not allowing these families to ever visit again. The land will be destroyed. ...Why would we take that away from them? It goes against all IQ principles, as well as Inuit principles that are not made "official"." – E-mail Submission

Another individual spoke about how engagement in the mining sector will lead to a change in Inuit values:

"Taking resources from our ground will not bring solutions to social problems, but will add to them by forcing even more of a capitalist mindset and way of life upon us, and will further distance us from our land...Without healthy land, we have nothing. Can we face the generations after us and say that we truly acted in the best interest of the land and took the steps necessary to protect our animals, fish and waters? ...With so many lnuit elders and leaders calling for us to reconnect with the land, we need to create opportunities for kids and families to go back to places and spaces that provide healing and empowerment, instead of signing agreements that distance us from our lands forever." – Iqaluit resident, Website Submission

A related comment related to the central importance of the land to Inuit and Inuit decision-making was made by one of the panellists:

"Sustainability includes having clear vision for Nunavut as a healthy ecosystem, a healthy and vibrant society that is strong in its culture and roots. The very basis of Inuit culture is sustainability. Which includes respect for all the things that are around us, including, the land the sea and the environment around us. The driving force behind our land claim agreement was control over our lands and other cultural rights, like hunting and controlling these things on our terms. Now that we have a land claim, we face external pressures to exploit our lands and internal pressures to deal with poverty... To me these decisions would be very different if they were made out on the land, as any lnuk that depends on the well being of the lands for food and cultural sustainability knows we are most conscious that the land is what defines what we are. We know instinctively that what we do to our land we do to ourselves, as we are extensions of the land." – Sandra Inutiq, panellist, Baker Lake forum

One participant described a perceived loss of Inuit self-reliance over the past two generations and that now people are experiencing economic hardships. In this context, the trade-off decisions related to uranium mining are essentially being made under economic duress:

"...look at our financial situation now compared to fifty years ago when our grandparents were able to survive properly without having to be hungry. We ...had boats, we could go hunting, go fishing, go about with our traditional life. And now everybody got broken down skidoos and people are wondering, 'where am I going to get my next meal?' ...People are on the radio every day, 'can I please have some

*lunch, my kids are coming home, and they have nothing to eat.* This is 'economic bullyism' as far as I am concerned." – Baker Lake forum

Not everyone agreed with the notion that mining represents a threat to Inuit traditions and culture, however:

"Over the years Inuit will continue to be hunters. Inuit were hunters and trappers in the past. The Greenpeace killed a lot of industry and look where we are right now. And we are still fighting. ...we are going to stand up—and look, we can work, we need jobs for our younger generation, we need education, jobs bring education. And we have to balance everything. We are not going to see mining outweighing the environment and the wildlife." –Cambridge Bay forum

#### 3.8 EXPRESSIONS OF SUPPORT AND OPPOSITION RELATED TO URANIUM MINING

The consultation process was not intended to act as an opinion poll to measure public support or opposition to uranium mining. As a result, rather than providing a tally of "support" versus "opposition" this section is intended to acknowledge the desire of a substantial number of participants to make clear statements regarding their opposition or support for uranium mining. It is noted that many more people made comments that suggested concerns about uranium mining, however these were only tallied under this section if a clear statement was made.

A total of 58 members of the public volunteered clear expressions of opposition or support for uranium mining. These comments were mostly made during through the various anonymous feedback opportunities provided (39 people in total). In addition a number of individuals (18) expressed their opinions during the public forums held in Baker Lake and Iqaluit.

In addition to indicating personal views on uranium mining, some people suggested that a moratorium should be placed on uranium mining in Nunavut or indicated that moratoria have been placed on uranium mining in other jurisdictions and wondered why Nunavut would not do the same. It was suggested that strong opposition has led to no uranium mining in Nova Scotia, British Columbia, New Brunswick, Greenland and elsewhere around the world. "Why is it that more and more jurisdictions, provinces, countries all around the world are banning uranium mining? It obviously isn't without good reason." These comments arose during the Iqaluit forum and in the anonymous feed back submissions.

Others spoke about the trade-offs they perceived that uranium mining would entail. These generally involved gaining jobs and opportunities for young people in exchange for risks or outright damage to the environment and to people. Some of these "trade-off" comments included a conclusion as to whether or not the "mining" option was the preferred choice or not, while others simply stated the trade-offs they perceived: "For the mining industry out there, there will be jobs for the young people. The uranium mine I know will be dangerous for the environment, and the people and the wildlife." – Cambridge Bay forum

"I honestly am afraid of the radiation this uranium mining will cause. Nonetheless it'll provide jobs for the local community and outside of it." – Website Submission

"I think that the uranium in Nunavut has its positive and negative feedback by the pollution of our beautiful land. But it would provide employment opportunities for our beneficiaries." – Website Submission

"Uranium in Nunavut might equal some jobs, but the cost [to] the environment and [to] the socio-economics of the people who care and still feel a strong connection to the land are too HIGH." – Website Submission

"It does create jobs but at what cost to the people and environment around them? The risks far outweigh the benefits and what happens when the industry is gone? This is not a legacy that we need to pass down to future generations. Instead of trying to play catch up with the rest of the world, Nunavut should be leaping ahead and be a place the world looks up to. We've seen the mistakes the world has made. It's time we learned from them and make Nunavut a leader." – Website Submission

"Is something worth the risk compared to something else? It is a hard question and it is the same with the issue we deal with here with mining. In some cases the judgment may be that it is worth it, and in other cases it absolutely is not." – Keith Morrison, NTI, panellist, Iqaluit forum

#### 3.9 PERCEIVED TRADE-OFFS AND RISKS

A number of people expressed a view that uranium mining will lead to a trade-off providing jobs but causing environmental damage. Some comments pointed out these perceived trade-offs without providing a clear indication of whether or not uranium mining should be supported or opposed:

"For the mining industry out there, there will be jobs for the young people. The uranium mine I know will be dangerous for the environment, and the people and the wildlife." – Cambridge Bay forum

"I honestly am afraid of the radiation this uranium mining will cause. Nonetheless it'll provide jobs for the local community and outside of it.." – Website submission

In some cases the expression of support for job creation was mixed with a hesitation or fear about gaining these opportunities through uranium mining:

"We as elders who are parents, as much as we are afraid of something that may be dangerous, you know, it is just paving the way for the future and we got to think clearly and wisely. As much as it may be dangerous, we should wake our young people up and make them aware of this and engaged, and so that we will not stop that and block that, because we are afraid of one thing or another. What I hear from the panellists, we as people have to make good decision. Something new has to happen, and because there is nothing to do, this is the way our young people are, so let's give them something that will give our youth something to do, and something to think about. We got to give them something for their minds, and uranium is being discussed, from what I hear." – Baker Lake forum

In several cases, it was clear that the perceived cost to the environment was not worth the anticipated benefits:

"There will be benefits for our community in that there will be more money and jobs, but it will disturb our wildlife and animals, water and the air we breathe, so I hope we will make the right decision." – Baker Lake forum

"While I do understand fully how important it is for us to build job opportunities and revenue, there are few legal industries that are so deeply unethical that I feel Nunavut should never consider getting involved with them and they are uranium, military arms, and the tobacco industry." – Email Submission

"Uranium in Nunavut might equal some jobs, but the cost on the environment and on the socio-economic of the people who care and still feel a strong connection to the land are to HIGH." – Website Submission

"It does create jobs, but at what cost to the people and environment around them? The risks far outweigh the benefits and what happens when the industry is gone? This is not a legacy that we need to pass down to future generations." – Website Submission

One resident voiced concerns that the development of mines would lead to inflation, a perceived economic "trade-off":

"If the mining companies are going to have open mines, everything will be more expensive, fuel, housing, and store bought food." – Baker Lake forum

Another person felt that the benefits will not accrue to Nunavummiut but will simply flow out of the territory:

While some comments suggested that acceptance of mining may be part of the creation of future opportunities for youth, several people expressed skepticism that this tradeoff will actually succeed on the benefits side:

"We are ignored and marginalized until something of "value" is found on our lands, and then very quickly, colonial forces start to further "control," "regulate",

"negotiate" and "manage" our ways of life. We as Inuit cannot seriously believe that uranium mining will bring more jobs. Instead it will bring more non-Inuit colonizers into our communities as "consultants," but it will not empower Inuit through employment in a sustainable way." – Website Submission

"The whole picture of costs in human health, animal health, air and water health plus, environmental damage costs are too great for Nunavut to handle. The money will leave the territory to the big investors who do not live in the immediate area or territory and the amount that stays is little compared to what leaves. Plus the environmental and human health risks are too great." – Website Submission

One person expressed confidence that the influence Inuit have gained through the land claims agreement will provide sufficient safe guards to ensure that any environmental risks associated with uranium mining will be adequately mitigated:

"We have our own government, we have our Land Claims under NTI, and we have many organizations that will protect the environment, the culture, wildlife and lots of other things communities care for. I think we all know that Nunavut has a potential for economic prosperity, and the one on the top of the list is exploration and mining companies..."

Another resident provided an interesting perspective on "risk" itself:

"...we have been told a lot about the dangers of uranium mining... And it reminded me that when I was growing up, we were told how to avoid dangers going up the river, hunting out on the thin sea ice, or going somewhere in a blizzard. ...And we did not know how until we actually go up the river on our own, and go out on the dangerous sea ice on our own. Without going we would never have found out how to deal with it. Therefore in order to find the real danger of uranium mining or any other mining we need to actually see how it goes and have a part in planning and in control." – Cambridge Bay forum

Finally, one person cautioned that there are lots of uncertainties involved when thinking about the risks and trade-offs that may be associated with uranium mining:

"it is very easy for us to say that we are going to minimize the risks and that we want to maximize benefits. But what exactly does that mean? I have done some research to try to understand uranium mining and the nuclear industry. It is very confusing. There is an awful lot of information out there; a lot of it seems to be quite exaggerated depending on which group you are looking at. You have those that are pro-uranium mining and pro-nuclear and you have those that are anti-uranium. ...I would also like to say legislative protection only goes so far, and while there is a long list of various legislation that was provided to us tonight, often we have learned too late when the problems arise, that legislation and the regulations did not do their job, and did not protect us. We have hundreds of years of history to back that up." – Iqaluit forum