

The medical aids include injuries requiring a visit to the Baker Lake clinic. In 2008, these included treatment of a steel sliver to a finger, a facial rash, a knee injury and two cases of stomach pain.

There were no lost time accidents in 2008 involving AREVA personnel.

A lost time accident was sustained by a Forest Helicopters pilot on July 16, 2008. The accident occurred when drill split tubes (very long, light hollow aluminum tubes) were caught in the helicopter rotor during unloading. The impact of the split tubes with the rotor caused the helicopter to vibrate severely. The helicopter was damaged and the pilot sustained an injury to his arm while jumping clear of the helicopter during the incident.

From the helicopter accident investigation it was determined that the practice of carrying long, light materials underneath idling rotors in unpredictable environments created the potential for serious injury and equipment damage. Worker complacency and inattention can exacerbate the risk of incident. A number of recommendations were made in the incident report, including the need for additional helicopter safety training for workers and improved operating practices for the loading and offloading of equipment while the helicopter is operating.

In February 2009, AREVA held a training session for all employees and contractors who may be at the Kiggavik site during the 2009 field season. The session, facilitated by experienced safety consultants, focused upon helicopter safety in exploration and mine development projects.

5.2 Radiation Protection

The Radiation Protection Plan for the Kiggavik Project is designed to meet the requirements of the applicable Nunavut Occupational Health and Safety Regulations, exploration best practices and AREVA requirements.

5.2.1 Administrative Elements

Program Documentation

The Radiation Protection Program for the Kiggavik Project is supported through a comprehensive series of work instructions for worker dosimetry, radiological monitoring and the safe handling of radioactive materials.

Training

All AREVA employees and contractors working at the Kiggavik site received orientation and appropriate radiation protection training prior to beginning work to ensure worker safety and protection of the environment.

Personnel involved with the shipment of radioactive materials received the required training in Transportation of Dangerous Goods (TDG).

5.2.2 Program Elements

Dosimetry Monitoring Program

Dosimetry monitoring is conducted to determine and document worker exposures to radiological components which include gamma radiation, radon progeny (RnP) and long-lived radioactive dusts (LLRD). A Code of Practice (COP) sets Action and Administrative Levels.

No COP dosimetry action levels were exceeded during the 2008 program. The worker radiation doses observed during the 2008 program were well below regulatory dose limits for members of the public (1 mSv/a) or occupational workers (20 mSv/a).

Gamma Exposures

The largest component of radiation exposure during uranium exploration activities is expected to come from gamma radiation emitted from mineralized core, rock and drill cuttings.

Worker exposures to external gamma radiation were measured using optically stimulated luminescent dosimeters (OLDs) provided by the licensed dosimetry provider, Landauer. For exposure control, workers handling and logging radioactive drill core and rock samples are also issued direct reading dosimeters (DRDs).

During the 2008 program, worker gamma radiation exposures ranged from 0.00 mSv to 0.51 mSv with an average exposure of 0.02 mSv. The highest gamma radiation exposure was received by a driller. A frequency distribution of worker gamma radiation exposures is presented in Table 5.2. As shown, 81% of the exposure results were below the OLD detection limits of 0.01 mSv and 95% of the gamma exposure results were below 0.1 mSv.

Table 5.2 Worker gamma dose frequency distribution

Gamma Radiation Exposure (mSv)	Frequency
0.00	68
0.01 – 0.05	5
0.05 – 0.10	7
> 0.10	4

Radon Progeny and Long-Lived Radioactive Dust Exposures

Worker exposures to radon progeny (RnP) and long-lived radioactive dust (LLRD) are estimated from industry-accepted area monitoring techniques and occupancy time information.

Worker exposures from RnP and LLRD during the 2008 program were conservatively estimated from workplace monitoring to be less than 0.05 mSv and 0.06 mSv respectively.

Total Effective Exposure

Total effective exposure was estimated for each individual based on OLD, RnP and LLRD results. The maximum dose received by an individual working at Kiggavik in 2008 was 0.537 mSv. The average dose was 0.029 mSv. The maximum dose permitted for an occupational worker is 50 mSv in a given year or an average of 20 mSv/a over 5 years. The maximum annual dose for a member of the public is 1 mSv/a. The estimated individual exposure of all personnel working at the Kiggavik site was therefore below the regulatory limit for members of the public (Figure 5.1). The total effective dose for the site (all personnel collectively) was 5.278 mSv.

5.2.3 Radiological Monitoring Program

Workplace monitoring

As part of the Radiation Protection Program, routine radiological monitoring is performed for gamma radiation, radon gas (Rn), radon progeny (RnP), and long-lived radioactive dust (LLRD) in order to detect potentially abnormal radiological conditions, estimate worker doses, and document radiological conditions.

Radiological monitoring was conducted during the program at and around the drilling sites, in the camp and mobile core shacks and the driller dry shacks. A summary of the radiological monitoring results from the 2008 program is given in Table 5.3.

Table 5.3 Radiological Monitoring Results for 2008 Program

Radiation Type	Average	Maximum
Gamma ($\mu\text{Sv/h}$)	0.26	9.65*
Radon Gas (Bq/m^3)	NA	NA
Radon Progeny (Grab Sampling) (WL)	0.002	0.052
Radon Progeny (Integrating Monitor)** (WL)	0.001	0.003
Long-Lived Radioactive Dust (Grab Sampling) (Bq/m^3)	0.01	0.05
Long-Lived Radioactive Dust (Integrating Monitor)** (Bq/m^3)	0.01	0.01

*The maximum gamma reading recorded was from elevated natural background at an outcrop.

**Radon progeny and long-lived radioactive dusts were also measured using the Radiation Safety Institute of Canada continuous integrating Radon Monitor. Exposure times and locations differ between grab sampling and integrating monitors.

NA: Data not yet available from Landauer.

Gamma dose rate measurements ranged from 0.00 – 9.65 $\mu\text{Sv/h}$ with an average dose rate of 0.26 $\mu\text{Sv/h}$. It is noteworthy that the highest gamma readings recorded during the program were from areas with elevated natural background gamma levels.

Indoor radon progeny measurements ranged from 0 – 0.052 WL with an average radon progeny potential alpha energy concentration of 0.002 WL. Radon progeny levels were typical of natural background indoor levels.

Long-lived radioactive dust concentrations ranged from 0.00 – 0.05 Bq/m^3 with an average concentration of 0.01 Bq/m^3 . It should be noted that, with the exception of one measurement, all measured LLRD concentrations were below the minimum detectable activity (0.04 Bq/m^3) for the measurement method.

Three site alpha dosimeters were installed in 2008; one in Baker Lake, one at Kiggavik and one at Sissons. These instruments include an air sampler, an electronic flow meter for the continuous measurement of the sampling volume of air and a head for the integrated measurement of alpha emissions of short life daughter products of radon 222 and 220 and long life products of uranium and thorium. Results from these dosimeters are still pending from the laboratory.

Twenty-six track etch cups for environmental radon gas measurements were also installed in the Kiggavik and Sissons areas. Analysis of the track etch cups is still ongoing at the laboratory.

Contamination Monitoring

Contamination control measures are implemented to minimize the spread of radioactive materials into unintended locations. Routine contamination monitoring using a pancake probe and swipes was performed weekly throughout the site including at the drill site,

core shacks and at the camp facilities. The Administrative Level was exceeded in one instance during the season, in a core logging shack. The shack was cleaned until readings were below the Administrative Level.

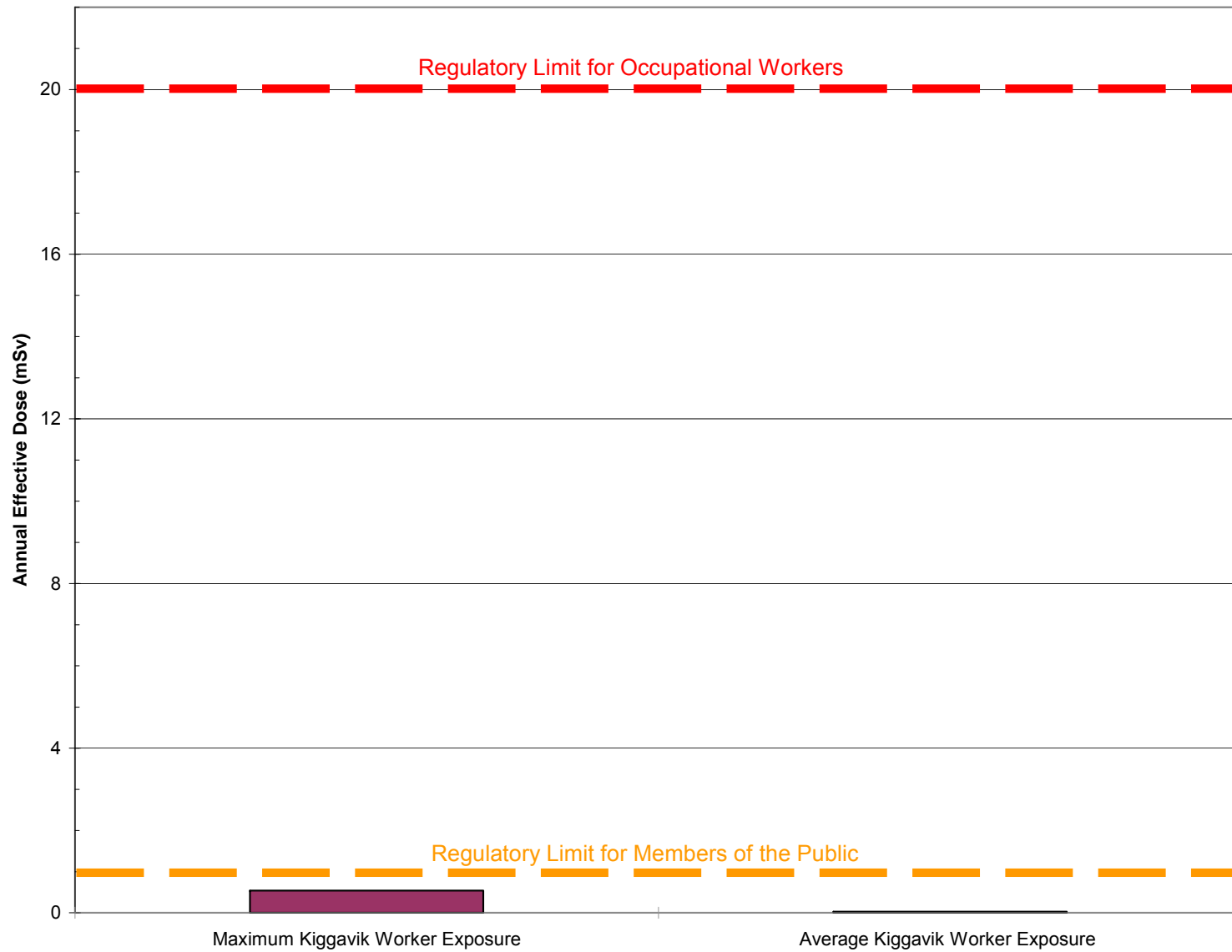


Figure 5.1 Comparison of Kiggavik Exposures and Regulatory Limits

6 SUMMARY OF LOCAL HIRES AND INITIATIVES

An important aspect of the Kiggavik Project is that it brings employment and business opportunities to local residents. In 2008, local people were hired for the Feasibility work carried out at the Kiggavik camp and to work in the Baker Lake office. Local companies were successful in winning contracts. In addition to providing direct employment and business contracts, the Kiggavik Project sponsored several events in the Kivalliq region in 2008.

6.1 Local Employment

The Kiggavik Project provided employment to local people through direct hiring as well as by hiring local companies to supply labour services to the Project. During 2008, the Project hired two local people directly – a Community Liaison Officer who worked afternoons throughout the year, and a Logistics Assistant who worked through the field season.

The Project contracted Inuit workers from a Baker Lake company for camp operations and maintenance, wildlife monitoring, logistics, and baseline monitoring. In addition, baseline monitoring consultants contracted local Inuit workers from Baker Lake and Chesterfield Inlet for baseline monitoring and a local IQ interviewer was contracted for IQ interviews. Table 6.1 summarizes the employment provided to local Inuit workers in 2007 and 2008.

Table 6.1 Local Employment

	2007		2008	
	Inuit Workers	Hours	Inuit Workers	Hours
Local AREVA Employees	3	1731	2	2,214
Contracted Workers	28	6730	29	10,958
Total	31	8461	31	13,172

In addition to the local employment listed here, the contracted work described in the next section also provided employment to residents of Baker Lake and other Kivalliq communities.



Kiggavik Camp Operators preparing to fill the potable water supply at Kiggavik

6.2 Locally Contracted Work

Many goods and services obtained for the Kiggavik Project in 2008 were contracted to local suppliers. The total value of the local contracts in 2008 was \$3.5 Million. The majority of this work went to companies with offices in Baker Lake. Some work, including purchase of fuel, accommodation and meals and translation services, was given to companies in other Kivalliq communities.

Table 6.2 summarizes the value of contracts awarded to northern businesses. The work contracted to local companies in 2008 consists of:

- Diesel and jet fuel
- Expediting and transportation
- Aircraft charters
- Marine baseline investigations
- Groceries
- Meals and accommodations

- Core box construction
- Construction materials
- Vehicle rental
- Translation services
- Cleaning services
- Camp construction and renovation
- Labour
- Office utilities

Table 6.2 Kiggavik Project Northern Contracts

	2007	2008
Inuit Owned companies**	\$1.3M	\$2.0M
Other Northern companies***	\$1.1M	\$1.5M
Total	\$2.4M*	\$3.5M

*Number differs from the \$1.85M reported in 2007 because the selection criteria have been modified

**Companies on the NNI list of Inuit owned companies

***Companies not on the NNI list but with offices in Nunavut and a significant number of Inuit employees

6.3 Sponsorships and Donations

The Kiggavik Project sponsored community events in Baker Lake and other communities in the Kivalliq. Sponsorships were given to educational events, cultural events, celebrations and sport events. The list of events sponsored and donations given in 2008 is shown in Table 6.3.

Table 6.3 Sponsorships and Donations for 2008

Category	Organization	Activity	Date
Community	Baker Lake Hamlet	Hamlet Days Feast	May
	RCMP	Bike rodeo	June
	Search and Rescue	Going away event for member	August
	Baker Lake Hamlet	Feast for Mining Week	September
	RCMP	Christmas Hamper	December
	Baker Lake Hamlet	Skate for Santa	December
	Baker Lake Hamlet	Musicians for Holiday Square dance	December
	Hospice Society	Food donation	December
Sports and Recreation	Chesterfield Inlet	Fishing Derby	May
	Baker Lake Snowmobile Club	Races	May
	Baker Lake girls basketball	Sports event	July

Category	Organization	Activity	Date
	Athletes to Kugluktuk	Sport trip	July
Education	Inuit Sivungiksavut	Trip	April
	JA High School Graduates	Trip	May
	RA Grade school	Awards for grade 3 and 8	June
	JA High School	Award of Excellence	August
	Kivalliq Science Fair	Rocks and Minerals Camp	September
Culture	Aliante	Arts Festival in Iqaluit	May
	Homecoming Society	Homeland Visit	June
	Printmakers Coop	2009 prints	November

7 COMMUNITY CONSULTATIONS

AREVA recognizes that for the Kiggavik Project to be successful, it will need the support of the people in the region. A key to gaining community support is dialogue and community involvement.

AREVA has engaged in a series of initiatives to inform, consult with and involve the community in the Kiggavik Project. The initiatives and events carried out in 2008 to inform and involve various stakeholders are detailed in this section. Table 7.1 lists the communication and consultation activities carried out during 2008.

Table 7.1 Community Information, Involvement and Consultation Activities – 2008

Date	Location	Audience	Purpose/ Topic
Jan 23	Baker Lake	CLC	Regular Meeting
Jan 28	Vancouver	NTI	Project update
Jan 30	Vancouver	KIA	Project Update
Feb 28	Baker Lake	CLC	Regular Meeting/ IQ
Mar 26	Rankin Inlet	Kivalliq Chamber of Commerce	Project overview/ Workforce Estimates
Mar 26	Rankin Inlet	Kivalliq Partners Outreach	Presentation on mining employment opportunities
Mar 26	Baker lake	HTO	Presentation on Road options
Mar 27	Baker Lake	Hamlet Council	Presentation on Road options
Mar 27	Baker Lake	CLARC	Presentation on Road options
Mar 31	Chesterfield Inlet	Hamlet Council	Update and presentation on uranium mining (SENEs)
Apr 1	Chesterfield Inlet	HTO and Elders	Update and presentation on uranium mining (SENEs)
Apr 1	Chesterfield Inlet	Community Meeting	Update and presentation on uranium mining (SENEs)
Apr 9	Iqaluit	Inukshuk High School class	Presentation and interactive session during NMS
Apr 21	Baker Lake	Arctic College pre-mining class	Presentation on employment opportunities in mining
Apr 22	Baker Lake	CLC	Regular meeting/ IQ
Apr 23	Arviat	KIA Board	Project Update
May 5	Baker Lake	Community feast	Sponsored and attended
May 6	Rankin Inlet	Kivalliq Wildlife Management Board	Update focussing in wildlife protection aspects of the project
May 8	Fort Smith	BQCMB	Project update - Caribou Protection Measures and cooperative research.
May 20	Rankin Inlet	Kiggavik Regional Liaison Committee	Regular meeting
May 21-22	McClean Lake/ Cluff Lake	Kiggavik Regional Liaison Committee	Tour of operating & decommissioned uranium mine and mill
May 28	Baker Lake	Hamlet Council	Update on road presentation/ Socioeconomic baseline
May 28	Baker Lake	CLC	Regular meeting/ socioeconomic baseline monitoring/IQ
May 29	Chesterfield Inlet	HTO	Marine Baseline Monitoring

Date	Location	Audience	Purpose/ Topic
May 29	Chesterfield Inlet	Hamlet Council	Socioeconomic and marine Baseline monitoring
Jun 12	Kiggavik camp	Premier, Minister of ET&T, Mayor	Tour of Kiggavik
Jun 23	Coral Harbour	Hamlet Council	Project Update
Jun 24	Repulse Bay	Hamlet Council	Project update
Jul 15–17	McArthur River, McClean Lake, Cluff Lake	KIA	Tour of operating and decommissioned uranium mines and mills
Aug 20	Baker Lake	HTO	Baseline monitoring (Jacques Whitford
Aug 21	Kiggavik	CLC	CLC visited Kiggavik camp and drilling program
Aug 21	Judge Sissons Lake and Schultz Lake	CLC reps	Visit to traditional homelands
Aug 26	Baker Lake	Regional Committee	Regular meeting
Aug 27	Kiggavik	Regional Committee	Tour of Kiggavik site
Sept 5	Baker Lake	Kivalliq Science Fair	Talks on minerals and job opportunities
Sept 5	Mallory Lake	Community reps	Homeland visit
Sept 6	Shultz Lake	Community reps	Homeland visit
Sept 7	Back River	Community Reps	Homeland visit
Sept 18	Baker Lake	CLC	Regular meeting/ Marine baseline monitoring & IQ
Sept 19	Baker Lake	Community feast	Sponsored and attended a community feast for mining week
Oct 6-7	McClean Lake & Cluff Lake	CLC, Kivalliq Wildlife Board, HS students	Tour of operating and decommissioned uranium mines
Oct 28	Baker Lake	CLC	Regular meeting/ Wildlife baseline monitoring
Oct 29	Rankin Inlet	KIA	Project Update
Nov 18-20	Winnipeg	BQCMB	Project update - Caribou Protection Measures and cooperative research.
Nov 29	Baker Lake	CLC	Regular Meeting/ Project Proposal
Dec 1	Arviat	Hamlet Council & High School	Project update and employment opportunities
Dec 2	Rankin Inlet	High School	Employment opportunities with Arctic College
Dec 3	Whale Cove	Hamlet Council & High School	Project update and employment opportunities with Arctic College
Dec 4	Chesterfield Inlet	Hamlet Council & High School	Project update and employment opportunities with Arctic College

7.1 Information Office

AREVA has operated an information office in Baker Lake since August of 2006. During 2008, this office was open to the public on a daily basis. A bilingual Community Liaison Officer was present each afternoon to speak with visitors to the office.



Baker Lake Information Office

7.2 Kiggavik Project Liaison Committees

7.2.1 Baker Lake Community Liaison Committee

The Kiggavik Project established a community liaison committee (CLC) in December 2006 as a means of involving the community of Baker Lake in the Project. The concept is endorsed by the Hamlet Council and committee members are appointed by their respective organizations. A community member is elected as co-Chair of the Committee. The other co-Chair is an AREVA representative.

The organizations represented on the CLC are:

- Hamlet Council
- Elders Society (Male and Female)
- Youth group (Male and Female)
- District Education Authority
- Hunter and Trappers organization
- Health Committee
- Justice Committee
- Business community
- Aberdeen Lake people

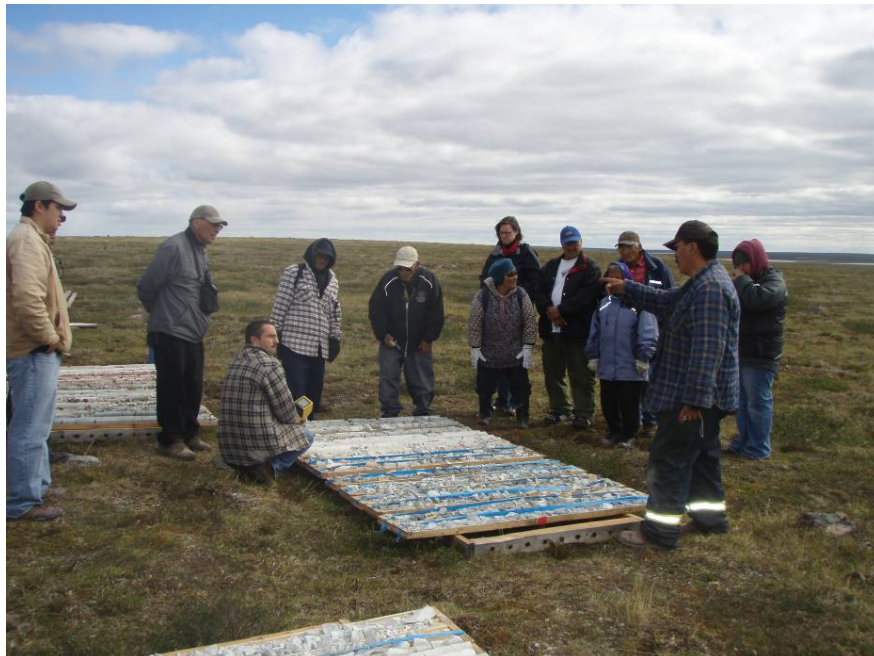
During 2008, the Baker Lake CLC met on 9 occasions – 7 times for meetings and twice for tours. The dates are shown in Table 7.1. Meetings were held at the AREVA Information Office in Baker Lake and were open to the public. Meeting announcements were made on the local radio with the date, time and location in advance. Following the

meetings, radio announcements were also made to provide the public with a meeting summary. Translation was provided and minutes were kept of each meeting.

The Baker Lake CLC provided community advice to the Kiggavik Project throughout the year. The following is a summary of topics discussed at meetings:

- Updates of Project activities (field program, environmental baseline work, permits)
- Possible road routes to the Kiggavik site and the means to obtain broad community input on this important topic
- IQ interviews. The committee had input into how interviews should be conducted, who should be interviewed and what questions should be asked. Regular updates were provided to the committee by the interviewer.
- Presentations by consultants. The CLC received presentations by four consultants performing baseline monitoring work.
- Project Consultations. The committee discussed the consultations that were carried out throughout the year.
- The committee provided input on road and dock options and on fuel storage
- Communication materials
- Local Employment Opportunities
- Sponsorships

The CLC made its second visit to the Kiggavik site on August 21. The CLC visited the McClean Lake operating uranium mine and mill on October 6 and the Cluff Lake decommissioned mines and mill on October 7.



CLC members observing cores at the Kiggavik site, August 2008

7.2.2 Regional Liaison Committee

In addition to the Baker Lake CLC, a Regional Liaison Committee (RLC) was formed in 2007. This committee consists of one representative from each Kivalliq community appointed by the Hamlet Councils. This committee is a means of ensuring ongoing communication between the Kiggavik Project and Kivalliq communities. Minutes are kept of the meetings.

The RLC met on two occasions in 2008. In May, the committee met in Rankin Inlet and then traveled to northern Saskatchewan where members visited the McClean Lake operating uranium mine and the Cluff Lake decommissioned uranium mine and mill. The committee attended presentations on the two operations, toured the sites and spoke with workers. In August, the committee met in Baker Lake and toured the Kiggavik camp and drill sites.

The topics of most interest to the RLC continue to be regional communications, training and employment development and business opportunities.



Regional Liaison Committee visiting decommissioned Claude Mining Area at Cluff Lake, Saskatchewan, May 2008

7.3 Kivalliq Community Involvement

Kiggavik Project staff visited communities throughout the Kivalliq region during 2008 and made presentations to various organizations. These communications are summarized in this section.

7.3.1 Arviat

Hamlet Council

- A Project update presentation was given to the Hamlet Council on December 1.

High School

- A presentation on employment opportunities was given to the high school students on December 1.

Kivalliq Inuit Association (KIA)

- A Project update presentation was given to the KIA board at a meeting on April 23.

7.3.2 Baker Lake

Hamlet Council

- A presentation on road options between Baker Lake and the Kiggavik site was given to the Baker Lake Hamlet Council on March 27.
- An update presentation on road options and a presentation on socioeconomic baseline monitoring were given to the Hamlet Council on May 28.

Hunters and Trappers Organization (HTO)

- A meeting on road options between Baker Lake and the Kiggavik site was held with the Baker Lake HTO on March 27. A presentation was given and the options discussed.
- A meeting on marine baseline monitoring including the Baker Lake HTO, AREVA and AREVA's consultant Nunami Jacques Whitford was held on August 20. There was a presentation followed by a discussion.

Community Lands and Advisory Committee (CLARC)

- A presentation on road options between Baker Lake and the Kiggavik site was given to the CLARC on March 27. A discussion followed the presentation.

Arctic College

- A presentation on employment opportunities was given to the Arctic College pre-mining class on April 21.

Kivalliq Science Fair

- AREVA attended the Kivalliq Science Fair in Baker Lake on September 5. Interactive discussions were held with the students on geology and on employment opportunities in mining.

7.3.3 Chesterfield Inlet

Hamlet Council

- On March 31, AREVA and representatives from SENES Consultants met with the Chesterfield Inlet Council as a follow-up to a previous request for a presentation on uranium mining from an independent body. This was the first of three similar presentations made during the visit. AREVA provided a Project update and SENES provided a presentation on uranium mining in Canada. A discussion followed the presentations.
- On May 29, AREVA, Golder Associates, and Nunami Jacques Whitford representatives met with the Chesterfield Inlet Hamlet Council. Presentations were given on socioeconomic baseline monitoring (Golder) and on marine baseline monitoring (Nunami Jacques Whitford). A discussion followed the presentations.
- On December 4, a Project update presentation was given to the Chesterfield Hamlet Council.

Hunters and Trappers Organization (HTO) and Elders

- On April 1, AREVA and representatives from SENES Consultants met with the Hunters and Trappers Organization with the same presentation that was given to the Hamlet Council the previous day. Elders were also invited to attend. A discussion followed the presentations.
- On May 29, AREVA, Golder Associates and Nunami Jacques Whitford representatives met with the Chesterfield Inlet HTO and Elders. Presentations were given on socioeconomic baseline monitoring (Golder) and on marine baseline monitoring (Jacques Whitford). A discussion followed the presentations.

Community Meeting

- On April 1, AREVA and representatives from SENES Consultants held a community meeting at the Hamlet Council Chambers in Chesterfield Inlet. This was a follow-up to a previous request for a presentation on uranium mining from an independent body. AREVA provided a Project update and SENES provided a presentation on uranium mining in Canada. A discussion followed the presentations.

High School

- A presentation on employment opportunities was given to the high school students on December 4. Arctic College also gave a presentation.

7.3.4 Coral Harbour

Hamlet Council

- On June 23, AREVA gave a Project update presentation to the Coral Harbour Hamlet Council. A discussion followed the presentation.

7.3.5 Rankin Inlet

Chamber of Commerce

- On March 27, AREVA gave a presentation to the Kivalliq Chamber of Commerce. The presentation included a Project update focussing on employment and business aspects of the Kiggavik Project.

Kivalliq Partners Outreach

- On March 27, AREVA gave a presentation on employment opportunities to a Kivalliq Partners Outreach class.

Kivalliq Wildlife Management Board

- On May 6, AREVA gave a presentation on the wildlife protective measures and baseline monitoring program to the Kivalliq Wildlife Management Board. An invitation to tour Saskatchewan mines was extended and the tour took place in October.

Kivalliq Inuit Association

- On October 29, AREVA gave a Project update to the KIA at a board meeting. The KIA Community Involvement Award was given to AREVA at this meeting.

High School

- A presentation on employment opportunities was given to the high school students on December 2. Arctic College also gave a presentation.

7.3.6 Repulse Bay

Hamlet Council

- On June 23, AREVA gave a Project update presentation to the Repulse Bay Hamlet Council. A discussion followed the presentation.

7.3.7 Whale Cove

Hamlet Council

- A Project update presentation was given to the Hamlet Council on December 3.

High School

- A presentation on employment opportunities was given to the high school students on December 3. Arctic College also gave a presentation.



AREVA Geologist talking with students at the Kivalliq Science Fair, September 2008

7.4 Homeland Visits

An initiative for people with close ties to the area where the Kiggavik Project is located began in 2006 and continued in 2007 and 2008. Participants visit both the Project site and their traditional homeland. 19 people participated in 2006, 4 people participated in 2007 and an additional 21 people participated in 2008. Each homeland visit consists of one or more Inuk, who was born on the land, along with family members traveling by helicopter and visiting a location where they lived on the land. The AREVA Community Liaison Officer normally accompanies the group on the visit.

In August, following a visit to the Kiggavik site, two groups of CLC members stopped for homeland visits on the way back to Baker Lake. AREVA's Community Liaison Officer accompanied 4 community members on a visit to Shultz Lake and a group of 5 community members visited a grave site at Judge Sissons Lake. In September, the AREVA Liaison Officer hosted four community members on a visit to Mallory Lake, another 4 to Shultz Lake and another 4 to the Herman River. A summary of AREVA's Homeland visits since 2006 is provided in Table 7.2. This program continues.

Table 7.2 Homeland Visits

Date		Location	Community Participants
2006	Jul 27	Aberdeen Lake and Beverly Lake	12
	Jul 28	Aberdeen Lake and Beverly Lake	3
	Aug 24	Aberdeen Lake	3
2007	Aug 17	Schultz Lake and Aberdeen Lake	4
2008	Aug 21	Schultz Lake	4
	Aug 21	Judge Sissons Lake	5
	Sep 5	Mallory Lake	4
	Sep 6	Schultz Lake	4
	Sep 7	Herman River	4



Homeland Visit to Shultz Lake, September 2008

7.5 Site Tours

Since 2005, community and other stakeholder groups have taken tours of uranium mines in Saskatchewan and the Kiggavik site.

7.5.1 Minesite Tours

During 2008, the Kiggavik Project hosted four tours of Saskatchewan minesites. The Kiggavik Baker Lake and Regional Community Liaison Committees each visited Saskatchewan mines this year. In addition, a group of Government of Nunavut employees, the KIA board and staff, the Kivalliq Wildlife Management Board and a group

of five students and one teacher from the Grade 10 Minerals and Energy course at the Jonah Amitnaaq High School at Baker Lake visited Saskatchewan uranium mines.

The minesite tours presently consist of a day at the operating open pit uranium mine and mill at McClean Lake and a day at the decommissioned uranium mines and mill at Cluff Lake, both operated by AREVA. Some of the tours also include a visit to the McArthur River underground uranium mine operated by Cameco Corporation with AREVA as a joint venture partner. A list of tours carried out since 2005 is provided in Table 7.3.

Table 7.3 Tours of Saskatchewan Mines

Date		Group		Tour and meetings
2005	Sep 13-15	14	Governments and co-management boards 32 from NTI, the three RIA's and the mayor of Baker Lake.	Toured McArthur River and McClean Lake and held meetings in Saskatoon with Saskatchewan Environment, CNSC and Environmental Quality Committee members
	Sep 19-21	32	NTI, the three RIA's and the mayor of Baker Lake.	Toured McArthur River and McClean Lake and met with Saskatchewan northerners who have worked with uranium mines.
	Oct	11	Councillors, elders, students, hunter/trappers and business people from Baker Lake	Toured McArthur River and McClean Lake
2007	Sep 11-13	12	NPC Commissioners and Staff	Toured McArthur River, McClean Lake and Cluff Lake and met with EQC reps in LaRonge
2008	May 21-22	8 1	Regional Committee members Arctic College rep	Toured McClean Lake and Cluff Lake and met with the McClean Lake Elder
	Jun 21-22	7	Staff members from Government of Nunavut Departments	Toured McClean Lake and Cluff Lake
	Jul 15-17	12	KIA Board Members and Staff	Toured McClean Lake and Cluff Lake and met with AREVA and CAMECO reps in Saskatoon
	Oct 6-7	11 9 5 2	Kivalliq Wildlife Management Board CLC Minerals Class from JA High School Regional Committee	Toured McClean Lake and Cluff Lake and met with McClean Lake elder and AREVA staff from the northern affairs office in LaRonge.



KIA Group at Cluff Lake, July 2008



Group of CLC, Kivalliq Wildlife Management Board, JA High School and Regional Liaison Committee at McClean Lake Sue Mining Area, October 2008

7.5.2 Kiggavik Site Tours and Visits

In 2008, three stakeholder groups toured the Kiggavik site and an additional four community groups visited the Kiggavik site as part of a homeland visit. The three tour groups were the Premier of Nunavut along with the MLA, the Mayor of Baker Lake, the Minister of Economic Development and Transportation and others; the Baker Lake Community Liaison Committee; and, the Kivalliq Regional Liaison Committee. The tours included a visit to the camp, to the core logging and storage area, and generally to one or more of the drill rigs. Staff members explain the various aspects of the Project. The tours generally include a meal at the camp. Homeland visit groups often stop at Kiggavik for a short time and usually have a meal so they can maximize their time at their homeland site. A list of the stakeholder and community visits to Kiggavik is provided in Table 7.4.

Table 7.4 Site Visits to Kiggavik

Date		Group		Visit
2005	Aug 23	4	Baker Lake elders	Visit after 2003 and 2004 cleanup
2006	Jul 27	12	Homeland visitors	Visit Kiggavik site during homeland visit
	Jul 28	3	Homeland visitors	Visit Kiggavik site during homeland visit
	Aug 24	3	Homeland visitors	Visit Kiggavik site during homeland visit
2007	Aug 12	10	CLC & community members	Tour of camp, core area and drilling
	Aug 17	4	Homeland visitors	Visit Kiggavik site during homeland visit
2008	Jun 12	7	Premier, Mayor and group	Tour of camp, core area and drilling
	Aug 21	8	CLC	Tour of camp, core area and drilling
	Aug 27	5	Regional Liaison Committee	Tour of camp, core area and drilling
	Sep 5	4	Homeland visitors	Visit Kiggavik site during homeland visit
	Sep 6	4	Homeland visitors	Visit Kiggavik site during homeland visit



Premier of Nunavut, Mayor of Baker Lake, Minister of ED&T and Kiggavik group, June 2008

7.6 Other Communication Events

Other events and audiences in Nunavut where information about the Kiggavik Project was presented and/or discussed included:

- January 28 – Meeting with NTI in Vancouver for a Project update
- January 30 – Meeting with KIA in Vancouver for a Project update
- April 9 – Presentation and interactive discussion with Inukshuk High School students in Iqaluit during the Nunavut Mining Symposium.
- May 5 – Project staff attended the Hamlet days community feast sponsored by AREVA
- May 8 – A presentation giving a Project update and a summary of caribou protection measures and data was made to the Beverly Qaminirjuaq Caribou Management Board in Fort Smith
- November 18-20 – A presentation giving a Project update and a summary of caribou protection measures and data was made to the Beverly Qaminirjuaq Caribou Management Board in Winnipeg

8 INSPECTIONS

8.1 Conducted by Regulatory Bodies

Land Use Inspectors visited the Kiggavik Project site three times during the 2008 field season, on July 22, July 29 and September 19. There were two inspections by the Mines Inspector (Workers' Safety & Compensation Commission), on July 9 and August 21.

An Indian and Northern Affairs Canada (INAC) environmental inspection was conducted on July 22, 2008. The locations inspected were the Kiggavik camp and operating drill sites. The following is the one concern noted on his report and associated actions taken:

RECOMMENDATIONS/CONCERNS	ACTION TAKEN
Drill Waste Containment	Sandbags were placed around drill waste for containment.

A second inspection, focused on water use, was conducted by INAC on July 29, 2008. The Water Use Inspection Report received at the time of inspection indicated that the general condition of the camp was acceptable. However, it was noted that "two releases of drill cuttings were released into the environment". These releases had been previously reported by AREVA on July 7 and July 15 (refer to Section 12). The following is a list of the concerns reported and associated actions taken:

RECOMMENDATIONS/CONCERNS	ACTION TAKEN
Waste was piling up in camp; Inspector provided a direction to remove waste.	Waste was removed and hauled to Baker Lake landfill.
Secondary Containment at Fuel Cache. More may be required in driller's area in Camp.	More secondary containments were set up as needed.
Two releases of drill cuttings into the Environment and sampling is required to ensure no long lasting contamination.	AREVA collected water samples and sediment samples at one of the spill sites. A gamma survey was also conducted following the drill fluid path to Andrew Lake (refer to Section 12).

A third inspection was conducted by the Kivalliq Inuit Association (KIA) on September 19, 2008. The inspection covered the overall site locations. The areas inspected were the fuel storage area, grey water, incinerator, wildlife sightings log, heavy equipment and Andrew Lake drill cutting spill site (refer to Section 12).

RECOMMENDATIONS/CONCERNS	ACTION TAKEN
Fuel storage area was also being used as a fuelling area and that there was no proper secondary containment where fuel pumps are being used. Recommendations: ensure all re-fuelling have secondary containment.	All re-fuelling areas will have secondary containment to prevent leaks and spills into the tundra at the start of 2009 operating season.
Sewage – no concerns	None required
Incinerator – no concerns	None required
Wildlife sightings log – no concerns	None required
Heavy Equipment – one piece of equipment stand up loader/fork lift. – No concerns noted.	None required
Andrew Lake drill cuttings spill site. – No concerns and no other drill sites were inspected.	None required

The inspection was conducted at the very end of the operating season and drilling operations were completed at the time of inspection. The camp site was preparing to shut down for the season at the time of the inspection.

The findings of the inspections by the Mines Inspector (Workers' Safety and Compensation Commission) were as follows:

RECOMMENDATIONS/CONCERNS	ACTION TAKEN
Diamond drills to be equipped with a suitable fall protector anchor capable of withstanding the arresting force of a person falling from the drill tower basket.	Anchor was placed as required and fall arrest discussed at safety meetings.
All people dispatched to site to have their required qualifications. An audit of the drilling contractor's certifications noted that not all drillers had as a minimum their Level 1 certification and not all their supervisors had a Level 2 certification.	AREVA followed up with the drilling contractor to ensure that all employees are certified prior to reporting to site. AREVA keeps training records for all people on site. The Mines Inspector was on site and some of the drilling staff wrote the Supervisor's Exams.
Remove damaged section of diamond drill's winch line from service and ensure that when the line is fully played out at least 3 dead wraps of rope remain on the drum.	Drill was taken out of service until a replacement cable was shipped to site and installed.

RECOMMENDATIONS/CONCERNS	ACTION TAKEN
Ensure the highly traveled access area in and out of the drill shack is a good solid step or ramp and does not pose a trip, slip or twisting hazard.	Proper steps were constructed at each rig and were inspected daily by the drilling supervisor and AREVA EH&S.

9 PROGRESSIVE RECLAMATION

As discussed in the Abandonment and Restoration Plan, it is AREVA's intention to establish chemical and physical stability at all sites impacted by exploration activities, to the greatest extent practical. However, due to challenges surrounding physical reclamation of surface disturbance the primary focus is currently on chemical stability. All drill sites from the current year's field program are inspected for fuel stained soil and undergo a gamma survey for radioactive contamination. Radiologically or chemically contaminated soil or cuttings are collected in appropriate containers and stored in the long-term core storage area for future handling.

Drill sites must be cleaned to the extent that gamma radiation at a height of 1 metre from surface is as close to pre drilling conditions as is practical and is less than 1 $\mu\text{Sv/h}$. Radioactive material is collected, appropriately packaged and stored in the existing core storage areas. Gamma radiation levels at 1 m from the surface of the core storage area should be reduced to 1 $\mu\text{Sv/h}$ and in no instances exceed 2.5 $\mu\text{Sv/h}$. If necessary, residual radioactive material will be transported to the McClean Lake Operation for storage and disposal.

9.1 Chemical and Radiological Restoration

All drill sites are subject to gamma surveys prior to conducting any drilling activities and again following the completion of the hole. If elevated levels of gamma radiation are detected in the post-drilling survey, clean-up activities are conducted followed by another gamma survey to ensure levels have been reduced and are below 1 $\mu\text{Sv/h}$.

A gamma radiation survey was conducted in the vicinity of each borehole and along the discharge route of the drilling water. Readings with an Automess 6150 AD 6 were made at one meter above the ground at approximately five meter intervals.

A summary of the gamma survey data collected at each drilling location from the 2008 field season is presented in Table 9.1 and discussed below. Note that in some cases, more than one hole was drilled from a single rig location, and therefore one set of pre- and post-gamma survey results correspond to a number of holes. Drill hole locations are presented in Figure 9.1 and Figures 9.2 through 9.21 show the survey results.

Table 9.1 Gamma Survey Data from 2008 Drill Locations

Drill Site	Pre-Gamma		Post-Gamma	
	Survey Date	Dose Rates (µSv/h)	Survey Date	Dose Rates (µSv/h)
MZ-08-01	May 29	0.0 - 0.5	June 10	0.014 - 0.401
MZ-08-02	June 8	0.023 - 0.455	July 1	0.037 - 0.569
MZ-08-03	June 12	0.01 - 0.089	June 21	0.03 - 0.379
MZ-08-04	May 29	0.1 – 12.8	June 21	0.189 - 11.75
MZ-08-05	June 18	0.050 – 0.174	June 23	0.029 – 0.453
MZ-08-06	June 18	0.011 – 0.173	June 27	0.01 - 0.38
MZ-08-07	June 20	0.151 – 0.179	June 27	0.01 - 0.37
CZ-08-01	Sept 1	0.06 – 2.61	Sept 10	0.03 - 2.88
ANDW-08-01	June 25	0.01 – 0.26	Sept 11	0.01 - 0.57
ANDW-08-02	Aug 8	0.01 - 1.63	Sept 3	0.03 - 1.51
ANDW-08-03	June 27	0.01 – 0.38	July 9	0.014 - 0.252
ANDW-08-04	July 9	0.009 - 0.216	Sept 3	0.01 – 0.58
ANDW-08-05	Aug 30	0.01 – 0.27	Sept 11	0.02 – 0.34
ENDG-08-01,08-02,08-03	July 3	0.011 – 0.252	Sept 18	0.01 - 0.26
ENDG-08-03A	*		Aug 22	0.00 – 0.28
EZ-08-01	Sept 1	0.00 – 0.37	Sept 16	0.01 - 0.18
GRANITE-08-020	Aug 22	0.00 - 0.19	Sept 3	0.00 – 0.21
BONG-08-36,08-37,08-38	June 13	0.004 – 0.132	July 12	0.022 - 1.245
BONG-08-40A	*		July 24	0.05 – 0.26
BONG-08-41	July 22	0.02 - 0.16	July 31	0.07 - 0.18
BONG-08-42	July 31	0.00 – 0.22	Aug 21	0.01 - 0.72
BONG-08-43	Aug 2	0.00 - 0.22	Aug 8	0.0 – 0.17
BONG-08-44	Aug 16	0.01 – 0.23	Sept 18	0.01 - 0.14

* Pre-gamma survey was inadvertently omitted.

In most cases, the measured dose rates were below 1 µSv/h. The cases where dose rate exceeded this value are discussed as follows:

MZ-08-04 - The pre-gamma survey was conducted at this site on May 29 indicating gamma dose rates ranged from 0.1 – 12.8 µSv/h. Nearly all of the readings are above 1 µSv/h. The area is in the center of the most elevated surface manifestation (outcropping) of uranium ore in the region, resulting in elevated natural background levels. The post-gamma survey was conducted on June 21 and showed readings ranging between 0.189 and 11.75 µSv/h. The elevated gamma dose rates are not believed to be a result of exploration activities as pre- and post-operational levels are similar, despite exceeding 1 µSv/h.

CZ-08-01 - The pre-gamma survey conducted at this site on September 1 indicated gamma dose rates ranged from 0.06 – 2.61 µSv/h. The post-gamma survey was conducted on September 10 and showed readings ranging between 0.03 and 2.88 µSv/h. The east end of the survey grid indicated residues (0.5 µSv/h to 2.8 µSv/h) from many historic boreholes (from previous drilling in the 1980's and 1990's) that are present

throughout the area. A more detailed survey and site cleaning, as required, will be conducted prior to abandonment of the site, in accordance with the Abandonment and Restoration Plan.

ANDW-08-02 – The pre-gamma survey was conducted at this site on August 8. These readings ranged between 0.01 and 1.63 $\mu\text{Sv/h}$. The post-gamma survey was conducted on September 3 with readings ranging from 0.03 to 1.51 $\mu\text{Sv/h}$. All measured does rates were below 1 $\mu\text{Sv/h}$ with the exception of a gamma reading of 1.51 $\mu\text{Sv/h}$ located directly adjacent to the borehole. As the elevated reading was present during the pre-gamma survey, it is considered the result of residue from historic drilling activity. A more detailed survey and site cleaning, as required, will be conducted prior to abandonment of the site, in accordance with the Abandonment and Restoration Plan.

BONG-08-36 – The pre-gamma survey was conducted at this site on June 13. These readings ranged between 0.004 and 0.132 $\mu\text{Sv/h}$. The post-gamma survey was conducted on July 12 with readings ranging from 0.022 to 1.245 $\mu\text{Sv/h}$. The site was cleaned to reduce measured does rates to below 1 $\mu\text{Sv/h}$; however, a complete gamma survey was not conducted following cleaning. This site will be re-visited during the 2009 season and the survey results included with the 2009 Annual Report.

9.2 Physical Reclamation

As discussed in the Abandonment and Restoration Plan, it is AREVA's intention to reclaim surface disturbed sites in an acceptable manner. Reclamation methods are currently being investigated and will be implemented under the direction and approval of experienced consultants, community members and regulatory agencies. Restoration work will be completed prior to the expiry of the Land Use License.