

Environmental Inspection

Kangirsuk: June 9-13, 2008

Introduction

During bi-annual environmental inspections of Nunavik, the regional office of the Ministère Développement durable, l'Environnement, et des Parcs (Ministry of Sustainable Development, Environment and Parks, MDDEP) visited the Northern Village of Kangirsuk from June 9-13, 2008. The MDDEP team was accompanied by employees from the Kativik Regional Government (KRG) and the Kativik Environmental Advisory Committee (KEAC). The community's Municipal Manager and Assistant Secretary-Treasurer also assisted in the inspections.

The main objectives of this visit were:

- To assist in the organization of hazardous waste in the community
- To sample the soil evacuated from a past oil spill for hydrocarbon level
- To visit and assess the clean-up of a nearby abandoned mining exploration site
- To inspect and assess the recent fuel spills in the community

In this report, the team has compiled its observations and recommendations and summarized the work undertaken while visiting Kangirsuk.

Hazardous Waste

During the time spent in Kangirsuk the team focused most of their efforts on organizing the barrels found on the site located on the hill above the rock quarry, near the airport. There were approximately 150 barrels of unknown content on this site.

A trailer located on the site, and which had been blown over in a windstorm was demolished and moved away from the barrels to allow for easier access. The team members then visually sampled the contents of each barrel, finding a mixture of used oil, anti-freeze, solvents, fuel and water. Some barrels were found to have resin. The barrels were labeled accordingly.

Some barrels were badly damaged, leaking or rusted and so their contents were transferred into barrels in good condition and that could be transported south by boat.

Once all the barrels had been labeled and assessed as transportable, they were separated into two categories. One group of barrels contained used oil, of a mixed content of used oil with small amount of water or anti-freeze. These barrels can remain in the community and the used oil be burned in a used-oil furnace that they community may decide to

purchase. The small amounts of water and anti-freeze can be easily separated from the used oil by way of decantation.

The other group of barrels consists of heavily mixed products that cannot be burned in a used oil furnace. These items are considered hazardous waste and should be stored in one designated location, rather than many. Community members should be made aware of this location so that other barrels of mixed products can be stored there. When the community is ready, the barrels should be placed on pallets, labeled, properly strapped and packaged together and sent south by boat to a recovery facility.

The team suggested that the community identify a specific location where all hazardous waste could be stored. A well-identified depot will ensure proper organization and fewer complications when it comes time to ship these items south. A new hazardous waste container was located on the beach, near the dock, that can be moved to a more safe location, away from any bodies of water, and used to store hazardous waste.

Signs that indicate the types of hazardous waste and the dangers they pose to the environment and human health were presented to the community by the KEAC. These signs should be used to identify the location where community members can deposit their hazardous waste such as batteries, paints and solvents, refrigerators and freezers (halocarbons) and used oil.

Finally, since these barrels have been on the site for many years and some of which were leaking, the soil there is visibly contaminated. The team suggested that once the barrels are removed from the site to a more permanent hazardous waste depot, that a consultant who can perform a soil characterization and suggest methods for soil treatment should evaluate the site.

The community has asked that a follow-up to the 2007 hazardous waste training course be provided for community members who deal with this type of waste on a regular basis, especially the municipal garage employees and the municipal manager.

Recommendations:

-Move the hazardous waste container to a permanent, safe located where community members can store their hazardous waste,

-Identify the container's location and its contents by using the signs provided by the KEAC and by announcing the container's location to the community ie. radio

-Move the barrels organized by the team to a safer, more permanent location (possibly next to the hazardous waste container), identify this location and inform the community of its purpose.

-A consultant should be hired to evaluate the soil at the barrel site.

-The community of Kangirsuk should consider purchasing a used oil furnace or consider sending its used oil to a community that has such a furnace (Inukjuak, Salluit or Kuujjuaq).

Oil/Fuel Spills

During the visit to Kangirsuk the team was shown various sites in the village where fuel and oil spills had occurred recently. The spills were mainly located at houses belonging to the Kativik Municipal Housing Bureau (KMHB). The spills examined were said to have been caused by cracked or rusted fuel tanks attached to the houses. A complete report of these site visits by the MDDEP will be available for the municipality to consult.

Coincidentally, while the spills were being inspected by the MDDEP, someone from KMHB was also on site. A casual conversation was held between the two organizations regarding the creation of a procedure to follow in case of a spill and whose responsibility it is to clean up the contaminated site. The municipality will be informed of the procedure and conclusions from the conversation between the MDDEP and KMHB.

Furthermore, samples were taken of the soil excavated from the site where a major fuel spill occurred in 2005. This soil was taken to the quarry, placed in several piles next to each other, some on plastic tarps and some not. A backhoe was used to turn the soil in the piles so that representative samples could be taken.

Laboratory analysis show that levels of hydrocarbons are low in all but one pile of soil, and therefore this soil can be used to fill-in the local solid waste disposal site. In the one pile where levels remain high (A1-2), treatment should continue by turning the soil regularly to allow the fuel to evaporate. (See attached map for location of unusable pile of soil.)

Also, the team suggests that any pile of contaminated soil be turned more regularly to encourage aeration of the hydrocarbons and that they be spread out more so that the piles measure no more than 2 feet high.

The municipality noted that they do not have the necessary equipment and tools to properly handle a spill and wish that these could be supplied to them.

Recommendations:

- Continue to treat spills with the current method*
- Be sure to advise both the KRG and the MDDEP of any spills by completing the Environmental Emergency Report Form*
- Turn pile of contaminated soil with heavy equipment regularly and ensure piles are no more than 2 feet high*
- Make a systematic inspection, in collaboration with KMHB, of all residential tanks that have not been changed in the last 2-3 years, and make repairs or changes to the tanks, if necessary*

Drinking Water

During visit to the water treatment plant, the MDDEP noticed that the chlorination system was out of order. The system will have to be repaired. Also, samples will have to be taken weekly for colilert analysis. The sampling is not done according to the agreement. With the colilert test, a sample for free chlorine analysis has to be done at the same time. A new UV lamp will have to be purchased.

Waste Water Treatment

The MDDEP visited the local lagoon and was satisfied with how it is functioning,

Abandoned Mining Site

On June 11 part of the team traveled to a nearby abandoned mining site with the help of two local guides. The purpose of this trip was to assess the amount of waste left behind at this site and to sample soil in specific areas for contaminants.

The site remained the same since it was last assessed in 2001. The major concern was the possibility of mining acid drainage. Soil and water samples were taken by the MDDEP chemist Raynald Gagnon, with the analysis showing negatives results. Others waste found on the site included 70 empty barrels, 13 barrels with residue, 11 bottles of propane, 100 L of grease, aluminum trays, metal rods, wood debris, etc.

Following this visit, the KRG lead a team of workers to the site during the week of June 23. All toxic waste, propane bottles and barrels were evacuated by helicopter and taken to a specific location. Empty barrels were crushed. Latter this summer the material will be put in a container. The wood debris was burned on site. The only waste remaining are the aluminum trays and metal debris, which have been placed strategically for a pickup this winter by snowmobile. This metal debris will also go in the container that will be transported down south next year for proper treatment of its various contents.

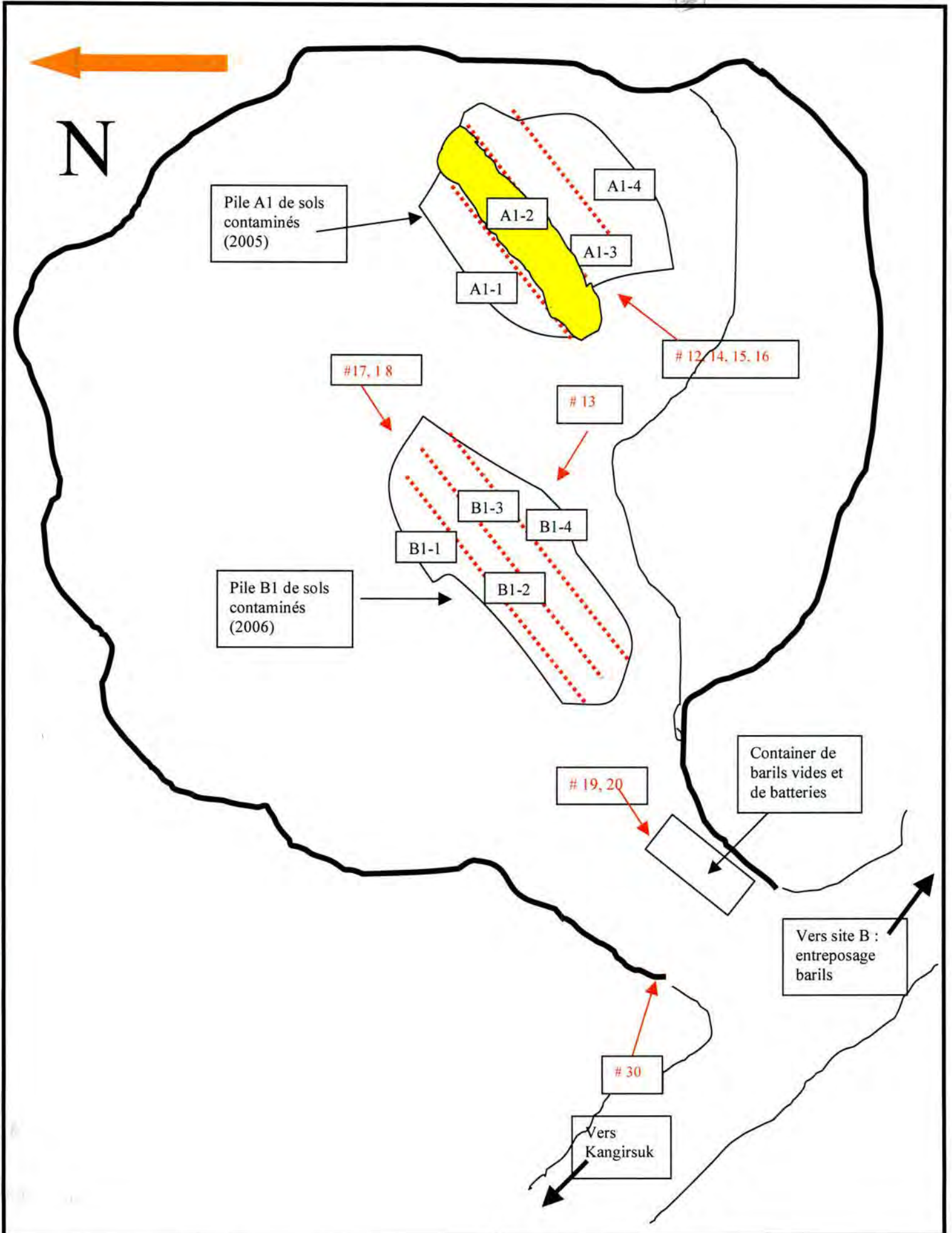
Conclusion

After five days in Kangirsuk, the team believes that the objectives mandated for this trip, were accomplished. There was great success with the organization of the barrels found near the quarry and now that the community has purchased a hazardous waste container, it is the team's hope that better overall organization of hazardous waste can be achieved.

Regarding the soil samples, results will be sent to the Northern Village of Kangirsuk once they have been received from the laboratory. The KRG will follow-up concerning the next steps regarding this soil.

Finally, the team believes that the Northern Village of Kangirsuk is willing to improve the organization of their hazardous waste and because they already exhibit well a executed response to oil and fuel spills in their community, the team is assured that the right people are on hand to fulfill this desire.

CROQUIS #2 : Carrière



NO REF : 7610-10-01-19016-00

LIEU : Village de Kangirsuk

SECTEUR : Nunavik

DATE DE L'INSPECTION : 2008-06-09 au 06-13

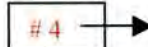
DESSINE PAR : Daniel Richer

SIGNATURE : _____

DATE DE LA REALISATION : 2008-06-17

NOTE : Échelle : aucune

: Numéro et direction des photos



8- 5601



Hôtel de la coop de Payne Bay Payne Bay Co-op Hotel

■ Gérant / Manager (819) 935-4762 • Fax (819) 935-4121
■ Kangirsuk, Québec, J0M 1A0
Courriel / Email: hotels@fcnq.ca

Pour réserver / For reservations: 1-866-336-2667 • (514) 457-3294
N° de TPS / GST#: R100-299-593
N° de TVQ / PST#: 10 0060 0357-1

(ÉCRIRE EN LETTRES MOULÉES / PLEASE PRINT IN BLOCK LETTERS)

Invité / Guest Nancy Pea
Compagnie / Company KEAC
Adresse / Address P.O. Box 930
Ville / Town Kujjuag
Province QC Code Postal / Postal Code Jom 1C0
Téléphone / Telephone (819) 964-2961 4-2287

Arrivée / Arrival June 9 Départ / Departure June 13

Tarif par nuitée Rate per night	<u>195.00</u>	Nombre de nuits Number of nights	<u>4</u>	Montant Amount	<u>780.00</u>
Tarif par nuitée Rate per night		Nombre de nuits Number of nights		Montant Amount	
Transport d'arrivée Transport arrival	<input type="checkbox"/>	Transport de départ Transport departure	<input type="checkbox"/>	Montant Amount	
Frais d'appel Telephone charges				Montant Amount	

Carte / Card	Chèque / Cheque
<input type="checkbox"/> Visa <input type="checkbox"/> Mastercard <input checked="" type="checkbox"/> FCNQ	<input type="checkbox"/> Chèque / Cheque <input type="checkbox"/> Comptant / Cash
# Réservation / Reservation # <u>3330</u>	

Somme partiel Sub total	<u>780.00</u>
TPS / GST (%)	<u>39.00</u>
Somme partiel Sub total	<u>819.00</u>
TVQ / PST (%)	<u>61.43</u>
TOTAL	<u>880.43</u>

97-0849
KATNIK ENVIRONNEMENTAL
ADVISORY COMMITTEE

Numéro d'autorisation / Authorisation number _____ Numéro de chambre / Room number 106

Numéro de feuillet / Charge slip number _____ # Autorisation de voyage / Travel warrant # _____

[Signature]
Signature de la coop / Co-op signature

[Signature]
Signature du client / Customer's signature



ᐅᑎᐱᑲ ᓄᓇᑕᑕᐱᑦ ᐅᑕᑦᐱᑲᑲ
 Administration régionale KATIVIK Regional Government
 P.O. Box 9 KUUVJUAQ (QUÉBEC) CANADA J0M 1C0

TRANSMISSION

Enter Department Name Here

ATTENTION/ᐃᑲᑲᑲ : Eli Angiyau
819-496-2500

Fax number ᑲᑲᑕᑲᑕ ᑲᑲᑕᑲᑲᑲ : _____

Date/ᐃᑕ ᓂᑦ : June 3/08

Number of pages / Includant this one
 Nombre de pages / Incluant celle-ci
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Sender / Expéditeur / ᐃᑲᑕᑕᑕ ᑲᑲᑕᑲᑲᑲ : Adel Yassa / ᐃᑎᑕ / Department Director

(Extension) / ᑲᑲᑕᑕᑕ ᑲᑲᑕᑲᑲᑲ : May Berthe / ᐃᑎᑕ / Administrative Assistant

Nancy Oua / 2287

Subject

ᐱᑕᑕᑲ :

Comment
 Hi Eli.
 Here is your itinerary for next week's trip with the MDDEP.
 You will travel by charter with us from Kuujuaq to Kangirsuk & back.
 I have made your hotel reservations as well.
 Call me if you have questions -


Original will be mailed / L'original suivra par courrier
 YES / OUI NO / NON

Please contact the sender if any pages are missing
 Veuillez contacter l'expéditeur s'il manque des pages

Confirmation

SALLUIT HOTEL
SALLUIT, J0M1S0

Tel : 866-336-2667 Fax : 514-457-7724

E-mail/Courriel hotels@fcnq.ca

CANCELLATION POLICY: 24 hours before arrival date

POLITIQUE D'ANNULATION: 24 heures avant l'arrivée

SALLUIT HOTEL is a smoke free hotel/SALLUIT HOTEL est non fumeur

Cie/co. : K.R.G. 02875

Tél./Tel. : 819-964-2961

Nom/Name : ELI ANGIYOU

Carte Coop Card 97-02875-

Demandé par/ Req. by : SARAH

C/C # : - - -

Courriel/E-mail travel@krg.ca

Exp. :

Aut. Voy#/Warrant # : K23759

Réservation No. : 2923

Arrivée / Arrival : 13/06/2008

Chambres / Room: 1

Départ/Departure : 14/06/2008

Transport/Pick up :

Nuits/Nights : 1

Arr. de/From :

Pers./# People : 1

Rés. Par/ Res by : AMANDA HOOGLAND

Tarif par nuitée :
Rate per night : \$195.00

Modif :

Notes :

K23759

CONFIRMED

DVC-42868-1837 22MAY08

PRINT PNR

YUL004 0049

YUL004 49 1837 22MAY /CA/PID42868

1. ANGIYOU/ELI RD7NP

2.	3H 601 Y	MO09JUN	AKVYPX HK1	1105 1130
3.	3H 501 Y	MO09JUN	YPXYVP HK1	1145 1310
4.	3H 820 Y	FR13JUN	YKGYZG HK1	1510 1730
5.	3H 601 Y	SA14JUN	YZGAKV HK1	0915 1050

6. 964-2961KRG

7. T

8. FQ #1/Y ID05/22MAY08

AKV

XYPX Y	ID05N1 NVB	NVA09JUN PC
YVP Y	ID05N1 NVB	NVA09JUN PC
YKG	S U R F A C E	
YZG Y	ID05N1 NVB	NVA09JUN PC
AKV Y	ID05N1 NVB	NVA09JUN PC

9. FQ #1/ FARE CAD 1275.85

DVC TAXES CAD 63.79 XG CAD 100.47 XQ

PRINT TOTAL CAD 1440.11

YUL AKV 3H X/YPX 3H YVP672.60/-YKG 3H YZG368.60 3H AKV234.65CAD1
275.85END

10. OSI 3H AKV 501 Y MO09JUN YPXYVP HK1 1145 1310

11. OSI 3H AKV 820 Y FR13JUN YKGYZG HK1 1510 1730

12. OSI 3H AKV 601 Y SA14JUN YZGAKV HK1 0915 1050 .

13. OSI 3H *****ATTN AKV*****

14. OSI 3H ISSUE TKT ONE DAY BEFORE DEPARTURE

15. OSI 3H WRITE APC IN FARE BOX

16. OSI 3H WRITE KRG IN ENDO BOX

17. OSI 3H WRITE IN FORM OF PAYMENT BOX, TW K23759 AND RD7NP

18. YUL004

Confirmation

KANGIRSUK COOP HOTEL
KANGIRSUK, QC, , J0M1A0

Tel : 866-336-2667 Fax : 514-457-7724

E-mail/Courriel hotels@fcnq.ca

CANCELLATION POLICY: 24 hours before arrival date

POLITIQUE D'ANNULATION: 24 heures avant l'arrivée

KANGIRSUK COOP HOTEL is a smoke free hotel//KANGIRSUK COOP HOTEL est non fumeur

Cie/co. : K.R.G. 02875

Tél./Tel. : 819-964-2961

Nom/Name : ELI ANGIYOU

Carte Coop Card 97-02875-

Demandé par/ Req. by : SARAH

C/C # : - - -

Courriel/E-mail travel@krg.ca

Exp. :

Aut. Voy#/Warrant # : K23759

Réservation No.: 3332

Arrivée / Arrival : 09/06/2008

Chambres / Room: 1

Départ/Departure : 11/06/2008

Transport/Pick up :

Nuits/Nights : 2

Arr. de/From :

Pers./# People : 1

Rés. Par/ Res by : AMANDA HOOGLAND

Tarif par nuitée :
Rate per night : \$195.00

Modif :

Notes :

Confirmation

GEORGE RIVER HOTEL
KANGIQUALLUJUAQ, QC. , J0M1N0

Tel : 866-336-2667 Fax : 514-457-7724

E-mail/Courriel hotels@fcnq.ca

CANCELLATION POLICY: 24 hours before arrival date

POLITIQUE D'ANNULATION: 24 heures avant l'arrivée

GEORGE RIVER HOTEL is a smoke free hotel/GEORGE RIVER HOTEL est non fumeur

Cie/co. : K.R.G. 02875

Tél./Tel. : 819-964-2961

Nom/Name : ELI ANGIYOU

Carte Coop Card 97-02875-

Demandé par/ Req. by : SARAH

C/C # : - - -

Courriel/E-mail travel@krg.ca

Exp. :

Aut. Voy#/Warrant # : K23759

Réservation No.: 2915

Arrivée / Arrival : 12/06/2008

Chambres / Room: 1

Départ/Departure : 13/06/2008

Transport/Pick up :

Nuits/Nights : 1

Arr. de/From :

Pers./# People : 1

Rés. Par/ Res by : AMANDA HOOGLAND

Tarif par nuitée :
Rate per night : \$195.00

Modif : AMANDA HOOGLAND

Notes :

Confirmation

FORT CHIMO COOP HOTEL
KUUJJUAQ, QC, J0M1C0

Tel : 866-336-2667 Fax : 514-457-7724

E-mail/Courriel hotels@fcnq.ca

CANCELLATION POLICY: 24 hours before arrival date

POLITIQUE D'ANNULATION: 24 heures avant l'arrivée

FORT CHIMO COOP HOTEL is a smoke free hotel/FORT CHIMO COOP HOTEL est non fumeur

Cie/co. : K.R.G. 02875

Tél./Tel. : 819-964-2961

Nom/Name : ELI ANGIYOU

Carte Coop Card 97-02875-

Demandé par/ Req. by : SARAH

C/C # : - - -

Courriel/E-mail travel@krg.ca

Exp. :

Aut. Voy#/Warrant # : K23759

Réservation No.: 13456

Arrivée / Arrival : 11/06/2008

Chambres / Room: 1

Départ/Departure : 12/06/2008

Transport/Pick up :

Nuits/Nights : 1

Arr. de/From :

Pers./# People : 1

Rés. Par/ Res by : AMANDA HOOGLAND

Tarif par nuitée :
Rate per night : \$195.00

Modif :

Notes :

Confirmation

KANGIRSUK COOP HOTEL
KANGIRSUK, QC, J0M1A0

Tel : 866-336-2667 Fax : 514-457-7724

E-mail/Courriel hotels@fcnq.ca

CANCELLATION POLICY: 24 hours before arrival date

POLITIQUE D'ANNULATION: 24 heures avant l'arrivée

KANGIRSUK COOP HOTEL is a smoke free hotel/KANGIRSUK COOP HOTEL est non fumeur

Cie/co. : Kativik Environmental Advisory Committee

Tél./Tel. : 819-964-2961

Nom/Name : DEA NANCY

Carte Coop Card 97-00899-

Demandé par/ Req. by :

C/C # : - - -

Courriel/E-mail ngirard@krg.ca

Exp. :

Aut. Voy#/Warrant # :

Réservation No.: 3330

Arrivée / Arrival : 09/06/2008

Chambres / Room: 1

Départ/Departure : 13/06/2008

Transport/Pick up :

Nuits/Nights : 4

Arr. de/From : KUUJJUAQ

Pers./# People : 1

Rés. Par/ Res by : LINDA ALLMAN

Tarif par nuitée :
Rate per night : \$195.00

Modif :

Notes :

Thanks for considering!

Nancy

Subject: RE : Informal request
Date: Friday, May 16, 2008 3:17 PM
From: josee.brazeau@mddep.gouv.qc.ca
To: <ndea@krg.ca>

Développement durable,
Environnement et Parcs
Québec

Hi Nancy,

I almost forgot about your request... Sorry...

Each characterization as to be carefully planned and bottles prepared in advance depending on which parameter you want to analyse. So, you have to know exactly what you are looking for in order to have the right bottles to do the sampling. Some parameters need specific preservative or specific bottles (glass, plastic...) and some parameters can not be mixed with others ! Some parameters need a certain volume of liquid in order to do the analysis... As you can see, it's a bit complicated to bring bottles without knowing exactly which analyses you want done ! Remember in 2006, while in Salluit, we sampled the contaminated water around the tank farm ??? The bottles that we brought with us were prepared in advance by our lab in Quebec. We also prepared a sampling plan so we knew exactly what we were looking for !

Hope this answers your question... Since we are talking about sampling... Do you know if Renewable resources will be able to pay for the analysis of the soil samples in Kangirsuk ??? Like I just explained, if KRG is able to pay for the analysis, we will have to do the sampling plan, make the arrangements with our lab and order the right bottles to do the sampling before we go... There is not much time left... The whole thing represents approximately 1500\$ to 2000\$ (max)

I'll wait to hear from you ! I'm still waiting for Micheal to confirm if Eli is going to travel with us ??? I'm pretty sure that there will be places for you and Romain to travel with to Kangirsuk. I'll confirm officially next week !

Have a great week-end !

JOSÉE

-----Message d'origine-----
De : NDea [mailto:ndea@krg.ca]
Envoyé : 13 mai 2008 16:32
À : Brazeau, Josée
Objet : Informal request

Hi Josée.

I was just wondering if, when you guys come to Kuujjuaq on the way to Kangirsuk, you could bring some water sample bottles to test water that is draining through a site we think is contaminated. Something that will test for fuel, heavy metals, hazardous waste, anything that might be dangerous to human health and to a river system.

KRG can take the samples, no prob...it's just they don't have the material to test with!