July 27, 2008

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Indian and Northern Affairs Canada
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Dear Mr. Holwell, Ms. Payette, Ms. Beaulieu, Ms. Wilman,

Re: NWB 3BC-TER Tern Island Project – Environment Canada

The NPC has completed its review of the above noted project proposal. It conforms to the North Baffin Regional Land Use Plan (NBRLUP), subject to the attached.

By this letter and additional enclosures, the NPC is forwarding the project proposal with this determination to NIRB for screening.

The applicant has undertaken to comply with the attached requirements. The authorizing agencies to which this letter is addressed are responsible under the *Nunavut Land Claims Agreement* to implement any of the attached requirements by incorporating the requirements directly, or otherwise ensuring that they must be met, in the terms and conditions of any authorizations issued.

My office would be pleased to discuss with these agencies how best to implement these requirements and to review any draft authorizations that the agencies wish to provide for that purpose.

And, this conformity determination applies only to the above noted applications as submitted. Therefore, the proponent must ensure other applications for a permit under this project proposal not listed above are forwarded to NPC for a conformity determination against the NBRLUP, and notify the NPC immediately if any material to the project proposal is changed before authorizations are issued.

Yours truly,

Bobby Suluk
Regional Planning Co-ordinator, NPC

Cc: Mr. Mark Mallory, Environment Canada

Application # NWB 3BC-TER Tern Island Project – Environment Canada

NUNAVUT PLANNING COMMISSION
APPLICATION TO DETERMINE CONFORMITY
WITH THE NORTH BAFFIN REGIONAL LAND USE PLAN

All applicants for a project proposal shall comply with the requirements listed below. The relevant sections of the plan are noted in each requirement.

GENERAL

2. **Environmental Protection:** *s3.3.11.8:* The applicant undertakes to prevent any new occurrences of pollution, garbage and contamination at the site of the development.

   (Yes) No

3. **Removal of Fuel Drums:** *s3.3.11.8:* The applicant undertakes to remove all drums safely from the site and dispose of the drums in a safe manner.

   (Yes) No

4. **New Site Restoration and Clean Up:** *s3.3.11.1 and Appendix C, s1:* The applicant undertakes to clean up the site and restore the site to its natural condition to the greatest extent possible.

   (Yes) No

5. **Low-Level Air Flights:** *Appendix C, s3:* Will the applicant avoid all low-level flights?

   (Yes) No

   i. If not, explain why such flights are or may be absolutely necessary.

Bobby Suluk

MALLERY
38K - TCR

ii. If such flights are or may be absolutely necessary, will they avoid disturbance to people and wildlife?

(Yes) No

iii. If not, explain why it is not possible to avoid such disturbance.

9. **Polar Bear Denning Areas and Walrus Haul-outs:** *s3.3.1.8:* Will the applicant keep its activities away from any polar bear denning area or walrus haul-out?

NONE THERE

(Yes) No

HERITAGE RESOURCES

10. **Reporting of Archaeological Sites:** *s3.3.9.3 and Appendix C, s2 and s8:* Will the applicant immediately report the discovery of all suspected archaeological sites to the Department of Culture, Language, Elders and Youth (GN)?

(Yes) No

11. **Carving Stone Deposits:** Appendix C, s9. Will the applicant report any discoveries of carving stone deposits to the Qikiqtani Inuit Association?

(Yes) No

SCIENTIFIC RESEARCH

17. **Scientific Research:** *s3.3.7.3:* Does the project proposal involve scientific research?

(Yes) No

If yes, will the applicant integrate all available and relevant local and traditional knowledge when conducting its research?

(Yes) No

HAVE UNDERTAKEN ALREADY

18. **Consultation with Nunavut Research Institute:** *s3.3.7.6:* Has the applicant consulted with the Nunavut Research Institute about research topics that would benefit or interest local residents?

(Yes) No

i. Describe the results of your consultation.

ONGOING DIALOGUE WITH NRI FOR 9 YEARS.

ii. If no, explain why.

19. **Local Services and Local Employment:** *s3.3.7.4:* Will the applicant rely on local services and employment where possible?

(Yes) No

i. Describe the services retained and the people to be employed.

ONLY IF LIABILITY ISSUES PERMIT

ii. If no, explain why it is not possible.

20. **Communication on Scientific Research:** *s3.2.8 and s3.3.7.5:* The applicant will, at minimum, translate a summary of its work into Inuktitut and communicate with communities using language that is clear and non-technical. The results of all scientific research shall be made available to the affected communities as soon as possible.

(Yes) No

22. **Code of Good Conduct for Land Users:** *Appendix C:* The applicant undertakes to adhere to the code of Good Conduct at all times.

(Yes) No

I, MARK MALLORY (name of applicant), certify that the information I have given in this application is true and correct and hereby make the above undertakings which form part of my application for a project proposal within the meaning of the Nunavut Land Claims Agreement.

Date: 25 JULY 08 Signature of Applicant: Mark Mallory

Effective June 16, 2006

WATER LICENCE
APPLICATION FORM

Application for: (check one)

☒ New ☐ Renewal ☐ Amendment ☐ Assignment ☐ Cancellation

LICENCE NO: (for NWB use only)

1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE

Mark Mallory, Environment Canada, CWS
Box 1714, Iqaluit NU X0A 0H0

Phone: 867 975 4644
Fax: 867 975 4645
e-mail: mark.mallory@ec.gc.ca

2. ADDRESS OF CORPORATE OFFICE IN CANADA (if applicable)

Phone:
Fax:
e-mail:

3. LOCATION OF UNDERTAKING (describe and attach a topographical map, indicating the main components of the Undertaking)

Latitude: (63°38' N) Longitude: (96°20' W)
NTS Map Sheet No. 68H Scale:

4. DESCRIPTION OF UNDERTAKING (attach plans and drawings)

We have a small, remote field research camp on a small island. The camp holds 4 people for up to 2 months to study breeding biology of High Arctic marine birds.

5. TYPE OF PRIMARY UNDERTAKING (A supplementary questionnaire must be submitted with the application for undertakings listed in "bold")

☐ Industrial
☐ Mining and Milling (includes exploratory drilling)
☐ Municipal (includes camps, lodges)
☐ Power
☐ Agricultural
☒ Conservation
☐ Recreational
☐ Miscellaneous (describe below)

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings

6. **WATER USE**

- [x] To obtain water
- [ ] To cross a watercourse
- [ ] To modify the bed or bank of a watercourse
- [ ] Flood control
- [ ] To divert a watercourse
- [ ] To alter the flow of, or store, water

[ ] Other (describe): We use very little water, estimated at 5 m3 per season. There are no showers - we melt snow for water, and have a small sump for grey water.

7. **QUANTITY OF WATER INVOLVED** (cubic metres per day including both quantity to be used and quality to be returned to source)

Water use: [x] 100m³/day or less
[ ] Greater than 100m³/day: if greater, indicate quantities to be used for each purpose (camp, drilling, etc.)

Water returned to source
m³/day

8. **WASTE** (for each type of waste describe composition, quantity (cubic metres per day), methods of treatment and disposal, etc.)

- [x] Sewage
- [x] Solid Waste
- [ ] Hazardous
- [ ] Bulky Items: Scrap Metal
- [ ] Waste oil
- [x] Greywater
- [ ] Sludges
- [ ] Other (describe): Solid waste is bagged and returned to Resolute Bay for disposal, sewage is deposited in a dug hole > 150 m from the ocean, greywater is disposed of in a small sump > 150 m from ocean.

9. **OTHER PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING** (give name, mailing address and location; attach if necessary)

None - remote site.

Land Use Permit
DLNSD [ ] Yes [x] No If no, date expected (renewal or administrative transfer applied for February 2008)

Regional Inuit Association [ ] Yes [ ] No If no, date expected _____

Commissioner [ ] Yes [ ] No If no, date expected

10. **PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES** (direct, indirect, cumulative impacts, etc.)

NIRB Screening: [x] Yes [ ] No If no, date expected

11. **INUIT WATER RIGHTS**

Will the project or activity substantially affect the quality, quantity, or flow of water flowing through Inuit Owned Lands and the rights of Inuit under Article 20 of the Nunavut Land Claims Agreement?
NO

If yes, has the applicant entered into an agreement with the Designated Inuit organization to pay compensation for any loss or damage that may be caused by the alteration. If no compensation agreement has been made, how will compensation be determined?

12. **CONTRACTORS AND SUB-CONTRACTORS** (name, address and functions)

None that I believe in the sense intended. Eight crew of – 4, 2 Environment Canada staff, 2 students

13. **STUDIES UNDERTAKEN TO DATE** (list and attach copies of studies, reports, research, etc.)

This is a research study to unobtrusively assess basic breeding biology of birds at the site.

14. **THE FOLLOWING DOCUMENTS MUST BE INCLUDED WITH THE APPLICATION FOR THE REGULATORY PROCESS TO BEGIN**

Supplementary Questionnaire (where applicable, see section 5) ☒ Yes ☐ No If no, date expected

Inuktitut and or Inuinnaqtun/English Summary of Project ☒ Yes ☐ No If no, date expected

Application fee of $30.00 (Payee Receiver General for Canada) ☐ Yes ☐ No If no, date expected

Water Use fee of $30.00 (unless otherwise indicated in Section 9 of the *NWT Waters Regulations*; Payee Receiver General for Canada)

☐ Yes ☐ No If no, date expected

15. **PROPOSED TIME SCHEDULE** (unless otherwise indicated, the NWB will consider the application for a PROPOSED term)

☐ one year or less (or) ☒ Multi-Year

Start Date: July 1, 2008 Completion Date: August 30, 2010

MARK MALLORY	SEABIRD BIOLOGIST		29 April 2008
Name (Print)	Title (Print)	Signature	Date

For Nunavut Water Board office use only

APPLICATION FEE	**Amount: $**	**Pay ID No.:**	
WATER USE DEPOSIT	**Amount: $**	**Pay ID No.:**	

NUNAVUT WATER BOARD
[illegible]
OFFICE DES EAUX DU NUNAVUT

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: MARK MALLORY **Licence No:** ______ (for NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: ______ Tel: ______ Fax: ______ E-mail: ______

2. Project Manager: Same Tel: 867 975 4637 Fax: 867 975 4645 E-mail: mark.mallory@ec.gc.ca

3. Does the applicant hold the necessary property rights? APPLICATION IN TO INAC

4. Is the applicant an "operator" for another company (i.e., the holder of the property rights)? If so, please provide letter of authorization. NO

5. Duration of the Project

   - [ ] One year or less Start and completion dates: ~~[illegible]~~
   - [x] Multi Year.

   If Multi-Year indicate proposed schedule of on site activities
   Start: July 2008 Completion: August 2011

CAMP CLASSIFICATION

6. Type of Camp

   - [ ] Mobile (self-propelled)
   - [ ] Temporary
   - [x] Seasonally Occupied: ~ 2 months / yr
   - [ ] Permanent
   - [ ] Other: ______

7. What is the design, maximum and expected average population of the camp?
   Average ~ 4 people (3-5)

8. Provide history of the site if it has been used in the past.
   Has been surveyed for lhs since 2002; had brief camp in 2007

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.

Centre of small (2 km x 0.75 km) island, on central rock ridge, 100 m from meltwater pond

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

Chosen as best site for observing approaching bears, proximity to bird colony, consulted with Resolute Bay HTA in Jan. 2006

11. Is the camp or any aspect of the project located on:

- ☒ Crown Lands — Permit Number (s)/Expiry Date: Reserve Application submitted
- ☐ Commissioners Lands — Permit Number (s)/Expiry Date:
- ☐ Inuit Owned Lands — Permit Number (s)/Expiry Date:

12. Closest Communities (direction and distance in km):

Resolute Bay, 150 km south of site

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

Yes, consultation in Jan 2006, annual, translated FAXes to community, GN wildlife Permit process (annual) notification

14. Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats?

No and No

PURPOSE OF THE CAMP

15.
- ☐ Mining (includes exploration drilling)
- ☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.) (Omit questions # 16 to 21)
- ☒ Other Scientific Research

16. Activities (check all applicable)

- ☐ Preliminary site visit
- ☐ Prospecting
- ☐ Geological mapping
- ☐ Geophysical survey
- ☐ Diamond drilling

- ☐ Reverse circulation drilling
- ☐ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
- ☐ Other: _____

17. Type of deposit (exploration focus): N/A

- ☐ Lead/Zinc
- ☐ Diamond
- ☐ Gold
- ☐ Uranium
- ☐ Other: _____

DRILLING INFORMATION

N/A

18. Drilling Activities

- ☐ Land Based drilling
- ☐ Drilling on ice

19. Describe what will be done with drill cuttings?

20. Describe what will be done with drill water?

21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.

22. Will any core testing be done on site? Describe.

SPILL CONTINGENCY PLANNING

23. The proponent is required to have a site specific Spill Contingency Plan prepared and submitted with the application. This Plan should be prepared in accordance with the *NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations, July 22, 1998* and *A Guide to the Spill Contingency Planning and Reporting Regulations, June 2002*. Please include for review.

See attached.

24. How many spill kits will be on site and where will they be located? 1, near fuel drums

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

1 drum gasoline
1 drum kerosene
1 100 lb canister propane

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

we melt snow near the camp and store in camping barrels, or use water from shallow, meltwater pond later in season; ~ 100m from camp.

27. Estimated water use (in cubic metres/day):

☒ Domestic Use: max 0.083 Water Source: snow or pond
☐ Drilling: _____ Water Source: _____
☐ Other: _____ Water Source: _____

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? (see *DFO 1995, Freshwater Intake End-of-Pipe Fish Screen Guidelines*) Describe:

N/A

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

N/A

30. Will drinking water be treated? How?

No / Snow melt

31. Will water be stored on site? yes, in camping barrels (approx 40L barrels)

WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:

☒ Camp Sewage (blackwater)

Buried in hole dug >150 m from shore

☒ Camp Greywater

Est. 10 L/day, dumped in sump hole >150 m from shore

☒ Solid Waste

Combustibles burned in drum; non-combustibles taken back to Resolute

☐ Bulky Items/Scrap Metal

N/A

☐ Waste Oil/Hazardous Waste

N/A

☒ Empty Barrels/Fuel Drums

Picked up by Polar Shelf and returned to Resolute Bay base

☐ Other:

33. Please describe incineration system if used on site. What types of wastes will be incinerated?

Paper/waste food burned in 205 L drum

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted?

Taken to NRCan base in Resolute Bay, which has long-term agreement for waste

35. Describe location (relative to water bodies and camp facilities), dimensions and volume, and freeboard for all sumps (if applicable)

Sumps >150 m from meltwater pond and marine shoreline. Volume ~ 300 L (Dim 1m x 1m x 30 cm)

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?

NO

OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

N/A - just like camping

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

long-term research site planned; possible future protected area and thus site disturbance kept to minimum.

BASELINE DATA

39. Has or will any baseline information be collected as part of this project? Provide bibliography.

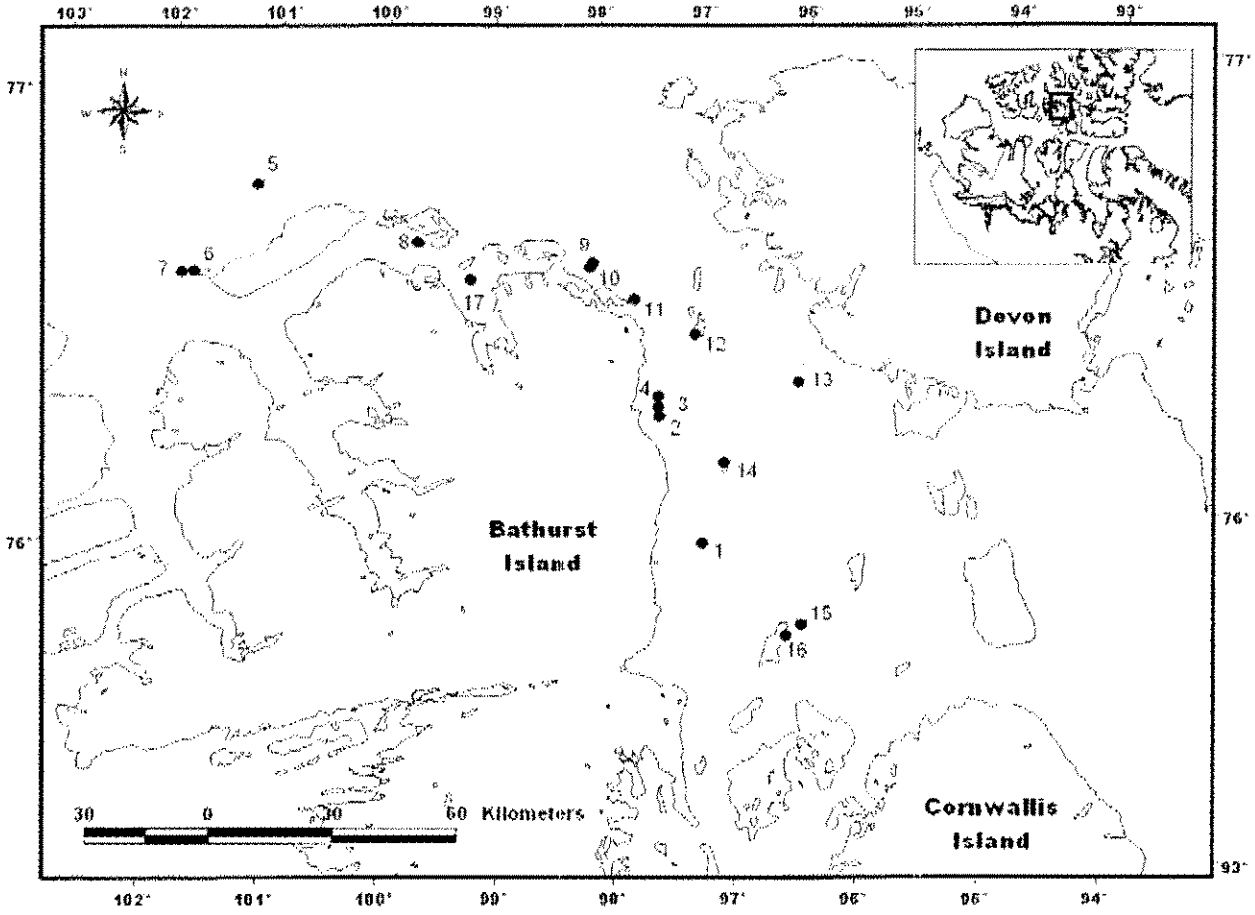
This is what we are doing!

- ☐ Physical Environment (Landscape and Terrain, Air, Water, etc.)
- ☒ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)
- ☐ Socio-Economic Environment (Archaeology, Land and Resources Use, Demographics, Social and Culture Patterns, etc.)
- ☐
- ☐
- ☐ Other

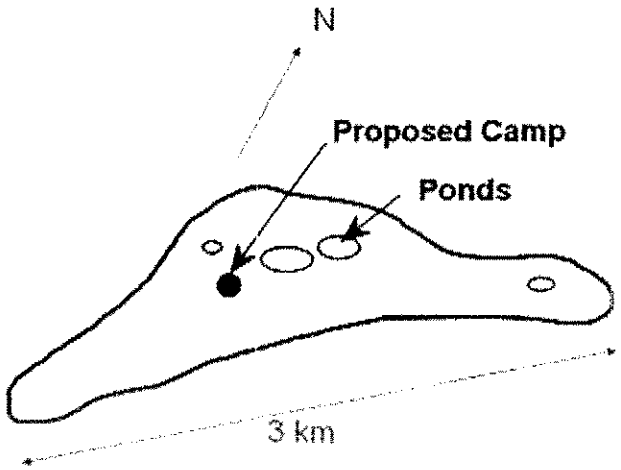
REGULATORY INFORMATION

40. At a minimum, you should ensure you have a copy of and consult the documents below for compliance with existing regulatory requirements:

- ✓ ARTICLE 13 – *NCLI -Nunavut Land Claims Agreement*
- ✓ NWNSRTA – *The Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002*
- ✓ *Northwest Territories Waters Regulations, 1993*
- ✓ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
- ✓ NWB - Interim Rules of Practice and Procedure for Public Hearings
- ✓ RWED – *Environmental Protection Act, R-068-93- Spill Contingency Planning and Reporting Regulations, 1993*
- ✓ RWED A Guide to the Spill Contingency Planning and Reporting Regulations, 2002
- ✓ NWTWB - Guidelines for Contingency Planning
- ✓ *Canadian Environmental Protection Act, 1999 (CEPA)*
- ✓ *Fisheries Act, RS 1985 – s.34, 35, 36 and 37*
- ✓ DFO - Freshwater Intake End-of-Pipe Fish Screen Guideline
- ✓ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT



Proposed site is island 15, ~ 140 km N of Resolute Bay



Breeding Ecology of High Arctic Marine Birds

Prince Leopold Island (PLI) and islands in Penny Strait are key terrestrial and marine habitats for marine birds in the eastern Arctic, particularly Northern Fulmars, Thick-billed Murres, Black-legged Kittiwakes, and Arctic Terns. We still know little about the biology of most of these species, for which Canada supports a significant part of the global population and thus has significant international responsibilities. In 2008 we plan to continue to study aspects of reproduction of marine birds in the High Arctic, and to test birds for avian diseases. At PLI, egg collections will be made for contaminant analyses as part of the long-term (>30 year) monitoring program. We will establish a new field camp at a small, unnamed island in Penny Strait, where we plan to study small gulls and terns, to test for diseases and gather information on basic breeding biology.

ᐳᓇᓴᓗ ᓕᐅᐳᓕ ᖃᑭᖅᑕᖏᓐᓂᒃ ᐊᒻᒪᓗ ᖃᑭᖅᑕᒪᓴᓕᒃ ᐸᓂ ᐃᒪᓐᓂᓕᑐᐃ ᐊᑲᐅᑕᑎᐊᖅᑐᓕ ᓄᓇᕗᑦᐅᑕᓄᑦ ᐊᒻᒪᓗ ᐃᒪᖏᐅᑕᓄᑦ ᓇᔨᒋᕆᐅᓂᖓᐃᓴᓪᒃ ᑎᓐᓕᐊᖏᓄᑦ ᑕᓇᐅᖏᐅᑕᓄᑦ ᑲᓇᓐᓴᖅᐸᓂᖏᓕᒃ, ᐃᓕᓴ ᖃᖏᑯᓪᓚᓐᓄᑦ, ᐊᐅᐸᓄᑦ, ᑎᕎᑎᔪᓄᑦ ᐊᒻᒪᓗ ᐃᒥᖅᑯᑕᐃᓴᓄᑦ. ᓂᓴ ᒪᓐᓇ ᖃᐅᕆᒪᑦᑎᐊᖏᓐᓂᑐᒍᑦ ᑲᑉᑯᓂᖓᓐᓄᑦ ᑎᓐᓕᐊᖏᓂᑦ ᐃᓕᓴᖏᓐᓂᑦ, ᐊᒻᒪᓚᔪᖏᒥᔪᖅ ᑲᑉᑯᐊ ᐅᓄᖅᑐᐃᓄᑦ ᑲᓇᐃᒪᓕᒃ ᑲᑉᑯᓂᖓᓐᓄᑦ ᑎᓐᓕᐊᖏᓂᑦ. 2008ᒥᑦ ᖃᐅᕆᔭᐃᓐᓇᓗᒃᑲᓐᓂᕐᒪᔪᒍᑦ ᑲᑉᑯᓂᖓᓐᓄᑦ ᒪᓐᓂᐅᖏᓐᓂᖓᓐᓄᑦ ᖃᑯᑎᖅᑐᒥᓂᓂᓕᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐊᒻᒪᓗ ᖃᐅᕆᔨᐊᖏᒪᓕ ᑎᓐᓕᐊᑦ ᐋᓐᓂᐊᖏᓇᖃᑦᑕᓂᓐᓂᑎᓐᓂᑦ. ᐳᓇᓴᓗ ᓕᐅᐳᓕ ᖃᑭᖅᑕᓐᓇᓂᑦ ᒪᓐᓂᕐᓂᑦ ᐱᔪᒪᔪᒍᑦ, ᑕᐃᒪᓐᓇ 30ᓂᑦ ᐊᖏᖃᔪᓂᑦ ᖃᐅᕆᔭᑦᓕᐊᖏᓐᓇᖅᑭᓇᓕᖅᑐᖅᑐᒍᑦ ᖃᐅᓄᐃᓕᐅᖅᑕᖏᓐᓇᐃᓕᓴᖅᑐᑦ ᓄᓇᕗᑦᐃᓕᓴᖅᑐᑦ. ᐃᒡᓗᕆᓕᖏᑦᑕᐅ ᐃᓕᓴᕐᓂᔪᒪᔪᒍᑦ ᖃᑭᖅᑕᖏᓐᓂᕆᓕᖏᑦ ᐸᓂ ᐃᒪᖏᐅᑕᐃᓕᓴᓂᑦ, ᖃᐃᒃᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᓂᓂᓕᑦ ᐊᒻᒪᓗ ᒪᓐᓂᐅᖏᓐᓂᖓᓐᓄᑦ ᐊᒻᒪᓗ ᒪᓐᓂᐅᖏᓐᓂᖓᓐᓄᑦ.