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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File: 3AM-GRA

March 9, 2010

Wayne Thistle, Acting Regional Project Manager
Government of Nunavut, Department of
Community and Government Services
P.O. Bag 002 Government of Nunavut
Rankin Inlet, NU X0C 0G0
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Distribution List via Email

Subject: Additional Information Requirements for the Government of Nunavut Community Government Services Type 'A' Water Licence Application for the Hamlet of Rankin Inlet's Water Supply and Sewage and Meeting Notes for the March 3, 2010 Technical Meeting

Dear Mr. Thistle,

This letter summarizes the commitments made by the parties attending the recent Technical Meeting held by teleconference on March 3, 2010 for the Government of Nunavut Community Government Services (GN-CGS or Applicant) Type A Water Licence Application for the Hamlet of Rankin Inlet's Water Supply and Sewage (Application).

The GN-CGS agreed to revise the Application to provide the following information to the NWB during the Meeting in response to intervenor comments:

1. Background information to clarify water use estimates.
2. A detailed written description of the water studies to be undertaken, including the water consumption audit, leak detection study and bathymetric study, the timeline for the completion of the studies and the expected deliverables.
3. Minutes of a meeting between GN-CGS and the Department of Fisheries and Oceans Canada (DFO) regarding fish and fish habitat issues, including identification of fish species, the water intake and screen, and draw-down of the lake.
4. Evidence of an agreement between CGS and the Hamlet regarding the disposal of sewage treatment plant and water treatment plant wastes in the Hamlet's solid waste disposal facility.
5. Revised application documents, revised Sewage Treatment Facility Operation and Maintenance Plan, revised Water Supply Facility Operations and Maintenance Plan, revised Environmental Emergency Contingency Plan, and revised Environmental Monitoring Program and Quality Assurance/ Quality Control Plan, that address parties' comments including the removal of information regarding the solid waste disposal facility.

As agreed during the Meeting, GN-CGS will submit the revised Application containing the additional information listed above **by March 31, 2010**. The submission is to be sent to the NWB's Manager of Licensing, Phyllis Beaulieu, at licensing@nunavutwaterboard.org.

In addition, the NWB agreed to provide GN-CGS with its comments on the Environmental Emergency Response Plan. Those comments are attached to this letter for your consideration. The NWB also committed to confirm that land use planning and/or development impact requirements under the Nunavut Land Claims Agreement have been addressed with the Nunavut Planning Commission and the Nunavut Impact Review Board.

Attached are draft Technical Meeting notes prepared by the NWB. Parties to the meeting are requested to review the notes and provide comments by **March 15, 2010**. Comments are to be sent to the NWB's Manager of Licensing, Phyllis Beaulieu, at licensing@nunavutwaterboard.org.

If you have any questions or require clarification on the above, please contact the undersigned at (780) 443-4406 or by email to dts@nunavutwaterboard.org

Yours truly,

Original signed by:

David Hohnstein, C.E.T.
Director Technical Services

DH/tla

Attachments:

NWB comments of the Environmental Emergency Contingency Plan
Draft Meeting Notes

Government of Nunavut Community Government Services Type 'A' Water Licence Application for the Hamlet of Rankin Inlet's Water Supply and Sewage (3AM-GRA)

The following are the Nunavut Water Board's (NWB) comments on the Government of Nunavut Community Government Services (GN-CGS) Environmental Emergency Contingency Plan, dated December 2008:

- The Environmental Emergency Contingency Plan (EECP) should be standalone for the Government of Nunavut – Community and Government Services (GN-CGS) licensed facilities. Contingency measures for Hamlet facilities should be provided by the Hamlet as the licensee for the 3BM-RAN Licence;
- Provide quantities and locations of fuels and chemicals such as chlorine and fluoride that are part of the GN-CGS Facilities;
- Provide a 24 hour contact number for the person responsible for implementing this EECP;
- The site map should include major GN-CGS fuel/chemical storage locations and spill kit locations;
- Update the Nunavut Spill Report Form to the NT-NU Form, available on the NWB ftp site;
- Include an effective period for the Plan;
- Material Safety Data Sheets (MSDS) are not included. Either they should be appended to the plan or the plan should reference where they may be found on-site; and
- The contact list should include the Department of Fisheries and Oceans Canada (DFO), Kivialliq Inuit Association (KIA), Government of Nunavut Department of Environment (GN-DOE) and the local Hunters and Trappers Organization (HTO).

**Draft Meeting Notes
for
Technical Meeting
Government of Nunavut Community Government Services Type 'A' Water Licence
Application for Hamlet of Rankin Inlet's Water Supply and Sewage (NWB file: 3AM-GRA)
By teleconference
March 3, 2010, 8:00 AM MST to 10:30 AM MST**

Please find attached the Agenda for the Technical Meeting. The following meeting notes are organized by Agenda item.

1. Introductions and Confirmation of Registration

The following parties attended:

Government of Nunavut Community Government Services (GN-CGS)

Wayne Thistle, Regional Projects Manager

Jim Walls, P.Geol., Nuna Burnside Engineering and Environmental Ltd. (Consultant to GN-CGS)

Nunavut Water Board (NWB)

Dave Hohnstein, Director Technical Services

Phyllis Beaulieu, Manager Licensing

Don Carr, Technical Advisor

Catherine Emrick, Legal Counsel

Karlette Tunaley, Technical Advisor

Indian and Northern Affairs Canada (INAC)

Ian Parsons, Water Resources

LouAnn Cornacchio, Manager Water Resources

Environment Canada (EC)

Paula Smith, Environmental Assessment Coordinator

Carrie Spavor, Environmental Assessment Coordinator

Department of Fisheries and Oceans (DFO)

Lorienna Melnick, Habitat Mgmt Biologist

Government of Nunavut Department of Environment (GN-DOE)

Dee Karadag, Assessment Coordinator

Allison Loder, Environmental Analyst

Michael Mifflin, Manager Land Use Planning

Robert Eno, Director, Environmental Protection

The following parties registered but did not attend:

Paul Waye, SAO Hamlet of Rankin Inlet

Gary Cooper, Habitat Mgmt Biologist, Department of Fisheries and Oceans

2. Application to the Board

The NWB provided an overview of the application, including:

- Background of the existing licence 3BM-GRA0207 including name of licensee, date of renewal issuance, scope of licence, modifications, errata and expiry date
- Description of the community including population
- Triggers for Type A water licence based on regulations
- Procedural history of the Type A water licence application
- Scope of the application
- Application documents

3. Applicant Update on Current Status of the Project

It was confirmed that the name of the Licensee has changed from Department of Public Works & Services, Government Nunavut to Government of Nunavut Community Government Services (GN-CGS or Applicant).

The Applicant provided a project update and discussed the main issues identified by the intervenors. In summary, in response to the water intake issue, the Applicant requires additional time to address water consumption changes, the draw down of Nippisar Lake and to identify an alternative water source if required. The Applicant would like to move ahead with the licence renewal while that work is undertaken. The work will include water consumption studies and leak detection tests on the utilidor this summer. In addition, bathymetric studies have been conducted on Nipissar Lake and another waterbody which may be considered as a potential alternative water source.

In response to the Sewage Treatment Plant issues, the Applicant is planning to conduct studies of the marine environment at the sewage outfall this summer. Plans include sampling of the sewage effluent as well as the marine environment to determine the effect of the outfall on the marine environment. Changes to the design of the sewage treatment plant are being planned to decrease BOD and solids.

GN-CGS considered a project for a new sewage treatment plant, but determined the project was not feasible due to operation and maintenance costs. Therefore it was decided that upgrading the existing sewage treatment plant was a preferable option. More time is required to undertake upgrades to the sewage treatment plant and therefore the upgrades are not intended to be considered in the scope of the water licence application.

The Applicant advised that it would update the Application to respond to minor errors that were identified by the intervenors. The Applicant also agreed that the solid waste disposal facility was not to be included in the scope of the Application as the facility is licensed separately to the Hamlet of Rankin Inlet.

4. Identification of Issues Arising from Intervenors' Comments

On March 1, 2010 the NWB distributed the attached table entitled “Compilation of Issues” summarizing the issues identified by parties in their written comments. In addition to the issues identified in this table, the following issues were raised during the Technical Meeting:

1. Sewage disposal: Clarification regarding the scope of the licence was requested and it was noted that disposal of effluent into the marine environment is outside the NWB’s jurisdiction.
2. Sludge disposal: Concern regarding how the disposal of sludge would be regulated was raised.

5. Applicant’s Response to Interveners’ Comments

1. Water use – The Applicant provided the following responses to the water use issue:
 - A description of the water supply system as well as a description of the effect of increased infrastructure and development within the community on water use needs.
 - Clarification that water use is metered both going out and coming back from the pumphouse and that water use records are maintained, however they may not be dependable.
 - Clarification that sewage effluent volumes are monitored and may be correlated to water use estimates, however the sewage effluent volume monitoring results may not be accurate and therefore cannot be relied upon.
 - A commitment to provide a detailed written description of the water studies to be undertaken including a water consumption audit, leak detection study and bathymetric study
 - A request that the renewal proceed in the absence of study results.
 - An indication that recommendations for water conservation were to be part of the water consumption study noting that residents often run their taps to prevent their pipes from freezing thereby increasing overall water use.
2. Water intake screen – The Applicant committed to discuss the issue with DFO in a separate conversation and to provide meeting minutes to the NWB.
3. Drawdown on water source – The Applicant provided the following responses to the draw down on water source issue:
 - An indication that the Hamlet is also concerned about drawdown of the water source to ensure that they have a consistent water supply.
 - Information regarding plans for studies on alternative water sources noting that the studies will take time to complete.
 - A requested that the renewal proceed in the absence of study results.
4. Environmental Emergency Contingency Plan – The Applicant agreed to revise the plan to address party comments.
5. Sewage Disposal – no response

6. Sludge Disposal – The Applicant clarified that sludge is disposed in the Hamlet’s Solid Waste Disposal Facility and that the Facility is regulated under a separate licence held by the Hamlet. Regulation of the Facility in a separate licence held by the Hamlet was confirmed by the NWB.

The Applicant stated that an agreement is in place between CGS and the Hamlet regarding disposal in the Hamlet’s Solid Waste Disposal Facility. The NWB informed CGS that it is not aware of such an agreement. CGS agreed to provide evidence of the agreement.

7. Sewage Treatment Plant Operations and Maintenance Plan – The Applicant clarified that the Sewage Treatment Facility’s screen was repaired and that this was a temporary issue. Other issues were raised by the Workers Compensation Board (WCB) related to health and safety.

The Applicant stated that no upgrades to the Sewage Treatment Plant were planned at this time.

8. Water Supply Facility Operations and Maintenance Plan – The Applicant agreed to revise the plan. The Applicant confirmed that chlorine gas is not used in the water treatment plant.

6. Clarification of Outstanding Information Requirements

GN-CGS agreed to provide the following additional information by the end of March 2010:

1. Background information to clarify water use estimates.
2. A detailed written description of the water studies to be undertaken, including the water consumption audit, leak detection study and bathymetric study, the timeline for the completion of the studies and the expected deliverables.
3. Minutes of a meeting between GN-CGS and the Department of Fisheries and Oceans Canada (DFO) regarding fish and fish habitat issues, including identification of fish species, the water intake and screen, and draw-down of the lake.
4. Evidence of an agreement between CGS and the Hamlet regarding the disposal of sewage treatment plant and water treatment plant wastes in the Hamlet’s solid waste disposal facility.
5. Revised application documents, revised Sewage Treatment Facility Operation and Maintenance Plan, revised Water Supply Facility Operations and Maintenance Plan, revised Environmental Emergency Contingency Plan, and revised Environmental Monitoring Program and Quality Assurance/ Quality Control Plan, that address parties’ comments including the removal of information regarding the solid waste disposal facility.

In addition, the NWB agreed to provide GN-CGS with its comments on the Environmental Emergency Response Plan.

7. Scheduling of next Technical Meeting (if required) and Pre-Hearing Conference

All parties agreed that two weeks is sufficient time to review the additional information to be submitted by GN-CGS prior to the next Technical Meeting, and that the parties are available to attend a Technical Meeting and Pre-Hearing Conference the week of April 19, 2010. All parties were agreeable to attending the Technical Meeting and Pre-Hearing Conference either in-person or via teleconference.

All parties advised that they are available to attend a Public Hearing the week of May 10, 2010 or May 17, 2010 should the Board decide to schedule the Public Hearing prior to the completion of the Technical Meeting and Pre-Hearing Conference.

8. Other Issues

The NWB committed to confirm that land use planning and/or development impact requirements under the Nunavut Land Claims Agreement have been addressed with the Nunavut Planning Commission and the Nunavut Impact Review Board.

9. Closing of the Meeting

The meeting adjourned at approximately 10:30 am Mountain Standard Time.

Attachments: Technical Meeting Agenda
 Compilation of Issues table

Technical Meeting Agenda
Type 'A' Water Licence for Rankin Inlet
By Teleconference
March 3, 2010, 8:00 a.m. Mountain Time

Call in number: 1-877-727-8553
Participant passcode: 908 066 616

1. Introductions and Confirmation of Registration
2. Application to the Board
3. Applicant Update on Current Status of the Project
4. Identification of Issues Arising from Interveners' Comments
5. Applicant's Response to Interveners' Comments
6. Clarification of Outstanding Information Requirements
7. Scheduling of next Technical Meeting (if required) and Pre-Hearing Conference
8. Other Issues
9. Closing of the Meeting

Rankin Inlet - GN Application

Compilation of Issues

ISSUE	INAC	GN-DOE	EC	DFO
Completeness Review				
Completeness	Due to concern over the sustainability of the proposed water use, the Applicant must provide the appropriate studies prior to the consideration of a new water licence application	Application for a Type 'A' Water License is complete and may move forward for a technical review	Application Complete. Recommend CGS to provide a timeline of when studies on the water supply are complete and made available to the NWB	Proponent should refer to DFO's "Proponent's Guide to Information Requirements for Review Under the Fish Habitat Protection Provisions of the Fisheries Act" (link provided in comments)
Water Usage	Substantial increase in water use over a 5 year period. Proposed use of 850,000 m3/year is far greater than the provided recharge rate of 314,000 m3/year			If water body is being drawn down provide details on: volume required, size of water body, percent of total volume of water in source lake to be used, fish species etc. to DFO for review
Other	Nuna Burnside Engineering and Environmental made the following recommendation "The lake has been designated as a reservoir and is off limits to recreational activities. This considered the water takings should not have a significant impact to the environment. The Government of Nunavut and the Hamlet should identify an alternative water supply that they can pump into the reservoir during the summer months to maintain the water levels in the lake in the future" To INAC knowledge, this has not been completed. INAC recommends this info be proved with appropriate studies prior to the consideration of the new water licence			Small lakes and streams should not be used for water withdrawal
Technical Review				
Drawdown	Water use in the application is said to be 876,000 m3/year based on water treatment facility operator records. This is more than double the license allowable use of 400,000 m3/year			A detailed assessment of the proposed volume of water to be withdrawn from Nipissar Lake against the total annual recharge and the potential ramifications for drawdown is required
	with the recharge rates being calculated to be 314,000 m3/year (as per operation and maintenance plan for the water supply treatment facility) further studies are required to determine the long term sustainability of the water source			

Rankin Inlet - GN Application

Compilation of Issues

ISSUE	INAC	GN-DOE	EC	DFO
Environmental Emergency Contingency Plan	Spill kit locations should be included under the Environmental Emergency Contingency Plan	The Environmental Emergency Contingency Plan should include the GN-DOE's Manger of Pollution Control	An Environmental Emergency Contingency Plan should include emergency contingency measures for the utilidor system in the event of a failure or overflow should be provided	
	INAC Manager of Field Operations to be contacted in the event of a spill as well as 24 Hour Spill Line	Should a spill occur on water or ice, Environment Canada should be consulted regarding clean-up methods	Any spill located on ice or into water regardless of size shall be immediately reported to the 24 Hour Spill Line	
O&M Plan	The O&M Plan for the Sewage Treatment Facility does not include problems, timelines and mitigation plans identified in the 2008 Annual Report. Follow-up information is required that provides clarification as to whether the problems were fixed	The Proponent should include in the Operations & Maintenance Manual for the Sewage Treatment Facility, any procedures that may be in place should there be a disruption in service		
Hazardous Waste	Hazardous waste management plans, procedures and protocols should be adopted for the water treatment facility, particularly with respect to chlorine and fluoride			
Water Intake	Provide intake screen size			A detailed description of the proposed water intake is required. Refer to the Freshwater Intake End-of-Pipe Fish Screen Guideline (DFO 1995)
Other	Environmental Monitoring Program and QA/QC Plan references monitoring stations GRA-1, GRA-2, and GRA-3 and indicates that their specific locations are addressed on Figure 2, however their locations are not given or shown on the map associated with the Plan		All effluent discharged from utilidor must meet Section 36(3) of the Fisheries Act	Any impacts to fish and fish habitat which result from proceeding with this proposal could lead to corrective action such as enforcement
Hamlet of Rankin Inlet Application	Figure 3 shows sampling locations for the 3BM-RAN0207 licence renewal			
	Application includes solid waste info from the Hamlet of Rankin Inlet application			
Additional Info	Water sampling is said to have taken place. No sampling data submitted with the application			

Rankin Inlet - GN Application**Compilation of Issues**

ISSUE	INAC	GN-DOE	EC	DFO
	Some data missing in Annual Reports: tabular summaries, list of unauthorized discharges, summary of A&R work, work anticipated for the next year			