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Jan Davies Executive Director January 10, 2012

Northwest Territories Water Board P.O Box 2531 125 Mackenzie Road Suite 302, Professional Building Inuvik, NT X0E 0T0

Dear Jan Davies,

RE: Utility Group Facilities Inc. – Water Permit Application for Periodic Construction of Temporary Winter Access to Ikhil

Please find attached in duplicate hardcopy and electronic (CDs) copies of a Type "B" water licence application for the Oil and Gas Exploration Category. This application requests a licence for a term of 10 years for water access from the Mackenzie River for the construction of temporary winter access to the Ikhil Gas Plant and wells for maintenance and resupply activities. Two cheques payable to the Receiver General in the amounts of \$30 each are included, one for the application fee and the other a deposit for the first year's water use.

The following documents are attached as part of this application;

- 1. Completed Sch III Application for Licence
- 2. Water Licence Application Questionnaire for Oil and Gas Exploration: Drilling
- 3. Section 7, List of Attachments Table
- 4. EISC Project Description (main body) September 30, 2011
- 5. NEB Operations Authorization (OA) Application (main body) October 21, 2011
- 6. Figure 2 "Ikhil Gas Project Overview, Rev 0, September 27, 2011
- 7. Waste Management Plan (WMP) Rev 1, December 6, 2011
- 8. Spill Response Plan (SRP) Rev 2, January 10, 2012
- 9. Environmental Protection Plan (EPP) Rev 2, January 10, 2012

Please do not hesitate to contact myself directly to discuss any comments, questions, and concerns you may have related to the attached application.

Sincerely,

Utility Group Facilities Inc.

Colin F. Nikiforuk

General Manager, Ikhil Joint Venture

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SCHEDULE III (Subsection 6(1))

APPLICATION FOR LICENCE, AMENDMENT OF LICENCE, OR RENEWAL OF LICENCE

					/LICENCE NO: renewal only)
. NAME AND MAILING ADDRESS OF APPLICANT Utilities Group Facilities Inc. 540, 355 4 Ave SW Calgary Alberta T2P0J1			2. ADDRESS OF HEAD OFFICE IN CANADA I INCORPORATED Utilities Group Facilities Inc. 540, 355 4 Ave SW, Calgary AB T2P0J1		
	Telephone:	403-806-3317		Telephone:	403-806-3317
	Fax:	403-806-3310		Fax:	403-806-3310
•	proposed waste deposi Ikhil Gas Development I	it)			watercourses and location of any 134*08'44.62061"W
	seasonal maintenance and	onstruction from the Mackenzie River periodic resupply using the Blueberry			1 IKIIII Gas I Ioduction I actitues for
<u> </u>		tion and Application attached)		Alternate Route	
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7.	QUANTITY OF WATER INVOLVED (litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)							
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8. WASTE DEPOSITED (quantity, quality, treatment and disposal)								
	UGFI is committed	to handle and di	spose of wastes	as outlined	in Section 7, UGF	Waste Manage	ement Plan (attached	1)
9.	OTHER PERSO!			FECTED I	BY THIS UNDE	RTAKING (g	give name, mailing	g addr
	Community of Inuv Inuvik Hunter and Inuvialuit Lands Ac	rik Frapper's Comm	88.6 00					
10.	PREDICTED E	NVIRONME	NTAL IMPA	CTS OF U	NDERTAKING	AND PROP	OSED MITIGAT	ION
			1.1	e mitigation	measures to be use	d are expected	to result in no signif	icant et
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11.	from the project we	ork.		700 -		**		
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Section 7: List of Attachments – Ice Road Construction

Reference to Question #	Title	Page/Section #	Response
2.1	UGFI Ikhil NEB OA Application	Appendix 1, Figure 2	Attached map shows Ikhil facilities, topography and seasonal drainages
3.1.2	UGFI Ikhil NEB OA Application	Page 10, Sec 1	Water that will be used for ice road construction, any required snow / ice pads and for other construction activity, if required, will be obtained from the Mackenzie River East channel. The intake hoses will be screened according to current regulations to avoid fish entrainment (DFO 2005). The NWT Operational Statement for the construction of Ice bridges and snow fills (DFO 2010) will be followed.
			No water will be taken from a land-locked water body where drawdown and related fisheries concerns may be an issue.
3.2.2	Camp Layout		The ice road construction camp will be located adjacent to the ice road during construction activities approximately mid way between the Mackenzie River ice road access and the Ikhil gas production facilites. There is no intent to move this camp during construction operations. The sleigh camp consists of two separate trailer units which double as an emergency shelter during winter storm periods.
3.2.3	Sewage & Grey Water Treatment	UGFI Waste Management Plan, Section 6.1, Page 5	All wastewater (sewage and grey water) will be collected in lined, heated storage tanks, transported off-site (through local vacuum trucks) and disposed of at the Inuvik wastewater facility.
3.2.5	Contingency Plans for Sewage & Waste Water	UGFI Waste Management Plan, Section 7.3, Page 8	All wastewater will be collected in a lined and heated storage tank, the capacity of the tank is to be determined based on the expected number of personnel, but no less than approximately 25 cubic metres (m³). The tanks will be pumped out on a regular basis using a local vacuum truck. In the event that the vacuum truck cannot empty the tanks (e.g., due to bad weather and road closure), the existing tank capacity (approximately 25

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			m ³) provides enough backup storage capability.
			To reduce the impact to the environment through accidental leaks (or at the Inuvik wastewater facility), the following mitigation measures will be applied:
			• the wastewater tank will be enclosed by a lined berm;
			 biodegradable products will be used in camp operations to the greatest extent possible; and
			 Grease traps installed in the drain pipes will prevent grease from entering storage tanks and with that the environment.
3.2.6	Solid Waste Disposal	UGFI Waste Management Plan, Section 7.2, Page 7	Non-hazardous, domestic waste will consist of paper, food, tin cans, plastic packaging, metal and non-recyclable glass jars. These items will be stored in wildlife proof containers, transported off-site and disposed of at the Inuvik landfill site. According to the GNWT (2011¹), the average person generates 3.7 kg (8.1 lb) of waste per person per day. Assuming a maximum of four weeks (28 days) of camp operation for 16 people, it is expected that the ice road construction program will generate approximately 1660 kg (3650 lb) of non-hazardous domestic waste.
			Non-hazardous industrial waste is expected to be composed of plastic packaging, flagging tape, stakes, and similar items. All waste and debris will be collected daily, stored and disposed of along with the non-

¹ GNWT, ENR. 2011. State of the Environment – 9. Solid Waste. http://www.enr.gov.nt.ca/_live/pages/wpPages/soe_solid_waste.aspx. Accessed October 2011.

			hazardous domestic waste.
			All non-hazardous wastes will be disposed of at the Town of Inuvik landfill site. The facility has the appropriate permits and licenses in place and the Senior Administrative Officer (Mr. Grant Hood) has approved the use of the facility by UGFI (Dana Moran, Development Officer, Town of Inuvik, pers. com. November 23, 2011). The Town of Inuvik will charge UGFI the appropriate disposal fees for the estimated 20,500 lb of non-hazardous waste.
3.2.7	Hazardous Materials	UGFI Waste Management Plan Sec 7.1 Page 6	Hazardous and combustible waste will consist of waste oil, oil and fuel filters. Hydrocarbon contaminated materials that may result from spills also fall into this category. Waste oil will be collected and stored in used barrels, which will be labelled appropriately. The barrels will be stored temporarily in a bermed area and transported off-site for potential re-use. Oil and fuel filters used by UGFI and sub-contractors will be handled and stored according to WHMIS requirements and disposed of at an appropriate and authorized landfill site outside of the territory (e.g., SHTC in Alberta or Fort Nelson in British Columbia).
3.2.8	Fuel Storage	UGFI Spill Response Plan Section 3, Page 3	Bulk fuel stored at the Ice Road Construction staging site will consist of a maximum of 50,000 litres of diesel stored in one double walled tank, which will be enclosed by a berm capable of containing 110% of the tank volume in the event of a leak.
4.2	Heavy Equipment at site	UGFI Ikhil NEB OA Project Summary, Sec 1.8 Page 11 Table 1.1 Preliminary Equipment List	Construction equipment and rig mobilization equipment will be sourced in Inuvik from Inuvialuit companies wherever possible. The heavy construction equipment will be trucked from Inuvik to the Ice Road construction staging site.
4.3	Winter access	UGFI Ikhil NEB OA Project Summary, Sec 1.1 Page 3	Project Route is detailed in Figure 2, Appendix A of the NEB OA Project Summary

4.6	Waste Management Plan	UGFI Waste Management Plan	A detailed WMP is a vital part of the waste management process. This plan details the wastes generated during the Project, and specifies the proper handling, storage and disposal practice for each waste stream. The WMP considers different streams of waste. It describes approaches
			for the disposal of waste materials and actively promotes waste minimization strategies.
4.10	Surficial Geological Conditions	UGFI Environmental Protection Plan, Section 7, Page 5	Table 7 presents an overview of sensitive environmental factors (VCs identified in Section 9) that might be affected by Project work, environmental protection procedures and mitigation measures. The goal is to achieve protection of sensitive environmental parameters.
5.1	EPP & SRP	UGFI Environmental Protection Plan; UGFI Spill Response Plan	Both Plans are attached as Appendices to the NEB OA Project Summary
5.2	Planned Abandonment & Restoration Plans	UGFI NEB OA Project Summary, Section 8, Page24	All equipment, materials, and any debris will be removed from the Project area prior to spring breakup and taken to Inuvik (and further south as applicable) for appropriate disposal. Any waste fluids generated, and excess fuel containers will also be removed from the Project area and disposed of appropriately. Spill containment kits will be available at camps and staging sites, and carried on vehicles to properly contain accidental spills. Spills will be cleaned up and impacted materials remediated through excavation and disposal. An updated Spill Contingency Plan is provided as part of the Emergency Response Plan in Appendix B. Any disturbed areas will be covered with snow and / or ice to maintain protection of vegetation, soil, and water, as appropriate.
			The Project area will be re-inspected by helicopter in the summer following Project completion and any remaining debris or other materials will be cleaned up and removed from the area.

6.1	Initial Environmental Assessment	UGFI Ikhil NEB Project Summary OA Section 1, Page 1	The Ikhil Gas Development Plan (Submission 06-97-03) was initially proposed by the Inuvialuit Petroleum Corporation (IPC) as Operator of the Ikhil Gas Project at that time. The project was reviewed by the EISC during meetings held July 28 to 31, 1997 and was approved. It was determined by the EISC that "the development will have no significant negative impact on the environment or Inuvialuit harvesting in the Inuvialuit Settlement Region (Inuvialuit Final Agreement [IFA] Section 11(13)(a))." The Ikhil Gas Development Plan was subsequently submitted to the National Energy Board (NEB) on August 29, 1997 and approval received on December 24, 1997. In the Development Plan, IPC planned to use the K-35 well and to drill two additional wells to provide a secure supply of gas for the Town of Inuvik.
6.2	Baseline Data for water Sources	IKHIL UGFI Project Description Final to EISC Section 10.6, Page 36	Water for the Project will be taken from the East Channel of the Mackenzie River; no water will be withdrawn from lakes or inland streams. Water levels in the channel will not be affected by the small quantity of water to be withdrawn, compared to the channel volumes. Fish can be injured or killed if drawn into intake hoses used to withdraw water. Intakes used for withdrawing water will be screened according to the current DFO regulations (DFO 2005) to avoid impingement or entrainment of fish. The NWT Operational Statement for the construction of Ice bridges and snow Fills (DFO 2010) will be followed. The implementation of the above mitigation measures regarding water withdrawal is predicted to result in negligible effects to water levels from
6.3	Baseline Data	IKHIL UGFI Project Description	the channel where water is withdrawn. Residual impacts to aquatic resources from water withdrawal are therefore predicted to be not significant. Since 2009 and ongoing, Kiggiak EBA and IMG-Golder carried out several
	regarding the Biophysical	Final to EISC, Section 15, Page 70	studies and completed reports for the proposed Inuvik to Tuktoyaktuk Highway, which is routed to the east of the Project area. Within the

	Environment		Mackenzie Delta, a number of other oil and gas program assessments have been completed, and other studies have occurred over the years. Examples of these are listed in Table 15.1.
6.4	Community Consultation	IKHIL UGFI Project Description Final to EISC, Executive Summary, Page ii	Formal consultations with the Inuvik Hunters and Trappers Committee (HTC) and community members of the Town of Inuvik were conducted on August 24 th , and September 26 th , 2011 (respectively) to discuss Project plans, any issues of concern, and proposed mitigation measures. There were no concerns raised during these meetings and on August 25th, 2011, the Inuvik HTC issued a letter to that effect to UGFI.
6.5	Environmental Impact & Proposed Mitigation Measures	UGFI Ikhil NEB OA Project Summary Section 6, Page 17	The proposed Project will be completed entirely during the winter months, and within a small, well defined and previously utilized area. Therefore, the duration is considered to be short and the geographic scope is local / sub-regional (Appendix D).
			Table 6.1 summarizes the potential impacts, proposed mitigation, and residual effects that are predicted to remain after mitigation. The significance is then predicted, based on the predicted residual effects.
			It is expected that the use of the proposed mitigation measures, including completion of the Project under winter conditions and meeting or exceeding government guidelines and community expectations, will result in residual environmental, cultural and social impacts that are predicted to be not significant.