

Newsletter of the Land and Water Boards of the Mackenzie Valley



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Photo: Sarah Elsasser, WLWB
Near Whatì, NWT

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“Sharing responsibility by working together to make the best decisions for the land, water, and people.”

Geothermal Gets Green Light

Minister Accepts MVLWB Recommendation to Approve Geothermal Power Project

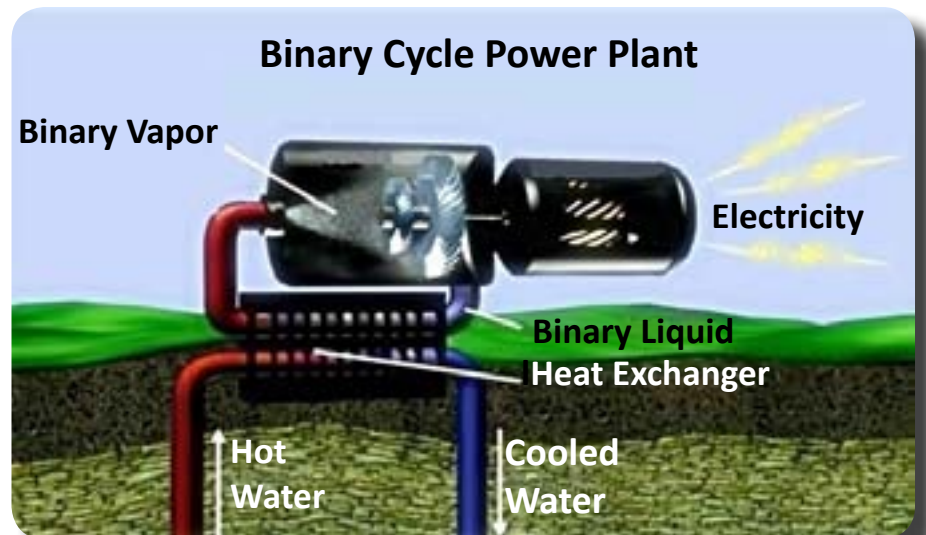


Diagram of generic binary turbine for geothermal power generation.
Courtesy of Borealis GeoPower.

On June 15, the Mackenzie Valley Land and Water Board (MVLWB or the Board) provided a recommendation to the Minister of Aboriginal Affairs and Northern Development Canada (AANDC) for approval of Type A Water Licence MV2012L4-0001 for Borealis GeoPower's geothermal power application in Fort Liard, NWT. Borealis' water licence (WL) and land use permit (LUP) applications proposed the construction of two vertical wells (one for injection and one for

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Borealis GeoPower Continued

production), the development of a geothermal power plant, and the production of electricity in Fort Liard, NT. The project is a joint venture between Borealis GeoPower and the Acho Dene Koe First Nation. If Borealis is successful in developing the project to its full potential, excess heat from the power plant may also provide district heating to the community.

The proposed project is the first geothermal power plant application of its kind in Canada. Lindsey Cymbalysty, the MVLWB's lead Regulatory Officer on the project, explains that, "Geothermal power is a new type of application for the Board with unique issues. We had to do lots of research to get up to speed with the technology and processes involved with it and also consider what other jurisdictions have in the way of geothermal regulation. We did look to and consider British Columbia's legislation to assist us."

At the April 2012 public hearing held in the community of Fort Liard, key topics for discussion included groundwater monitoring, capture and disposal options for H₂S and natural gas during drilling, contingency planning for chemicals unique to the operation, security, and the term of the licence.

Before commencing operations, Borealis GeoPower must post a \$1.215 million security with Aboriginal Affairs and Northern Development Canada; prior to drilling the second well (injection), Borealis must post an additional \$675,000.

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The MVLWB received the Borealis application in January 2012 and concluded its public comment period in mid-February. The Board held technical sessions in mid-March and a public hearing in Fort Liard, NWT on April 24. In early June, the MVLWB granted the LUP and sent the WL to the Minister of AANDC. On July 17, the Minister accepted the Board's recommendation and approved Borealis' Type A Water Licence.

View the [Land Use Permit and Water Licence](#), also available in hard copy at the MVLWB office in Yellowknife.



Farewell to GLWB Executive Director Robert Alexie

The Chairs, Board Members, and staff of the Land and Water Boards of the Mackenzie Valley congratulate Robert Alexie on his election, in early July, as president of the Gwich'in Tribal Council (GTC). Robert had served as the Executive Director of the Gwich'in Land and Water Board since October of 1999. As Executive Director, Robert oversaw all aspects—administrative, technical, and otherwise—of the land use permitting and water licensing for the GLWB.

The Chairs, Board Members, and staff sincerely thank Robert for his many years of excellent service and wish him well in his new role as president of the GTC.



Robert Alexie, GLWB Executive Director, 1999-2012

Gwich'in Land and Water Board Issues

Permit and Licence for Operation Nanook

The Gwich'in Land and Water Board was busy through the spring and early summer processing applications for a land use permit and a water licence for the Canadian military. Canadian Forces Base Edmonton carried out Operation Nanook in the Western Arctic in August as part of a larger exercise called Nanook 2012 that included a marine-based scenario played out in the Hudson Bay area.

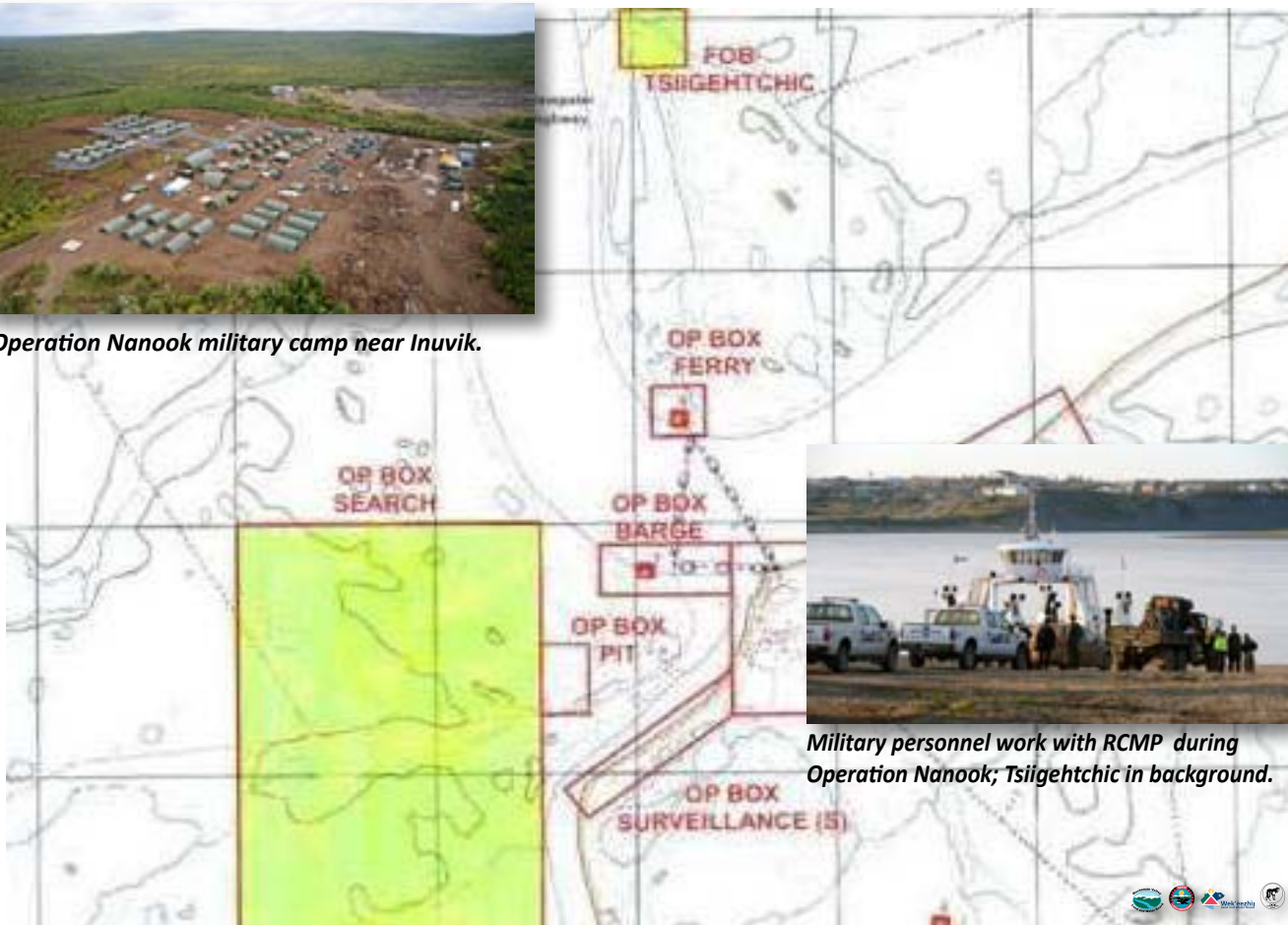
The portion of the exercise that took place in the Gwich'in Settlement Area included a 300-person camp in Inuvik and a 200-person camp near Tsiigehtchic. The military activities comprised three search and rescue scenarios and an incident on the Mackenzie

River that resulted in an effort to evacuate and secure the town of Tsiigehtchic. In the mock scenario, a barge carrying a truckload of toxic chemicals would collide with the ferry that crosses the Mackenzie River close to the townsite. If the chemical was to have spilled into the river, it would have reacted with the water and be extremely dangerous for the people of Tsiigehtchic. The military established a base camp at the ferry site and assisted the RCMP and other government departments to evacuate the town and control access to the barge. The military deployed a real barge and truck, but no chemicals were on board.

Map submitted by Canadian Forces Base Edmonton, as part of their water licence and land use permit applications.



Operation Nanook military camp near Inuvik.



Military personnel work with RCMP during Operation Nanook; Tsiigehtchic in background.



The Sahtu Land and Water Board Prepares for Increase in Oil and Gas Exploration Applications

On June 27, 2012, Aboriginal Affairs and Northern Development Canada (AANDC) awarded two new land parcels for oil and gas exploration in the Sahtu Region, in addition to the 11 parcels it awarded in 2011. This represents more than \$625,000,000 over the next five years in committed exploration expenses by five separate oil and gas companies.

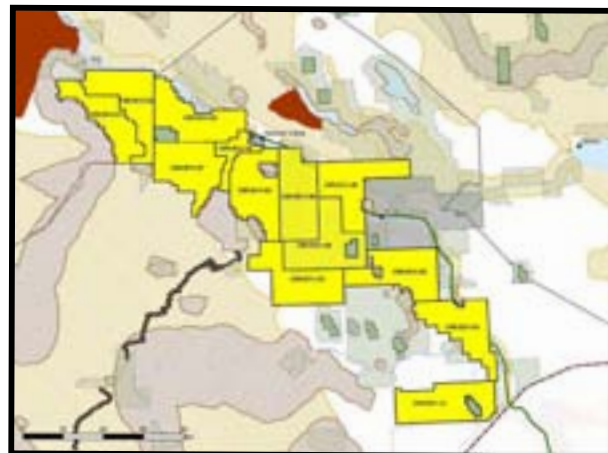


2011-12 Winning Bids for Oil and Gas Exploration Licences, K'asho Got'ine District.

For the Sahtu Land and Water Board (SLWB), this means it's in for some very busy times, and it has been working hard to ready itself for this increase in anticipated activity in oil and gas screening and regulation. The SLWB has been in close contact with other regulators, including AANDC, the National Energy Board (NEB), and the Government of the Northwest Territories, in preparation for this exploration work.

The SLWB also has been communicating with the various oil and gas companies that hold these exploration licences, outlining its application requirements and policies, and inquiring about each company's proposed developments in order to be sufficiently prepared when they submit applications. As required by the SLWB, the companies are also engaging with Sahtu organizations and communities; the NEB and AANDC are following suit by holding workshops on hydraulic fracturing and other new oil and gas technologies.

The Sahtu Land and Water Board has been in close communication with other regulators, including AANDC, the National Energy Board, and the Government of the Northwest Territories, in preparation for this exploration work.



2010-11 Winning Bids for Oil and Gas Exploration Licences, Tulita District.

This is to ensure that all organizations and communities have enough information to thoroughly review water licence and land use permit applications.

Please direct any questions regarding exploration activities in the Sahtu and/or the work of the SLWB to Board staff in Fort Good Hope: 1-867-598-2413. You are welcome to visit the Board's website at www.slwb.com.

Maps courtesy of Aboriginal Affairs and Northern Development Canada.



Public Hearing 101

A public hearing is one of the main tools a Board uses when it reviews major applications. The following is a basic introduction to the process.

What is a public hearing?

A public hearing offers water licence and/or land use permit applicants, interested parties, and members of the public an opportunity to give evidence about a proposed project directly to the Board. It is a forum at which participants ask questions of each other and possibly resolve outstanding issues related to a proposed project. The Board uses the evidence from the public hearing to develop conditions for the water licence and/or a land use permit for a project.

A public hearing is a quasi-judicial process, which means that it has powers resembling those of a court of law. A transcript of the hearing becomes part of the Board's Public Registry and is available online and at the MVLWB's office in Yellowknife.

What gives the MVLWB the authority to hold public hearings?

The Board holds public hearings under section 21 of the *Northwest Territories Waters Act* and section 24 of the *Mackenzie Valley Resource Management Act*.

Who is Involved?

- MVLWB Chairperson, Board Members, and staff
- expert and technical witnesses
- proponent – company that is applying for a water licence and/or land use permit
- interveners
- lawyers
- translators
- legal recorder
- audio technician
- the public.

What is the order of events at a public hearing?

Every public hearing has an agenda that sets out the order in which people speak and when they can ask questions. Following are the main items found on all hearing agendas in the order in which they appear.

- call to order and introductions
- proponent's presentation
- proponent's replies to questions from interveners and others
- interveners' presentations
- interveners' replies to questions
- opportunity for other parties to speak
- closing remarks
- adjournment.



City of Yellowknife Public Hearing (2010) for a type A water licence.

Continued next page

Public Hearing 101 continued

Who can participate?

Anyone can participate in a public hearing. Members of the public who wish to speak must register at the front desk at the beginning of the hearing. If a member of the public does not wish to speak at the public hearing, he or she can provide their views, in writing, to the Board and the proponent before the hearing takes place.

After the Hearing – The Board Decision

Following the public hearing, the Board considers the evidence and develops terms and conditions

for the water licence and/or land use permit for the proposed development. The next step is for the applicant, interveners, and members of the public to re-view and comment on the draft terms and conditions of the licence and/or permit. In the case of a type A water licence, the Board can only issue the licence with the approval of the Minister of Aboriginal Affairs and Northern Development Canada.

For more information, contact your local Land and Water Board: www.mvlwb.com



Rivers to Oceans Day Boards Join DFO in Education Initiative



MVLWB and Wek'èezhii Land and Water Board diorama

For the third consecutive year, the MVLWB accepted an invitation from Fisheries and Oceans Canada to participate in their "Rivers to Oceans Day". One of the main goals is to help students learn about the importance of aquatic health in the North and the use of water in a safe and enjoyable way.

Staff from the Wek'èezhii Land and Water Board and the MVLWB constructed a diorama illustrating poor environmental practices. The students offered suggestions about how to minimize or eliminate the negative impacts on the air, water, land, wildlife, and people at the project site.



Rivers to Oceans Day, June 12, Yellowknife



Approved Land Use Permits, Water Licences, Plans, and Reports

May 1 - August 31, 2012



Key	LW Board	Land Use Permit	Company	Project
1	GLWB	G12X004	Canadian Forces Base, Edmonton	Camp and military exercise
2	GLWB	G12Q005	Bob's Welding Limited	Rip, stockpile, and haul out shale
3	GLWB	G12Q006	Bob's Welding Limited	Rip, stockpile, and haul out shale
4	GLWB	G12Q007	Bob's Welding Limited	Rip, stockpile, and haul out shale
5	SLWB	S12A-001	MGM Energy Corp.	Oil and gas exploratory well
6	MVLWB	MV2012C0008	Canadian Zinc Corporation	Develop exploration decline
7	MVLWB	MV2012X0001	Borealis GeoPower	Drilling - two wells
8	MVLWB	MV2012S0011	North American Tungsten Corp. Ltd. (NATCL)	Geotechnical drilling
9	MVLWB	MV2012C0014	NATCL	Mineral exploration
10	MVLWB	MV2012J0017	Redbed Resources	Camp reactivation and exploration
11	MVLWB	MV2012X0015	GNWT Dept. of Transportation	Miscellaneous: quarry, road, camp
12	MVLWB	MV2012Q0013	Rowe's Construction	Quarry operation

Continued from previous page

13	MVLWB	MV2012C0010	Kennady Diamonds Inc.	Exploration assessment
14	MVLWB	MV2012X0012	Devon Canada Corp.	Barge landing and access road
15	MVLWB	MV2012C0018	War Eagle Company	Mining exploration
	LW Board	Water Licences		
16	GLWB	G12L3-001	Canadian Forces Base, Edmonton	Water use and disposal
17	SLWB	S12L1-001	MGM Energy Corp	Oil and gas exploratory well
18	SLWB	S12L3-002	Plummers Lodges	Use of water, disposal of waste
19	MVLWB	MV2012L8-0003	Great Slave Lake Lodge	Obtain drinking and domestic water
20	MVLWB	MV2012L4-0001	Borealis GeoPower	Drilling - 2 wells
21	MVLWB	MV2011L4-0002	Northwest Territories Power Corp. (NTPC)	Operate Taltson Power Plant
22	WLWB	W2012L1-0002	Nighthawk Gold Corporation	Mining and milling
	LW Board	Major Plans and Reports		
23	WLWB	W2009L2-0001	BHP Billiton	Waste Rock and Ore Storage Management Plan
24	WLWB	W2009L2-0001	BHP Billiton	Seepage Report
25	WLWB	W2007L2-0003	Diavik Diamond Mines Inc.	Aquatic Effects Monitoring Program (AEMP) Summary Report
26	WLWB	W2007L2-0003	Diavik Diamond Mines Inc.	AEMP Design
27	WLWB	W2007L2-0003	Diavik Diamond Mines Inc.	Hazardous Materials Management Plan
28	WLWB	W2007L2-0003	Diavik Diamond Mines Inc.	Operations Phase Contingency Plan
29	MVLWB	MV2009L8-0008	INAC-CARD	TCA Cover Design Plan
30	MVLWB	MV2002L2-0019	NATCL	Underground Tailings Management Plan
31	MVLWB	MV2002L2-0019	NATCL	Flat River erosion protection plan
32	MVLWB	MV2009L4-0004	NTPC	Dam Decommissioning Plan
33	MVLWB	MV2009L3-0007	City of Yellowknife	Landfill cell plans, record drawings
34	MVLWB	MV2009L3-0007	City of Yellowknife	Landfill Operations and Maintenance Plan

Other Land and Water Board Licence and Permit Activities May 1 - August 31, 2012

	MVLWB	GLWB	SLWB	WLWB
New applications received	6	0	1	2
Referrals to environmental assessment	0		0	0
Extensions*	3	0	0	1
Amendments*	4	0	0	2
All plans and reports*	8	0	0	7
Final clearances*	7	0	4	4

*Approved

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