

## REPORT

# WATER AND WASTE MANAGEMENT WORKSHOP



INUVIK, NT  
February 24 and 25, 2016

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## Executive Summary

A Water and Waste Management Workshop, hosted by the Inuvialuit Water Board (IWB), was held in Inuvik on February 24 & 25, 2016. The workshop was attended by Mayors and Hamlet staff from the Inuvialuit Settlement Region communities of Aklavik, Sachs Harbour, Tuktoyaktuk, Ulukhaktok and Paulatuk. Participants included staff from the Government of the Northwest Territories (GNWT) Departments of Municipal and Community Affairs (MACA), Environment and Natural Resources (ENR) and Health & Social Services (H & SS). Representatives from the Gwich'in Land and Water Board (GLWB) also attended.

The overall objective of the workshop was to strengthen the capacity of the communities to manage municipal water and waste services safely, efficiently and effectively.

Specific objectives included:

- To increase the level of awareness and knowledge amongst community representatives and all other parties involved in the provision and management of community water and waste services with a focus on water licensing regulatory requirements, waste management, and effluent sampling, analysis and reporting;
- To promote and support community compliance with water licensing requirements;
- To review and update actions taken to address concerns related to community water and waste services identified during the February 2015 IWB workshop;
- To develop a common understanding of the roles and responsibilities of all parties involved in the provision and management of community water and waste services; and
- To identify appropriate communication tools to convey roles and responsibilities to the elected leadership and staff of all parties on an ongoing basis.

In part, these objectives were advanced through interactive presentations from MACA, ENR and H & SS. Presentations focused on:

- Roles and responsibilities of the respective GNWT department,
- Operation and maintenance of sewage and solid waste disposal facilities,
- Hazardous waste management and planning,
- Municipal water licence standard terms and conditions,
- Assisting the ISR communities in municipal water, sewage and solid waste management,
- Water licensing processes and maintaining regulatory compliance.

Presentations were followed by floor discussions among all workshop participants, discussions on "roles and responsibilities" of each party and a presentation by the IWB on municipal water licence standard terms and conditions. A commitment was made to work as a "team" to address issues and challenges in water, sewage and solid waste management systems in the ISR communities.

This workshop was the fifth in the series of workshops organized by the IWB, formerly the Northwest Territories Water Board. Other workshops included Municipal Water Licensing (2008), Spill Contingency Planning and Sampling (2010), Hazardous Waste Management (2011) and Municipal Wastewater Management (2015).

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## Acknowledgements

The success of this workshop would not have been possible without the active participation of all attendees and presenters. A sincere thank you to the Mayors and Hamlet staff from Sachs Harbour, Ulukhaktok, Tuktoyaktuk, Paulatuk and Aklavik and the representatives from ENR, H&SS, MACA and GLWB.

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## 1. Opening Prayer

Mayor Ray Ruben of Paulatuk opened the workshop with a prayer.

## 2. Welcoming Comments from the Chair

The IWB Chairperson, Roger Connelly, welcomed all the participants, highlighting the importance of Water and Waste Management and the ongoing issues and challenges related to health, safety and environment. He emphasized the collective effort needed from all parties to provide safe and efficient water and waste management services to community residents. Workshops of this nature create a forum for interactive communication between communities, government and the IWB. This workshop will identify the roles and responsibilities of the government departments and the IWB in assisting community governments provide safe potable water, environmentally acceptable wastewater and municipal solid waste disposal practices and an understanding of maintaining regulatory requirements and compliance. Finally, he stressed the importance of the IWB and government departments working together with communities to achieve their common goals.

## 3. Follow-up Action Items from the IWB February 2015 Workshop

During the February 2015 workshop, community and government participants raised issues and concerns regarding the provision of municipal water and waste management services. Discussions on these topics during and following the 2015 workshop resulted in agreed-upon action items to address the issues raised. Progress achieved since 2015 was presented. Follow-up discussion by all responsible parties on the action items resulted in updates of the identified actions. A table summarizing the discussion will be prepared and provided to participants by the IWB in a separate document (**Commitment #1**).

## 4. Presentations

The GNWT departments were invited to present topics related to municipal solid waste landfill operation and maintenance, hazardous waste management, spill reporting and spill response, water licence compliance and water stewardship strategy, assisting community governments on safe, efficient and effective water and waste management and maintaining regulatory compliance. All presentations were interactive and included discussions on municipal landfill operations and maintenance, hazardous waste, spill reporting and spill response.

**Gavin Olvera, Community Works Advisor, MACA** provided information on standards for solid waste operation and maintenance highlighting the importance of proper training of operators for effective landfill management. He emphasized the importance of ENR's new program to recycle electronic waste (e-waste) (e.g. discarded electrical or electronic devices) since landfills should not accept these wastes any longer. Topics covered were: landfill attendant training, personal protective equipment, safety operations, landfill security, day to day tasks, burn pits and waste segregation.

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**Rick Campbell, Manager of Public Works, Town of Inuvik** outlined the benefits of adequate landfill compaction - increased landfill life, reduced cover material, prevents windblown debris and in turn reduces cost and increases landfill effectiveness.

**Olivia Lee, Manager of Infrastructure and Project Management, MACA** presented Solid Waste System (SWS) Operation and Maintenance (O&M) Templates and Design Guidelines. She emphasized proper landfill site selection in order to safeguard public health, reduce adverse environmental impacts and provide for long term isolation of waste deposited in the landfill facilities.

MACA provides funding, technical support and operator training for management of waste and wastewater systems to the municipal governments. In relation to water licence application processes, a community government may be assisted in document development and technical or engineering reviews upon request. O&M Plan templates are available on:

<https://mvlwb.com/resources/policy-and-guidelines>.

The presentations and discussions also provided the following information:

- MACA, in conjunction with ENR, is providing support to the Mackenzie Valley Land and Water Board (MVLWB) for the development of Design and Closure Guidelines for New Solid Waste Facilities and the guidelines are in the final draft stage;
- The final draft of the NWT Landfill Guidelines will be made public for consultation once ownership of the guidelines are determined by the parties;
- MACA assists communities in new landfill suitability assessments;
- MACA is responsible for the reclamation of existing landfill facilities located on both Commissioners Land and private land;
- Closure and capping of existing landfills is the responsibility of the municipalities;
- For new landfills, both closure and reclamation will be the responsibility of the municipalities;
- MACA understands the gravity of hazardous waste issues and is trying to identify funding for its management and removal;
- Recently MACA and ENR conducted a status study of existing landfill sites in the NWT, including the ISR, and the report will be made public once the draft is completed; and
- MACA is interested in monitoring the leachate at existing landfill sites.

**Philippe Thibert-Leduc, Water Resources Officer, ENR:** Presentations were divided into three parts: (1) ENR and Water Licence Compliance (2) Water Stewardship Strategy update, and (3) Spill Reporting and Spill Response. The first presentation emphasized ENR's roles and responsibilities in monitoring and enforcement as per Section 65 of *Waters Act* and maintaining compliance with water licence terms and conditions. The second presentation focussed on the NWT Water Stewardship Strategy. The third presentation provided information on spill reporting and spill response.

Highlights of the first presentation included:

- It is a shared responsibility for government, the IWB and municipalities to manage water, wastewater and municipal solid waste;

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- ENRs general mandate - promote and support the sustainable use and development of natural resources and to protect, conserve and enhance the NWT's environment for the social and economic benefit of all NWT residents;
  - The specific role of the WRO includes environmental protection, public outreach, and water licence inspections/closures;
  - Key goals - to keep NWT water clean and provide safe source drinking water to the communities;
  - There are opportunities and challenges in achieving goals in the context of existing geo-climatic conditions, post-devolution environment and limited human resources; and
  - Building capacity and awareness for safe, efficient and effective water and waste management services.

Highlights of the second presentation included:

- ENR is responsible for administering the legislation that regulates source water protection in the NWT post devolution April 1, 2014;
- ENR is the lead for the implementation of the NWT Water Strategy;
- NWT Water Strategy Phase I Action Plan and results are available on: <http://www.nwtwaterstewardship.ca/publications>;
- ENR currently drafting NWT Water Strategy Phase II Action Plan 2016 - 2020; and
- NWT Water Strategy Action Plan will be finalized and distributed in April 2016

The third presentation included:

- Spill reporting and response are regulated by ENR under the *Environmental Protection Act*;
- Spill Contingency Plan submissions and spill reporting are components of water licence terms and conditions;
- Basic spill response procedures are an important part of the Spill Contingency Plan;
- Spills must be reported immediately to the 24-Hour Spill Report Line at 867-920-8130; and
- A list of minimum reportable quantities for NWT spills can be found on: <http://www.enr.gov.nt.ca/programs/hazardous-materials-spills/reporting-spills>

**Gerald Enns, Hazardous Waste Specialist, ENR** presented information on hazardous waste management systems that included composition, quantification, handling, temporary storage, shipment and final disposal procedures.

The presentation included:

- Tracking of the hazardous waste movement from the generator to the carrier and to the receiver for final disposal;
- Sources of hazardous wastes generation: (1) Household Hazardous Waste (residential), and (2) Industrial, Commercial, and Institutional (ICI) Sector;
- Contaminated soil is the major source of hazardous waste in NWT;
- Hazardous wastes are classified into four categories: (1) reactive (2) corrosive (3) ignitable, and (4) toxic;
- One household thermostat contains three to five grams of Mercury which is enough to contaminate 5 million litres of drinking water while one litre of used oil is enough to contaminate 1,000 litres of drinking water; and

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- The requirement for coordinated transportation and disposal for safe and economic management of hazardous waste.

**Sachs Harbour:** There was a spill of an unknown substance in the garage after maintenance of equipment was completed. The maintenance staff did not have bottles to collect the sample for identification and neither did the health center. Taiga indicated they would provide the proper glass bottles to collect a sample of the unknown liquid. Gerald Enns reiterated the importance of Hamlet staff knowing the proper spill response procedures as per the Hamlet Spill Contingency Plan.

**Bruce Stuart, Manager, Taiga Environmental Laboratory, ENR:** Demonstrated sampling protocols such as collection techniques, labelling, and field sheet completion.

Information included:

- Labelling of sample bottle should include: name, project ID, sample ID, preservative information, collection date and time, and analysis required;
- Sampling bottle should be rinsed twice with the sample to be collected except where bottle contains sample preservative;
- Sampling bottle should be filled to the top and tightly capped;
- Samples should be received by the laboratory within 24 hours from the time of collection;
- Collected sample should be stored in a cool environment;
- Field sheet should be filled-out completely and is available on: <http://www.enr.gov.nt.ca/programs/taiga-environmental-laboratory/supplies-and-sampling> ; and
- Proper safety and anti-contamination measures have to be followed during sampling such as wearing latex hand gloves, goggles, coveralls if needed, etc.

## 5. Roles and Responsibilities (Community Water, Wastewater and Solid Waste Management)

During the 2015 workshop it was recognized that several organizations and agencies are involved in the safe, efficient and effective provision of municipal water services, sewage and solid waste handling, management and disposal. This “team” includes the municipalities, MACA, ENR, Taiga Laboratories and H & SS, as well as the IWB. Discussions during the 2015 Workshop resulted in the development of a draft “roles and responsibilities” document which includes all parties involved.

The draft “roles and responsibilities” document was presented for discussion with three questions to consider:

1. Is the document accurate?
2. Is the document complete?
3. Do we agree on the content?

Each party's roles and responsibilities were discussed and revisions noted. MACA and H & SS will finalize their “roles and responsibilities” after further review within the next two weeks. A final version of “roles and responsibilities” will be provided to all participants.



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## 6. Municipal Water Licence Standard Terms and Conditions

**Mardy Semmler, Executive Director, IWB:** Introduced the standardized IWB municipal water licence terms and conditions (T & Cs). Existing T & Cs from each ISR community water licence and the Mackenzie Valley regional water boards were examined to create a list of consistent municipal water licence T & Cs. While consistency is the goal, the IWB may alter any or all of the T & Cs so that it may effectively address the specific geographic and other circumstances of a communities' municipal water licence.

## 7. Specific Discussions and Commitments

**Question (Communities):** Unregulated construction and demolition waste dumping at community landfills is a common practice by contractors. This practice is causing additional work for municipal staff and is shortening the landfill life. How can we deal with public works contractors and control the disposal of construction and demolition waste?

**Response:** There was an interactive discussion by MACA, ENR, H & SS, municipalities and the IWB to address the issue raised. Discussions resulted in the following:

- As the owner of the landfill, Hamlets have the authority to accept or reject construction waste;
- Non-hazardous construction and demolition waste can be safely accepted at community landfills, however that shortens the landfill life;
- All contracts should include waste management and disposal provisions;
- Effective implementation of contract terms and conditions is required;
- Caution should be exercised when accepting hazardous wastes from contractors;
- Effective implementation and monitoring of municipal waste management plan is critical;
- Hamlet can adopt tipping fee bylaws and enforce to recover costs and control construction waste being disposed of within community landfills;
- All contracts should include a requirement for a waste disposal agreement with the municipality.
- Contract holdbacks should not be paid until municipality can confirm that contractor has abided by the term of the waste disposal agreement with the municipality.
- Where contractor non-compliance results in additional landfill costs, these costs will be recovered from the holdback payment.
- IWB and MACA will jointly contact GNWT and federal contracting departments on this issue.
- Municipalities will address this issue with local contractors.
- These issues should also be discussed during the Northwest Territories Association of Communities (NWTAC) annual meeting.

The discussions resulted in commitments by MACA (**Commitments #2, #3 and #4**) to assist Hamlets to address some of the question and concern raised.

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**Question (Sachs Harbour):** During the IWB 2015 Workshop, ENR committed to collecting water samples from the old landfill site in Sachs Harbour and conduct laboratory analysis to find out if there are any environmental pollutants in the samples. Samples were not collected during 2015 open water season. When will the water samples be collected and laboratory analysis conducted?

**Response:** ENR reiterated commitment for sample collection during upcoming open water season and laboratory analysis for determination of possible environmental pollutants in coordination with the Hamlet of Sachs Harbour (**Commitment #5 – the commitment will be limited to sampling and analysis only**). MACA provided information about an environmental sampling program proposed in the Beaufort Delta during 2016/2017 fiscal year and committed to circulate the list of sites to be sampled to all SAOs of the five ISR communities (**Commitment #6**).

**Question (Sachs Harbour):** Are there any provisions for training to use on-site “Colilert” drinking water test kits?

**Response (H & SS and MACA):** H & SS stated that use of the Colilert test kit is simple. It includes a one page manual. H & SS committed to provide onsite drinking water test kits to the communities upon request (**Commitment #7**). Microbiological (*Coliform* and *E. coli*) tests have to be performed on drinking water four times per month. Chlorine and turbidity tests have to be performed daily and logs maintained and faxed to EHO in Inuvik weekly. MACA committed to providing a DVD in coordination with H & SS to assist communities as a training mechanism for using the Colilert drinking water test kits (**Commitment #8**).

**Question (Sachs Harbour):** Are there any regulations on incineration of wastes?

**Response (facilitator):** Regulations under the *Environmental Protection Act* are available for incineration of waste hydrocarbons and other wastes.

**Question (Paulatuk):** Fences at landfill facilities blow down due to strong winds and debris build up. Waste is then blown away and ends up on the land, shorelines and in the ocean. How can we address this problem?

**Response (ENR and MACA):** ENR suggested removing collected garbage along fences regularly such as weekly or monthly to reduce such problems. MACA informed there is no additional funding for remediating landfills or removing debris from the ocean and that has to be done from the Hamlet’s management budget.

**Question (Facilitator):** Does everybody understand the difference between remediation and closure as mentioned by MACA?

**Response (MACA):** Remediation is a process of cleaning the landfill (i.e. treating contaminated soil and reusing back into the landfill). Closure is a process of capping and closing the landfill at the end of its life.

**Question (Taiga Lab):** Is there any risk management analysis of waste disposal facilities on a regular basis?

**Response (MACA):** There is no such provision.

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**Question (Facilitator):** Is there leachate collection at the new Tuktoyaktuk landfill facilities?

**Response (MACA):** There is no leachate collection at the new Tuktoyaktuk landfill facilities. In the NWT, only the Yellowknife landfill site has a provision for leachate collection.

**Question (Facilitator):** Does ENR offer spill training to the communities?

**Response (ENR and MACA):** No spill training is currently provided however ENR can assist communities as needed on a request basis. MACA can include spill response training into its annual solid waste management training program. MACA Water and Waste Management Training Schedule for 2016-17 is attached in Annex 4.

**Question (Community):** Do we have to wear gloves during sampling activities?

**Response (Taiga Lab):** We have to wear gloves (i.e. latex gloves) during sampling activities. After sampling, gloves should be disposed of properly or may be returned to Taiga Lab (preferably in a Ziploc bag).

**Question (Aklavik):** Tap water in Aklavik makes containers black after boiling. What could be the reason?

**Response (Taiga Lab and MACA):** Water containing excess Iron (Fe) may be the reason for making containers black; however lab tests are required for confirmation. MACA can assist Aklavik in sampling and lab testing upon request.

**Question (H & SS):** Do we follow the same procedures for sampling and lab testing of drinking water and wastewater?

**Response (Taiga):** Procedures for sampling and laboratory analysis of water and wastewater are the same.

**Question (Aklavik):** Does the IWB visit the community before expiry of water licence?

**Response (IWB):** Each licence is staggered over a five year period with one municipal water licence renewal each year. The IWB visits the community during the summer before the expiry of the water licence and conducts visual inspections of the water supply and waste disposal facilities and meets with Hamlet leadership to discuss issues and concerns with regard to the water licence. The IWB will discuss whether it should also send a representative to Hamlets after the issuance of the water licence to discuss the licence terms and conditions (**Commitment #9**).

**Question (Paulatuk):** Barrel crusher and incinerators can be considered one of the options in the waste management process. How can we make barrel crushing more feasible and economic?

**Response (MACA and ENR):** Centralized collection and crushing could be one of the options. As an alternate option, buying a barrel crusher and rotate amongst the communities could save money. The sealift goes to each community each year and hamlets can coordinate the shipping of an incinerator, barrel crusher and have each community be prepared to deal with hazardous waste and scrap metal for shipping during the sealift season.

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**Question (Sachs):** What regulations or guidelines are available to build a permanent dock on the shoreline?

**Response (MACA):** Guidelines for the construction of a permanent dock can be found on the Department of Fisheries and Oceans (DFO) website.

**Question (Tuktoyaktuk):** What minimum quantity of hazardous waste requires a Transportation of Dangerous Goods (TDG) waste manifest transport documentation?

**Response (ENR):** Typically five gallons, however there are provisions for other hazardous waste which are more toxic in smaller quantities such as mercury (Hg). Totes are available for the transport of liquid contaminated and hazardous waste.

**Question (Sachs Harbour):** Contaminated soil from fuel/oil spills is one of the concerns in Sachs Harbour. Contaminated soil either has to be shipped out or remediated over a three to five year period. Last year contaminated soil was placed in a geo-textile area. Can we use the remediated soil as a capping material for landfill closure?

**Response (ENR):** The remediated soil has to meet industrial remediation criteria before reuse as a landfill capping material. ENR can assist communities in understanding requirements. If contaminated soil is to be shipped out, ENR would prefer the shipment to be coordinated as a region, partnering with other communities during the annual sealift.

**Question (IWB):** Other regional Land and Water Boards are interested in the “roles and responsibilities” document. Can we circulate the document upon finalization?

**Response (Participants):** All participants agreed to circulate final version of “roles and responsibilities” document to the regional land and water boards.

**Question (Facilitator):** What methods do you suggest to provide “roles and responsibilities” document to the communities?

**Response (Participants):** There was an interactive discussion by all participants to address the issue raised. Several options provided by participants were: Posters, calendars and using face book. Participants from communities suggested providing two to three page summary documents to the SAOs to include in new councillor’s orientation package. The Mayor of Ulukhaktok suggested the development of posters in both English and Inuvialuktun to provide information effectively to younger and older generations. The participants agreed with the development of posters in English and Inuvialuktun.

At the end of the discussion all the participants agreed to the distribution of a workshop Press Release to the NWT news media (see Annex 6).

The IWB Chairperson requested all participants provide suggestions and guidance to make the next planned workshop in February 2017 a success.

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## 8. Workshop Commitments

**Commitment #1:** The IWB will prepare an update on follow-up actions from the 2015 workshop, additional follow-up actions from this workshop, and provide copies to all participants.

**Commitment #2:** MACA to work with Hamlets to develop Tipping Fee By-laws and tipping fees schedules upon request, to assist in addressing the issues raised from construction and demolition waste dumping into the community landfill.

**Commitment #3:** MACA and the IWB to contact GNWT and federal contracting departments regarding:

- All contracts should include a requirement for a waste disposal agreement with the municipality.
- Contract holdbacks should not be paid until municipality can confirm that contractor has abided by the term of the waste disposal agreement with the municipality.
- Where contractor non-compliance results in additional landfill costs, these costs will be recovered from the holdback payment.
- IWB and MACA will jointly contact GNWT and federal contracting departments on this issue.
- Municipalities will address this issue with local contractors.

**Commitment #4:** MACA to assist communities for the siting and planning of new community landfill sites.

**Commitment #5:** ENR confirmed commitment made at the IWB 2015 workshop to obtain water sample collections from the old landfill site in Sachs Harbour and the Imperial Oil waste dump site at Tuktoyaktuk during the open water season in 2016 and arrange for laboratory analysis of the samples. ENR's commitment would be limited to sampling and analysis only.

**Commitment #6:** MACA to provide a list to the SAOs of five ISR communities of community waste disposal facilities to be sampled and monitored in 2016.

**Commitment #7:** H & SS to provide Colilert drinking water test kits to the Hamlet of Sachs Harbour upon request.

**Commitment #8:** MACA to provide a DVD as a training tool for using the drinking water test kits in coordination with H&SS to assist communities.

**Commitment #9:** IWB will consider sending a representative to the community following renewal of a municipal water licence to discuss its terms and conditions with local representatives.

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## 9. Moving Forward

All the participants – Hamlets, MACA, ENR, H & SS and the IWB, working as a "team", collectively contribute to the management of safe, efficient and effective Community water and waste services. Hamlet representatives and all the participants appreciated the workshop theme and suggested, for future workshops:

- Breakout sessions (e.g. operations, water, waste);
- Include a site visit to the Town of Inuvik water and waste facilities (operators only);
- Use of simple rather than technical words during presentations and discussion; and
- Use a workshop evaluation form at the end of workshop.

## 10. Closing Prayer

Stephen Charlie closed the workshop with a prayer.

## Annex 1: Invitation Letter and Workshop Agenda

January 28, 2016

Distribution List  
Workshop Participants

**Re: Municipal Water and Waste Management Workshop  
Inuvik, February 24/25, 2016**

The Inuvialuit Water Board (IWB) is pleased to attach the agenda for the Municipal Water and Waste Management Workshop to be held on February 24 and 25, 2016 at the Midnight Sun Recreation Complex in Inuvik. The agenda includes all items suggested by communities and participating government departments. Binders will be provided to all participants at the workshop.

Two workshop documents are being provided at this time:

### **1) Follow-up action items from the February 2015 workshop.**

During the 2015 workshop numerous issues and concerns regarding the provision of municipal water and waste services were raised by community and government participants. Discussion on these topics resulted in agreement on action items and commitments that would be undertaken by one or more of the participating organizations. Following some additional interaction after the workshop, this list was finalized and provided to all participants. A copy of this list is attached. The IWB looks forward to discussing the progress that has been made to address the action items and how this progress will improve the provision of municipal water and waste services in our communities.

### **2) Draft Roles and Responsibilities in Municipal Water and Waste Management.**

During the 2015 workshop it was clearly recognized that a number of organizations and agencies are involved in the process of municipal water use – a process that starts with water being taken from a water source, and ends when it is released back into the environment. This “team” includes the municipalities; the Government of the Northwest Territories (GNWT) Departments of Municipal and Community Affairs, Environment and Natural Resources (and the Taiga Lab) and Health and Social Services; as well as the IWB; and the Workers Safety and Compensation Commission.

This "team" has a collective goal and responsibility. Namely to provide water in a manner that does not diminish the receiving source; is adequate to meet community needs; does not pose a risk to the health and wellbeing of those receiving or providing the service, is capable of responding to emergencies; and ensures that when used water is released back into the environment it is free of substances that may pose a health or safety risk. The "team" also ensures that any liquid wastes released from solid waste facilities do not enter the receiving environment.

In recognizing the number of parties involved in the provision of municipal water and waste services it is important that all those involved have a full and consistent understanding of the major roles

and responsibilities of each of the parties. To this end the IWB has worked with the involved organizations to develop a list summarizing the respective roles and responsibilities of each “team” member. This list is attached, in draft form, for your review and consideration. We would like to have this list finalized by the end of the upcoming workshop so we can undertake the next steps in preparing appropriate communication materials (eg: pamphlets, calendars, web site – to be discussed at the workshop) that can be used on an ongoing basis by municipal leaders, staff and contractors, by incoming and existing government and agency staff and by other interested parties.

This awareness initiative is but one of our collective contributions to the provision of efficient and effective municipal water and waste services in our communities. Your observations and comments in finalizing this list would be greatly appreciated either before or during the workshop.

Thank you, in advance, for your participation at this upcoming workshop. The IWB looks forward to our collective discussions and deliberations on this issue of critical importance to the wellbeing of our communities and surrounding environment.

Sincerely,

Roger Connelly  
Chairperson

Attachments



**Municipal Water and Waste Management Workshop**  
**Community Lounge, Midnight Sun Recreation Centre, Inuvik, NT**  
**February 24, 2016: DAY 1**

<b>Time</b>	<b>Activity</b>	<b>Lead</b>
8:30 - 9:00 am	Arrival, Registration and Coffee	
9:00 - 9:30 am	Welcome and Introduction <ul style="list-style-type: none"> <li>• opening prayer</li> <li>• round table introductions</li> <li>• welcoming remarks</li> <li>• objectives of workshop &amp; agenda review</li> </ul>	Roger Connelly Chairperson  Emery Paquin Facilitator
9:30 – 10:15 am	Follow up on 2015 IWB Workshop Action Items	Emery Paquin
10:15 - 10:30 am	<b>Refreshments</b>	
10:30 – 12:00	MACA: <ol style="list-style-type: none"> <li>1. Landfills – General Operations and Maintenance</li> <li>2. Draft Guidelines – Landfills</li> <li>3. Landfill Operator – Routine Landfill Operations Practices/Challenges</li> <li>4. Community Landfills from a risk perspective</li> </ol>	Olivia Lee & Guest Landfill Operator
12:00 - 1:00 pm	<b>Lunch Break – on own</b>	
1:00 – 3:00 pm	ENR: <ol style="list-style-type: none"> <li>1. Managing Hazardous Waste;</li> <li>2. Spill Reporting and Spill Response (Spill Kits);</li> <li>3. Water Licence Compliance;</li> <li>4. Water Stewardship Strategy</li> </ol>	Philippe Thibert- Leduc
3:00 - 3:15 pm	<b>Refreshments</b>	
3:15 - 4:45 pm	Taiga: SNP Sampling Protocols - Demonstration	Bruce Stuart
4:45 – 5:00 pm	<b>Day One Wrap Up</b>	Emery Paquin

**February 25, 2016: DAY 2**

<b>Time</b>	<b>Activity</b>	<b>Lead</b>
8:30 - 9:00 am	Arrival and Coffee	
9:00 – 9:15 am	Review of Day 1 and Day 2 agenda	Emery Paquin
9:15 – 10:15 am	Roles and Responsibilities (Community Water and Wastewater Management)	Emery Paquin
10:15 – 10:30 am	<b>Refreshments</b>	
10:30 – 11:30 am	Roles and Responsibilities (Community Water and Wastewater Management) Documents to be Developed – next steps	Emery Paquin
11:30 – 12:15 pm	Municipal Standard Terms and Conditions	Mardy Semmler Bijaya Adhikari
12:15 - 12:30 pm	<b>Wrap up and closing remarks</b> <b>Closing prayer</b>	Roger Connelly

## Annex 2: List of Participants and Presenters

<b>Municipalities</b>	<b>Community</b>	<b>Phone</b>	<b>Email</b>
Ray Ruben, Mayor	Paulatuk	867-788-0002	ray.francis.07@live.ca
Greg Morash, SAO	Paulatuk	867-580-3531	hopaulatuk@gmail.com
Angus Dillon, Operations	Paulatuk	867-580-3039	dillon_angus@hotmail.com
Laverna Klengenber, Mayor	Ulukhatok	867-396-8000	
Judi Wall, Assistant SAO	Ulukhaktok	867-396-8023	asao@northwestel.net
Gibson Kudlak, Water Plant Operator	Ulukhaktok	867-678-0412	G_Kudlak@gov.nt.ca
Darrel Nasogaluak, Mayor	Tuktoyaktuk	867-340-2578	darrelnasogaluak@yahoo.com
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## School of Community Government

### WATER AND WASTE

### MANAGEMENT PROGRAM



#### 2016-17 SCHEDULE OF UPCOMING COURSES

<u>Course</u>	<u>Location</u>	<u>Date</u>
Small Systems Water Treatment (PM)	Inuvik, NT	April 4-9, 2016
Small Systems Water Treatment (PM)	Fort Smith, NT	April 11-16, 2016
Class I Water Treatment (PM)	Inuvik, NT	April 18-23, 2016
Class I Water Treatment (PM)	Yellowknife, NT	July 11-16, 2016
Solid Waste Management /Small Systems Wastewater Treatment	Yellowknife, NT	August 15-20, 2016
Class II Water Treatment	Yellowknife, NT	October 17-22, 2016



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## **Annex 4: Workshop Press Release**

### **PRESS RELEASE**

### **INUIVALUIT WATER BOARD**

**MARCH 1, 2016**

### **INUIVALUIT WATER BOARD HOSTS 2016 MUNICIPAL WATER AND WASTE MANAGEMENT WORKSHOP**

The Inuvialuit Water Board hosted a municipal water and waste management workshop in Inuvik on February 24 and 25, 2016.

The workshop was attended by Mayors and senior staff from the Inuvialuit communities of Aklavik, Sachs Harbour, Tuktoyaktuk, Ulukhaktok and Paulatuk. Participants also included the territorial Departments of Environment and Natural Resources, Municipal and Community Affairs and Health and Social Services. Representatives from the Gwich'in Land and Water Board also attended.

The workshop provided an opportunity to exchange information and discuss ways to assist community governments in providing clean drinking water and safe sewage and garbage disposal.

Inuvialuit Water Board Chairperson, Roger Connelly, recognized the important roles of all participants and the many challenges associated with these responsibilities. He emphasized that while the majority of the day-to-day responsibilities fall to community governments, it is through the commitment and effort of all parties working together that these challenges can be overcome.

To support protection of the environment and human health, the Board will continue working with communities and government departments to address the concerns and challenges associated with providing community water, sewage and garbage services. Another workshop will be held early in 2017.

For further information on the workshop and the Inuvialuit Water Board contact:

Mardy Semmler  
Executive Director  
Inuvialuit Water Board  
(867) 678-8609

## Annex 5: Evaluation Form

### EVALUATION FORM MUNICIPAL WATER AND WASTE MANAGEMENT WORKSHOP FEBRUARY 24 AND 25, 2016 INUVIK, NWT

Please take a few minutes to fill out and return this form **by March 1, 2016**.

1. Were the materials provided adequate to prepare you for the discussions?
2. Within the time available, was the meeting run effectively?
3. Could the agenda have been improved? If so, how?
4. Were the presentations/discussions relative and useful to your responsibilities?
5. Was there adequate time provided for participants' questions and responses?
6. Were questions from the floor answered satisfactorily?
7. What topics or aspects of the workshop did you find most interesting or useful?
8. Were the objectives of the workshop achieved?
9. Were you clear on future actions and commitments from the workshop?
10. Any suggestions on how the workshop might have been improved?
11. Were the physical arrangements of the workshop adequate (meeting facility, sound system, transportation, accommodation, support, etc.)?
12. Would you attend another Inuvialuit Water Board workshop on community water and waste services?
13. On a scale of 1 to 10, how would you rate this workshop (1 being poor and 10 being excellent)?

Thank you.

Completed evaluation forms may be returned to:

Mardy Semmler  
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Fax: (867) 678-2943