



INUVALUIT WATER BOARD WATER AND WASTE MANAGEMENT WORKSHOP REPORT



INUVIK, NT
February 22 and 23, 2017

**Water and Waste Management Workshop
Inuvik, NT – February 22 – 23, 2017**

Executive Summary

Acknowledgements

Table of Workshop Contents

Opening Prayer 1
Welcoming Comments from the Chair 1
Follow-up Action Items 1
Presentations 1
 Environment and Natural Resources
 Municipal and Community Affairs
Roles and Responsibilities 4
Tour of Water Treatment Plant and Sewage Disposal Facility..... 4
Specific Discussions..... 5
Workshop Commitments 9
Conclusion 10
Closing Prayer 10

Annexes

- 1 Invitation Letter and Workshop Agenda
- 2 Workshop Participants
- 3 Workshop Evaluation Summary
- 4 Evaluation Form

Workshop Presentations available upon request

Executive Summary

A Water and Waste Management Workshop, hosted by the Inuvialuit Water Board (IWB), was held in Inuvik on February 22 & 23, 2017 with a focus on hazardous waste management. The temporary storage and ultimate disposal of hazardous waste has been identified as an increasing concern in most communities. The workshop was attended by Mayors and Hamlet staff from the Inuvialuit Settlement Region (ISR) communities of Aklavik, Sachs Harbour, Tuktoyaktuk, Ulukhaktok and Paulatuk. Other 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) and Inuvialuit Regional Corporation (IRC) also attended.

Although focussing on hazardous waste management, the overall objective of the workshop was to strengthen the capacity of the communities to safely, efficiently and effectively manage municipal water and waste services. 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 hazardous waste, effluent sampling, analysis and water licence 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 2016 IWB workshop; and
- To gain an understanding of and support MACA's Asset Management Strategy.

In part, these objectives were advanced through interactive presentations from ENR and MACA.

- Hazardous waste handling, temporary containment and storage and final disposal;
- Hazardous waste and contaminated soil treatment guidelines;
- Surveillance Network Program (SNP) sample collection, lab analysis and reporting;
- Annual inspection and compliance of water licence terms and conditions; and
- Community asset management.

Each presentation was followed by floor discussions among all workshop participants. The IWB provided an update of the issues table action items developed during the 2015 and 2016 workshops and a draft copy of a Water and Waste Management "Roles and Responsibilities" poster. The parties present confirmed their commitment to work as a team to address issues regarding water, sewage, hazardous and solid waste management systems in the ISR communities.

This workshop was the third in the series of workshops hosted by the IWB since its establishment in 2014.

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, GLWB, and IRC.

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, introduced the Board & Staff of IWB and welcomed all the participants, highlighting the importance of water and waste management and the ongoing issues and challenges related to health, safety and environment. The ultimate responsibility for the provision of municipal water and waste services rests with community governments. Other parties support these services, including MACA, ENR, H&SS and IWB. These workshops bring the parties together to identify and discuss issues and concerns related to community water and waste services and provide an opportunity for interactive communication between communities, government and the IWB. The Chair emphasized the collective effort needed from all parties to provide safe and efficient water and waste management services to community residents. 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 2016 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 and 2016 workshops resulted in agreed-upon action items to address the issues raised. Progress achieved since 2016 was presented. Follow-up discussion during the 2017 workshop by all responsible parties on the action items resulted in updates of the identified actions. The IWB will prepare an update on follow-up actions from the 2016 workshop, additional follow-up actions from this workshop, and provide copies to all participants (**Commitment #1**).

4. Presentations

The GNWT Departments of ENR and MACA were invited to present topics related to hazardous waste management, contaminated soil land farm development guidelines, annual reporting and surveillance network program (SNP) sample collection and reports, water licence annual inspections and the municipal Asset Management Strategy. All presentations were interactive and included opportunities for questions and answers.

Gerald Enns, Hazardous Waste Specialist, ENR: The presentation was divided into two parts: (1) Hazardous Waste Management and Guidelines, and (2) Contaminated Soil Treatment Facilities Guidelines. The first presentation focused on hazardous waste management systems and guidelines that included hazardous waste management plans, waste type, sources, properties, handling, segregation, temporary storage, shipment and final disposal procedures.

Highlights of the presentation included:

- Protecting the environment by preventing release of contaminants;
- Handling and storage of acceptable hazardous waste temporarily at the community hazardous waste containment facility or landfill;
- Keeping unacceptable hazardous waste out of temporary containment facilities;
- Tracking of hazardous waste movement from the generator to the carrier and to the receiver for final disposal;
- Sources of hazardous waste generation: (1) Household Hazardous Waste (residential), and (2) Industrial, Commercial, and Institutional (ICI) sectors;
- Categories of hazardous wastes: (1) reactive (2) corrosive (3) ignitable, and (4) toxic;
- Information dissemination methods and effectiveness on waste management;
- Community perception on management of household hazardous waste;
- Steps in household hazardous waste collection: (1) identification (2) segregation (3) labelling (4) storing, and (5) recording;
- Consequences of unsegregated hazardous waste on transportation and disposal;
- Temporary storage of hazardous waste - not a long-term solution;
- Hazardous Waste Inventory requirement to arrange transportation for final disposal; and
- The benefits of coordinated transportation and disposal for safe and economic management of hazardous waste.

The second presentation focussed on “Contaminated Soil Treatment Facilities Guidelines” that are being developed by the Mackenzie Valley Land and Water Board with financial support from the IWB and ENR. ENR highlighted the need and importance of such guidelines including the factors to be considered when siting facilities and the design parameters needed for effective and efficient functioning of the contaminated soil treatment facility.

The presentation highlighted:

- Need and importance of contaminated soil treatment guidelines;
- Source of contamination (e.g. spills and historic contaminated sites);
- Design consideration of contaminated soil treatment facility (e.g. protective layer of aggregate below and above the liner, berm and runoff collection); and
- Other considerations: (1) distance to ground or surface water (2) location in community (3) types of soil entering facility (4) controlling access (5) analytical testing (6) qualified professional management, (7) size, (8) duration and (9) water licensing requirements.

Jeanne Arsenault, Pollution Control Specialist, ENR presented Northwest Territories (NWT) water management principles with the emphasis on SNP monitoring locations, sampling and reporting.

The presentation highlighted:

- NWT Water Stewardship Strategy which is designed to keep waters clean, abundant and productive for all time;
- SNP monitoring stations as a requirement of municipal water licences;

-
- SNP environmental parameters and reporting status in ISR and other regions of the NWT;
 - Annual report submission status; and
 - O&M plans for waste disposal facilities.

Rolland Malegana, Regional Environmental Assessment Coordinator, ENR outlined ENR's roles and responsibilities in inspection and enforcement as per Section 65 of *Waters Act* and the importance of maintaining compliance with water licence terms and conditions.

Highlights of the presentation included:

- 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 Water Resources Officer (WRO) includes environmental protection, public outreach, and water licence compliance inspections;
- Key goals - to keep NWT water clean and provide safe source drinking water to the communities;
- Guidance documents for inspector: legislation, water licence terms & conditions, O&M plans, previous inspection reports and correspondence & complaints;
- Use of inspection report;
- Scope of inspection (e.g. water supply and water treatment plant, solid and sewage waste disposal facilities and hazardous waste temporary containment facility);
- Components of inspection report: (1) cover letter (2) water supply (3) waste disposal - sewage (4) waste disposal - solid waste (5) fuel storage (6) surveillance network program (7) general conditions/reports/plans (8) additional comments/remarks (9) matters for follow-up, and (10) non-compliance/violations of Act or Licence.

Kim Herle, Community Works Advisor, MACA introduced a new asset management system developed by the GNWT to assist in the short and long term management of municipal assets. She emphasized that use of the new computer software is another tool for managing infrastructure and other resources in order to better deliver effective and efficient services to residents. The asset management software enables communities to better track maintenance needs, maximize the service life of assets and have accurate financial information on which to make decisions. Overall, the information collected will assist in minimizing capital and maintenance costs.

The presentation provided the following information:

- Definition of asset – any physical item that holds value (e.g. roads, community offices, recreation centers, water plants, etc.)
- Definition of asset management – a process of cost effectively maintaining, upgrading and operating physical assets for the short and long term;
- Benefits and need of asset management;
- Northwest Territories Asset Management Strategy;
- MACA collaboration with communities and other community government organizations for implementation of asset management planning; and

-
- Asset management implementation in all communities in NWT and using asset management tool for O&M of community infrastructure.

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 and 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 first presented for discussion during the 2016 IWB workshop. Each party's roles and responsibilities were discussed and revisions noted. A final version of “roles and responsibilities” was then collectively developed.

Following a request from the municipalities, this information was then summarized on a draft poster titled “WATER AND WASTE SERVICES, INUVIALUIT SETTLEMENT REGION COMMUNITIES, A COLLECTIVE RESPONSIBILITY” and distributed during the workshop. Comments on the draft poster were requested from all parties. The poster will be finalized by the IWB and distributed to all parties after incorporation of comments received.

6. Tour of Inuvik Water Treatment Plant and Sewage Disposal Facility

In coordination with Town of Inuvik, the IWB organized a tour of the newly built water treatment plant and the existing sewage waste disposal facilities. The tour was guided by Rick Campbell, Director of Public Works and Services, Town of Inuvik. He provided information regarding the operation and treatment systems of the water treatment plant (Photos 1a and 1b). The plant started distributing water to the Town residents in November 2016. Raw water is withdrawn from the Mackenzie River year-round and treated to Canadian drinking water quality standards.

Tour of Town of Inuvik water treatment plant was followed by a site visit of the Inuvik sewage waste disposal facilities. Rick Campbell gave a briefing regarding the primary and secondary containment structures utilized for the Town of Inuvik sewage waste treatment process before the effluent is discharged to the receiving environment.



7. Specific Discussions and Commitments

Question (Communities): Management and disposal of hazardous waste is a concern of the communities. Is there a plan by the GNWT to assist communities to deal with these issues?

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:

- Communities accepts hazardous waste at the community hazardous waste containment facility only for temporary storage. There are a few exceptions including asbestos and hydrocarbon contaminated soil and snow;
- Hazardous waste should be identified, segregated, quantified, labelled and recorded before entering the temporary containment facility;
- Hazardous waste stored at the temporary containment facility should be shipped out for final disposal to a registered hazardous waste disposal facility;
- There are no hazardous waste disposal facilities in the NWT; a commercial hazardous waste transfer station is available in Yellowknife;
- Tipping fees requirements could assist communities in the cost of temporary storage, management and shipments for final disposal of hazardous waste;
- Communities should recognize the significant practical and financial implications of accepting hazardous waste generated by industrial, commercial and institutional (ICI) sectors;
- MACA and ENR may assist communities in addressing hazardous waste storage and for shipment to a hazardous waste disposal facility for final disposal; and
- MACA and ENR will look at options for the removal of waste on a regional basis.

Question (Facilitator): What progress has been made to address issues related to uncontrolled dumping of construction and demolition waste at community solid waste disposal facilities?

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:

- Hamlet of Aklavik approved a resolution to be presented at the next Northwest Territories Association of Communities (NWTAC) to address the issues related to the disposal of construction and demolition waste generated by contractors;
- MACA to bring up the construction and demolition waste issue and the Hamlet of Aklavik resolution to the “Intergovernmental Working Group (IWG)” (**Commitment #2**) and inform the communities of any further progress on this issue (**Commitment #3**);
- MACA can make the recommendation, but Public Works and Services (PWS) has the responsibility for contracting the construction and demolition of GNWT infrastructure within communities.

Question (Facilitator): Is there an updated training calendar available for communities for 2017?

Response (MACA): The training calendar for 2017 is under development and will be distributed to the communities by the end of April 2017 (**Commitment #4**).

Question (Facilitator): Can community access the SNP sample analysis results online?

Response (ENR): Drinking water test results can be accessed on the MACA website (<http://www.maca.gov.nt.ca/home/for-residents/land-water-waste/drinking-water/>). The SNP laboratory results are a requirement of the water licence and should be submitted to the IWB with the Annual Report. ENR representative will follow up with Taiga Laboratory regarding the online availability of the SNP laboratory results (**Commitment #5**).

Question (Facilitator): How can communities obtain source water and wastewater sample kits for water licence compliance?

Response (MACA): Taiga Laboratory will provide sample kits upon request from communities.

Question (Facilitator): Is there an update on the proposed Wastewater Effluent Regulations (WWER)?

Response (ENR & MACA): A research project was conducted by Dalhousie University to investigate the performance of municipal waste stabilization ponds in Nunavut. There are no further updates on the WWER.

Question (Facilitator): During the IWB 2015 Workshop, ENR committed to collecting water samples of the drainage from the old landfill site in Sachs Harbour for analysis to find out if there are any environmental pollutants in the samples. This commitment was reiterated during the 2016 Workshop. Was this activity completed during the 2016 open water season?

Response (ENR): This action was not conducted during summer 2016, however, an effort for sample collection will be made during 2017 open water season and laboratory analysis completed to determine the quality of the samples (**Commitment #6 – the commitment will be limited to sampling and analysis only**).

MACA indicated that within five (5) years, all community solid waste sites (landfills) within the ISR will be equipped with groundwater monitoring wells for both the current landfills and old landfill sites.

Question (Facilitator): Was the runoff sample collected and analysed during 2016 open water season at the Imperial Oil Tuk Base waste dump site as per commitment made by ENR during 2016 workshop?

Response (IWB): The sample collection and analysis will be carried out by Imperial Oil Resources (IOR). IOR needs GPS coordinates to identify the sampling locations. SAO will provide GPS coordinates of the sampling location to the IWB (**Commitment#7**). The IWB will forward those GPS coordinates to IOR.

Question (Communities): Is there funding available to the communities to complete waste management O&M plans (Solid Waste Disposal Facilities O&M Plan, Sewage Waste Disposal Facilities O&M Plan, Hazardous Waste Management Plan, Spill Contingency Plan)?

Response (MACA): If Communities prefer to hire someone to complete the waste management O&M plans, funding is available within the municipal operations budget for a one time only development of O & M and Contingency Plans. No funding is available for revisions and updates of those O&M plans.

Question (Communities): Is there funding available for reduction and recycling of waste?

Response (ENR): Limited funding is available through the Waste Reduction and Recovery Initiative Funding program; however, communities must apply to ENR for this.

Question (H&SS): Who is responsible for monitoring illegal waste dumping within community waste disposal facilities?

Response (ENR): The responsibility rests with the Hamlet to monitor illegal dumping within community waste disposal facilities. Local ENR staff can be contacted for support.

Question (Communities): How can runoff from contaminated soil treatment facilities be managed?

Response (ENR): Runoff from contaminated soil treatment facilities can be collected and treated at a mobile treatment facility or by using other technology available. Alternatively, runoff can be collected and re-circulated within the treatment facility. ENR can provide information on a case-by-case basis upon request.

Question (Facilitator): Does the “Contaminated Soil Treatment Guidelines” address the water licensing requirements?

Response (ENR): Not specifically. The requirements of water licensing for a contaminated soil treatment facility will depend on the method of treatment and whether there will be a discharge of treated water.

Question (Communities): Does the “Contaminated Soil Treatment Guidelines” address a small spill (e.g. tanker leakage) within a community?

Response (ENR): The guidelines are being developed for consideration of small vs large facilities. Therefore, guidelines will address both small and large scale facilities.

Question (H&SS): What is the difference between BOD₅ and CBOD₅?

Response (ENR): The differences of biological oxygen demand (BOD₅) and carbonaceous biological oxygen demand (CBOD₅) were clarified. The CBOD₅ is considered a more accurate measurement of Dissolved Oxygen consumed by aerobic microbes and the breakdown of carbonaceous substances.

Question (IWB): Is there any difference between **O&M Plans** (Sewage Waste Disposal Facilities O&M Plan, Solid Waste Disposal Facilities O&M Plan, Hazardous Waste Management Plan and Spill Contingency Plan) and a **Waste Management Plan**?

Response (GLWB): O&M Plans are required to be submitted by the Hamlets as per municipal water licence terms and conditions for effective and efficient O&M of waste disposal facilities, whereas waste management plans are required for submission by the applicant other than municipal governments for a proposed project to manage waste generated during the project activities.

Question (IWB): Are there any provisions within GNWT construction and demolition contracts for the management and disposal of hazardous waste? Who enforces the contracts?

Response (MACA): A provision for hazardous waste management is incorporated within municipal infrastructure construction and demolition contracts. The Contractor is responsible for the management and final disposal of hazardous waste. The Project Manager is responsible for enforcement of the contract, including dumping provisions. ENR mentioned that if any illegal dumping is noticed, anyone can inform the ENR Water Resources Officer (**Tel: 867-678-6676 and/or Cell: 867-678-0623**).

Question (Communities): How can we address hazardous waste resulting from home renovations?

Response (ENR): It is the responsibility of the Hamlet to decide the hazardous waste management rules resulting from home renovations. A participant suggested the need for a hazardous waste and environmental liability assessment of the building before renovations begin.

Question (Communities): What is the cost of the asset management software?

Response (MACA): The cost of initial data collection and entry will be funded by MACA. The purchase of the asset management software may cost the community between \$3000 and \$6000.

Question (IWB): What is the actual time required to use the asset management software (e.g. data entry)?

Response (MACA): It is simple software. Initially, it may take longer but afterward it may get easier to use.

Question (H&SS): Is there use of the asset management software within NWT communities already?

Response (MACA): This software is not yet used anywhere in NWT.

8. Workshop Commitments

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

Commitment #2: MACA will discuss the construction and demolition contracts waste disposal provisions and the Hamlet of Aklavik resolution to the “Intergovernmental Working Group (IWG)”.

Commitment #3: MACA will provide updates to the communities of any further progress on construction and demolition contract provisions for waste disposal.

Commitment #4: MACA to distribute 2017 training calendar to the communities by the end of April 2017.

Commitment #5: ENR to follow up with Taiga Laboratory regarding the online availability of the SNP laboratory results.

Commitment #6: ENR will collect runoff samples from old landfill site at Sachs Harbour during 2017 open water season for analysis in coordination with the Hamlet of Sachs Harbour (**the commitment will be limited to sampling and analysis only**)

Commitment #7: SAO, Hamlet of Tuktoyaktuk, will provide GPS coordinates of the runoff sampling location of Imperial Oil Resources (IOR) Tuk Base waste dump site to the IWB.

9. Conclusion

The 2017 Water and Waste Management Workshop focused on hazardous waste management in response to increasing concern within communities in the Inuvialuit Settlement Region. There was an interactive discussion on follow-up actions from the February 2016 workshop and Roles and Responsibilities for Municipal Water and Waste Management. Representatives from ENR and MACA presented and led discussions on how communities can effectively manage, store and dispose of hazardous waste, Surveillance Network Program requirements, water licence inspections and MACA's municipal Asset Management Strategy.

A tour of the new drinking water treatment plant and existing sewage waste disposal facilities was organized in coordination with Town of Inuvik. The tour was led by Rick Campbell, Director of Public Works and Services, Town of Inuvik.

At the end of workshop, all the participants - Hamlets, MACA, ENR, H&SS, and the IWB - expressed their enthusiasm for continuing to work as a "team" for the safe, efficient and effective management of community water and waste services. Hamlet representatives and all participants appreciated the workshop theme.

10. Closing Prayer

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

Annex 1: Invitation Letter and Workshop Agenda

January 30, 2017

Distribution List
Workshop Participants

**Re: Municipal Water and Waste Management Workshop
Inuvik, February 22 – 23, 2017**

The Inuvialuit Water Board (IWB) is pleased to attach the final agenda for the Municipal Water and Waste Management Workshop to be held on February 22 and 23, 2017 at the Midnight Sun Recreation Complex in Inuvik. Participation binders will be provided at the workshop. The agenda includes all items suggested by communities and participating government departments and will focus on the following topics:

1. Follow-up action items from the February 2016 workshop.

During the 2016 workshop an update of the 2015 issues and concerns regarding the provision of municipal water and waste services was provided to community and government participants. Discussion on these topics resulted in agreement on further 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. The IWB looks forward to discussing the progress that has been made to address the collective list of action items and how this progress will improve the provision of municipal water and waste services in our communities.

2. Roles and Responsibilities for Municipal Water and Waste Management

During the 2015 workshop, it was clearly recognized that several organizations and agencies played a role in the successful provision of municipal water and waste services – a process that starts with water being taken from a water source, and ends when municipal liquid and solid wastes are managed and released in a manner that does not result in a threat to the environment. In addition to the municipalities, this “team” includes 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 Inuvialuit Water Board and the Workers Safety and Compensation Commission.

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 and distribute a list summarizing the respective roles and responsibilities of each “team” member. During the 2016 Water and Waste Management Workshop participants discussed the preparation of additional communication materials (eg: posters, pamphlets, calendars, web site). This will be further discussed at the 2017 workshop. Specifically mentioned was the development of a summary of the roles and responsibilities to be provided to community governments to be used as an ongoing information guide by municipal leaders, staff and contractors, by incoming and existing

government and agency staff and by other interested parties. The IWB committed to completing a draft poster that will be distributed during the upcoming workshop.

3. Hazardous Waste Management

The management and disposal of hazardous waste is an issue of increasing concern in most communities. As such, the IWB will be focusing a significant portion of the workshop on hazardous waste management, including guidelines available for community governments. Representatives from ENR have committed to presenting these documents and lead the discussion on how communities can effectively manage and dispose of hazardous wastes.

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

Sincerely,

Roger Connelly
Chairperson

Attachments

Distribution List

Participants – Community Representatives

Hamlet of Paulatuk

Mayor Ray Ruben
SAO Grant Scott
Operations – Keith Dodge

Hamlet of Ulukhaktok

Mayor Laverna Klengenber
SAO Judi Wall
Water Plant Operator William Joss

Hamlet of Tuktoyaktuk

Mayor Darrel Nasogaluak
Assistant SAO Katrina Cockney
Municipal Works Manager Davy Kregnektak

Hamlet of Sachs Harbour

Mayor Floyd Lennie
SAO Stephen Wylie
Municipal Operations - Darren Nasogaluak

Hamlet of Aklavik

Mayor Charlie Furlong
SAO Fred Behrens
Hamlet Foreman Dean Arey

Participants – GNWT

ENR – Norman Snowshoe, a/Regional Superintendent – Inuvik Region;
ENR – Lloyd Gruben, Water Resources Officer – Inuvik Region;
ENR – Rolland Malegana, Environmental Protection Officer – Inuvik Region;
ENR – Gerald Enns, Hazardous Waste Specialist – Yellowknife;
ENR – Jeanne Arsenault, Pollution Control Specialist – Yellowknife;
ENR – Bruce Stuart, Manager – Taiga Environmental Laboratory – Yellowknife;
MACA – Olivia Lee, Manager of Infrastructure and Project Management - Yellowknife;
MACA – Kim Herle, Community Works Advisor – Inuvik Region;
MACA – Iqbal Arshad, Civil Engineering Team Lead - Yellowknife;
MACA – Lorie Fyfe, Regional Superintendent – Inuvik Region;
MACA – Chrystal Lennie, Water and Waste Management Training Coordinator – Inuvik;
H & SS – Shawn Hardy, Environmental Health Officer – Inuvik Region;
GLWB – Leonard DeBastien, Executive Director – GLWB
GLWB – AlecSandra MacDonald, Regulatory Specialist - GLWB

Inuvialuit Water Board
Water and Waste Management Workshop
Community Lounge, Midnight Sun Recreation Centre, Inuvik, NT
February 22, 2017: DAY 1

Time	Activity	Lead
8:30 - 9:00 am	Arrival, Registration and Coffee	
9:00 - 9:30 am	Welcome and Introduction <ul style="list-style-type: none"> • opening prayer • round table introductions • welcoming remarks • objectives of workshop & agenda review 	Roger Connelly Chairperson Emery Paquin Facilitator
9:30 – 10:15 am	Update on 2016 IWB Workshop Issues Table Action Items Update on Roles and Responsibilities Document - Poster	Facilitator Emery Paquin
10:15 - 10:30 am	Refreshments	
10:30 – 11:50	ENR: <ol style="list-style-type: none"> 1. Guideline for the Development of a Hazardous Waste Management Plan; 2. Guideline for General Management of Hazardous Waste in NWT vs similar guidelines for Nunavut; 3. Contaminated Soil Land Farm Development Guidelines 	Roland Malegana – Environment Protection Officer (EPO) Lloyd Gruben – Water Resources Officer (WRO) Gerald Enns – Hazardous Waste Specialist (HWS)
11:50 - 1:00 pm	Lunch Break – on own	
1:00 – 2:00 pm	ENR continued: <ol style="list-style-type: none"> 1. Guidelines for the development of a Hazardous Waste Management Plan; 2. Guidelines for General Management of Hazardous Waste in NWT vs similar guidelines for Nunavut; 3. Contaminated Soil Land Farm Development Guidelines 	Roland Malegana – EPO Lloyd Gruben - WRO Gerald Enns - HWS
2:00 – 5:00 pm	Tour of Inuvik Water and Waste Management Facilities New Water Treatment Plant – Sewage Disposal Facility	Rick Campbell – Director of Public Works and Services - TOI
5:00 pm	Day One Wrap Up	Facilitator- Emery Paquin

February 23, 2017: DAY 2

Time	Activity	Lead
8:30 - 9:00 am	Arrival and Coffee	
9:00 – 9:15 am	Review of Day 1 and Day 2 agenda	Emery Paquin - Facilitator
9:15 – 10:15 am	Annual Reporting and Surveillance Network Program Sample Collection and Reports	Jeanne Arsenault – Pollution Control Specialist
10:15 – 10:30 am	Refreshments	
10:30 – 11:30 am	Annual Inspections	Roland Malegana – EPO Lloyd Gruben - WRO
11:30 – 12:15 pm	Water Licence template developments – update Asset Management Strategy	Olivia Lee – Manager of Infrastructure and Project Management -MACA
12:15 - 12:30 pm	Wrap up and closing remarks Closing prayer	Roger Connelly Chairperson - IWB

Annex 2: Workshop Participants

Municipalities	Community	Phone	Email
Ray Ruben, Mayor	Paulatuk	867-580-3531	ray.francis.07@live.ca
Grant Scott, SAO	Paulatuk	867-580-3531	hopaulatuk@gmail.com
Tracey Kanayok, Council Member	Ulukhatok	867-396-8000	sao_ulu@northwestel.net
William Joss, Water Plant Operator/Building Maintainer	Ulukhaktok	867-396-8000	sao_ulu@northwestel.net
Darrel Nasogaluak, Mayor	Tuktoyaktuk	867-390-2578	darrelnasogaluak@yahoo.com
Davy Krengnektak, Public Works Manager	Tuktoyaktuk	867-977-2479	tukforeman@northwestel.net
Floyd Lennie, Mayor	Sachs Harbour	867-690-3008	floydlennie@hotmail.com
Stephen Wylie, SAO	Sachs Harbour	867-690-4351	hamlet_ceo@northwestel.net
Shameem Ahmed, Foreman	Sachs Harbour	867-690-4351	shahmed@rogers.com
William Storr, Council Member	Aklavik	867-978-2351	billstorr@hotmail.com
Fred Behrens, SAO	Aklavik	867-978-2351	saoaklavik@permafrost.com
Kelly Arey, Water Treatment Operator	Aklavik	867-375-0004	elan_169horse@hotmail.com
Government of the NWT	Department		
Lloyd Gruben, Water Resources Officer – Inuvik Region	Environment and Natural Resources	867-678-6676	lloyd_gruben@gov.nt.ca
Rolland Malegana, Regional Environmental Assessment Coordinator	Environment and Natural Resources	867-678-6653	rolland_malegana@gov.nt.ca
Gerald Enns, Hazardous Waste Specialist – Yellowknife	Environment and Natural Resources	867-767-9236 Ext 53187	gerald_enns@gov.nt.ca
Jeanne Arsenault, Pollution Control Specialist – Yellowknife	Environment and Natural Resources	867-767-9234 Ext 53116	Jeanne_arsenault@gov.nt.ca
Olivia Lee, Manager Asset Management – Yellowknife	Municipal and Community Affairs	867-767-9164 Ext 21074	olivia_lee@gov.nt.ca
Kim Herle, Community Works Advisor – Inuvik Region	Municipal and Community Affairs	867-777-7213	Kim_herle@gov.nt.ca
Iqbal Arshad, Civil Engineering Team Lead – Yellowknife	Municipal and Community Affairs	867-767-9164 Ext 21075	iqbal_arshad@gov.nt.ca
Shawn Hardy, Environmental Health Officer – Inuvik Region	Health and Social Services	867-777-4840	shawn_hardy@gov.nt.ca
Inuvialuit Regional Corporation			
Jennifer Rafferty, Capacity Advisor	Inuvialuit Regional Corporation	867-777-7097	jrafferty@inuvialuit.com
Gwich'in Land and Water Board			
AlecSandra MacDonald, Regulatory Specialist	Gwich'in Land and Water Board)	867-777-4954	amacdonald@glwb.com
Inuvialuit Water Board			
Roger Connelly, Chairperson	Inuvialuit Water Board	867-620-0751	rconnelly@northwestel.net
Mark Cleveland, Member	Inuvialuit Water Board	250-931-1921	mcleveland.consulting@gmail.com
Richard Binder, Member	Inuvialuit Water Board	867-777-2828	richardbindersr@gmail.com
Elizabeth Arey, Member	Inuvialuit Water Board	867-620-0427	areyelizabeth@gmail.com
Mardy Semmler, Executive Director	Inuvialuit Water Board	867-678-8609	semmlerm@inuvwb.ca
Bijaya Adhikari, Science and Regulatory Coordinator	Inuvialuit Water Board	867-678-8610	adhikarib@inuvwb.ca
Facilitator			
Emery Paquin	Facilitator	867-873-4314	emerypaquin@outlook.com

Annex 3: February 2017 Workshop - Evaluation Summary

An evaluation form was distributed to participants during the workshop.

50% of the participants responded to the evaluation. Overall, respondents expressed their satisfaction with the materials, time provided for questions and discussions, and objective achieved. The workshop was rated good, very good and excellent by 9%, 36% and 55% of the respondents respectively. Comments and suggestions provided by the respondents can be summarized as:

- Well-planned agenda;
- Discussions based on specific topics could be more informative;
- Overall, all the topics were interesting and useful;
- Difficult to hear - sound system required; and
- Power point presentation screen too far and difficult to read - closer and larger screen required.

Table 1: Summary of responses provided by the participants on evaluation questionnaire

SN	Evaluation Questionnaire	Responses		
		Yes (% of respondents)	No (% of respondents)	Comments (% of respondents)
1	Were the materials provided adequate to prepare you for the discussions?	100%	0%	0%
2	Within the time available, was the meeting run effectively?	82%	0%	Tour could be little shorter (9%) A little long for some presenters (9%)
3	Could the agenda have been improved? If so, how?	-	-	Well planned agenda (64%) Tour between 4-5 pm (9%) Specific topic wise discussion (9%) Discussions relevant to water licence and application (9%) Response not provided (9%)
4	Were the presentations/discussions relative and useful to your responsibilities?	91%	0%	Response not provided (9%)
5	Was there adequate time provided for participants' questions and responses?	100%	0%	0%
6	Were questions from the floor answered satisfactorily?	100%	0%	0%
7	What topics or aspects of the workshop did you find most interesting or useful?	-	-	All topics interesting and useful (18%) Hazardous Waste (28%) Active participation of Community and other stakeholders (9%) Compliance to water licence (9%) Interaction with community representatives (9%) Annual inspection (9%) SNP sampling (9%)

				Response not provided (9%)
8	Were the objectives of the workshop achieved?	100%	0%	0%
9	Were you clear on future actions and commitments from the workshop?	82%	0%	Response not provided (18%)
10	Any suggestions on how the workshop might have been improved?	-	-	Well planned, no suggestions required (46%)
				Interaction and discussions (9%)
				Response not provided (27%)
				Specific topic wise discussion (9%)
	Power point presentation screen too far hard to read (9%)			
11	Were the physical arrangements of the workshop adequate (meeting facility, sound system, transportation, accommodation, support, etc.)?	73%	0%	Difficult to hear, loud sound system required (27%)
12	Would you attend another Inuvialuit Water Board workshop on community water and waste management?	91%	0%	Response not provided (9%)
Overall rating				
13	On a scale of 1 to 10, how would you rate this workshop (1 being poor and 10 being excellent)	% of total respondents		
	1-2 (Poor)	0%		
	3-6 (Good)	9%		
	7-8 (Very Good)	36%		
	9-10 (Excellent)	55%		

Annex 4: Evaluation Form

EVALUATION FORM MUNICIPAL WATER AND WASTE MANAGEMENT WORKSHOP FEBRUARY 22 AND 23, 2017 INUUVIK, NWT

Please take a few minutes to fill out and return this form **by March 1, 2017**.

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 management?
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
Executive Director, Inuvialuit Water Board
Email: semmlerm@inuvwb.ca
Fax: (867) 678-2943