



ᐱᓐᓇᓂᓐ ᓄᓇᓕᓕᓂᓐ ᓐᓇᓂᓐ

ᐱᐱᓐᓇᓂᓐ ᓄᓇᓂᓐ 460

ᐱᓐᓇᓂᓐ, ᓄᓇᓂᓐ

X0A 0H0

ᐱᓐᓇᓂᓐ ᐱᓐᓇᓂᓐ (867) 979-5600

ᓐᓇᓂᓐ ᓄᓇᓂᓐ (867) 979-5922

City of Iqaluit

Box 460

Iqaluit, Nunavut

X0A 0H0

Phone (867) 979-5600

Fax (867) 979-5922

Ville d'Iqaluit

C.P. 460

Iqaluit, Nunavut

X0A 0H0

Tél. (867) 979-5600

Télécop. (867) 979-5922

admin@city.iqaluit.nu.ca

www.city.iqaluit.nu.ca

January 29, 2016

Karén Kharatyan  
Manager of Licencing  
Nunavut Water Board  
PO Box 119  
Gjoa Haven, NU  
X0B 1J0

## RE: Landfill Fire Emergency Measures Update

Dear Mr. Kharatyan:

On January 13<sup>th</sup> and 14<sup>th</sup>, 2016, representatives of the City of Iqaluit (City) attended the Technical Meeting, Public Meeting and Pre-Hearing Conference for the renewal application of Water Licence 3AM-IQA0612. During the meetings, the Nunavut Water Board requested information regarding the work completed by the City to manage run-off water generated from firefighting operations that had taken place to extinguish the fire at the West 40 landfill in 2014. Due to the emergency nature of the landfill fire, the use and storage of water associated with the extinguishment of the fire was permitted without a Water Licence under Section 11(2)(b)(ii) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (the Act)*. For the purposes of this letter, the works associated with the extinguishment of the 2014 West 40 Landfill fire are hereinafter called the *Emergency Measures*.

Although the work completed as part of the *Emergency Measures* is not currently included in the City of Iqaluit Water Licence Renewal Application, the following is presented for information purposes in response to the request by the Nunavut Water Board.

### Background

During the fire at the City of Iqaluit West 40 Landfill in 2014, City administration developed a plan to extinguish the fire that involved: (1) constructing a small drafting pond immediately adjacent to the landfill to provide sufficient water pressure for firefighting; and (2) constructing an additional retention pond adjacent to the existing landfill retention pond to provide space to undertake treatment prior to discharge. This plan was submitted directly to INAC for review and comment prior to its implementation. As part of the plan, the City anticipated needing to hold and treat all water impacted from the extinguishment of the landfill fire which was estimated to be 10,000 m<sup>3</sup>.

### Implementation

In 2015, the City retained the services of Qikiqtaaluk Environmental (QE) to complete the treatment of 10,000 m<sup>3</sup> of landfill run-off that originated from the landfill fire. The contract included the supply, installation and operation of the treatment equipment as well as the construction of a new pond (see



ᐱᑭᐱᐅᐅ ᓄᓇᑦᑕᑦᑕᑦᑕᑦ

ᐱᐱᑦᑕᑦᑕᑦᑕᑦ 460

ᐱᑭᐱᐅᐅ ᓄᓇᑦᑕᑦ

X0A 0H0

ᐅᑦᑕᑦᑕᑦᑕᑦ (867) 979-5600

ᑦᑕᑦᑕᑦᑕᑦᑕᑦ (867) 979-5922

City of Iqaluit

Box 460

Iqaluit, Nunavut

X0A 0H0

Phone (867) 979-5600

Fax (867) 979-5922

Ville d'Iqaluit

C.P. 460

Iqaluit, Nunavut

X0A 0H0

Tél. (867) 979-5600

Télécop. (867) 979-5922

admin@city.iqaluit.nu.ca

www.city.iqaluit.nu.ca

Appendix A for the location of the new pond) to aid in the treatment of the 10,000 m<sup>3</sup> of impacted water. At the end of the contract the City retains ownership of all treatment equipment and will continue to use the equipment to treat landfill run-off on an annual basis.

Run-off generated during the course of the firefighting operations was collected and stored in three separate holding ponds: (1) the on-site *Detention Pond*; (2) the off-site *Retention Pond*; and (3), the *Drafting Pond* (see Appendix A for the location of each pond). The on-site *Detention Pond* and off-site *Retention Pond* are existing ponds that have been in use for over ten years for landfill run-off management, and the *Drafting Pond* was constructed in 2014 to provide a basin to draft water in support of the firefighting activities.

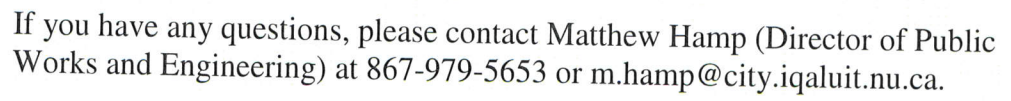
In 2015, QE constructed a lined holding pond of 5,000 m<sup>3</sup> capacity and also completed the primary treatment of the run-off that was contained in the on-site *Detention Pond*. Once the primary treatment was completed, the water was transferred to the new pond for secondary treatment, testing and final discharge. The secondary treatment for the run-off contained in the new pond will be completed in 2016. The primary and secondary treatment of the run-off water stored in the off-site *Retention Pond* and *Drafting Pond* will also be completed in 2016. The sediment that is generated from the treatment process will be disposed of properly (i.e. either landfilled directly or shipped to a hazardous waste disposal facility, depending on the results of characterization) and is the responsibility of QE. It is expected that all impacted water from the landfill fire will be treated by October 31, 2016, the date the City and INAC Inspectors agreed that the allowance for the *Emergency Measures* resulting from the landfill fire would cease.

### ***Follow-up***


The new pond is not included in the application for renewal; however, it is the City's intention to continue to use the pond after the run-off originating from the fire has been treated and discharged and the *Emergency Measures* are completed. As discussed with INAC Inspectors and the NWB, an amendment will be submitted prior to October 31, 2016, for the new pond that will include a preliminary decommissioning plan and any other information required for the amendment process. Furthermore, the drafting pond will begin to be decommissioned in 2016 and fully decommissioned by 2017, as discussed with the INAC Inspectors. It is understood, after October 31, 2016, the City will no longer have the authorization to use the drafting pond for water storage.

A plan for the disposal of the sediment contained at the bottom of each pond will be developed when the City is preparing for the final abandonment and restoration of the West 40 landfill.





Sincerely,



Muhamud Hassan  
Chief Administrative Officer

Muhamud Hassan  
Chief Administrative Officer  
City of Iqaluit

For

7 b c 3 b d c (867) 979-5922

Fax (867) 979-5922

Télécop. (867) 979-5922

[www.city.iqaluit.nu.ca](http://www.city.iqaluit.nu.ca)



## Appendix A

### Run-off Pond Locations

ᐃᑭᐅᐃᑦ ᓄᓇᑦᑕᑦᑕᑦᑕᑦ

ᑎᑎᓂᑦᑕᑦᑕᑦᑕᑦ 460

ᐃᑭᐅᐃᑦ, ᓄᓇᑦᑕᑦ

X0A 0H0

ᑕᑦᑕᑦᑕᑦᑕᑦ (867) 979-5600

ᑕᑦᑕᑦᑕᑦᑕᑦ (867) 979-5922

City of Iqaluit

Box 460

Iqaluit, Nunavut

X0A 0H0

Phone (867) 979-5600

Fax (867) 979-5922

Ville d'Iqaluit

C.P. 460

Iqaluit, Nunavut

X0A 0H0

Tél. (867) 979-5600

Télécop. (867) 979-5922

[admin@city.iqaluit.nu.ca](mailto:admin@city.iqaluit.nu.ca)

[www.city.iqaluit.nu.ca](http://www.city.iqaluit.nu.ca)





On-site Detention Pond

Drafting Pond

Off-site Retention Pond

New Pond