

WWTP Effluent Compliance Plan Update:

The overall plan to achieve effluent compliance at the Wastewater Treatment Plant is a multi-phase process that includes:

1. The Feasibility Study – to assess and develop preliminary cost estimates for the upgrade and or/expansion required for the existing facility in order to bring the City into compliance;
2. The Design of the Expansion and/or Upgrade;
3. The Construction of the New or Upgraded Facility; and
4. The Commissioning of the New or Upgraded Facility.

In September 2015, the City submitted a business case for the Wastewater Treatment Plant Upgrade to the Government of Nunavut to access the funds required to complete the project from the new Building Canada Fund. It is expected that the City will be notified in January 2016 if the Federal Government will fund the Wastewater Treatment Plant Upgrade through the Building Canada Fund.

The Department of Public Works and Engineering has requested \$750,000.00 of the City's Gas Tax Funds to complete the design of the Wastewater Treatment Plant Upgrade in the event that the City does not receive the funds to complete the project from the Building Canada Fund. This will allow the City to continue progress on the completion of the project while determining different funding sources.

Table 1 below outlines the milestones in the City's plan to upgrade the WWTP. The timelines presented in the table represent the revised schedule based on the progress obtained as of November 30, 2015.

Table 1 – Project Schedules and Milestones

Milestone	Target Timeline	Status
Award Consultant Contract for Feasibility Study	January 27, 2015	Completed
Feasibility Study Complete	May 1, 2015	Completed
Preferred Upgrade Option Selected by Council	June 1, 2015	Completed
Complete Funding Plan	January, 2016	
Issue RFP for Design of Upgrades	February, 2016	
Design of Upgrades Complete	July, 2016	
Tender for Construction	July - August, 2016	
Award of Construction Contract	September 1, 2016	
Mobilization of Materials	July – August, 2017	
Construction	September 2017 – December, 2018	
Commissioning of Upgraded Facility	TDB ¹	
Upgraded Plant Operational	December 31, 2018	

Annotations:

Commissioning of a WWTP could be as long as 18 months, depending on the complexity of the system. The plant is planned to be operational by the fall of 2018; however, it cannot be guaranteed that the plant would be fully compliant until the end of the commissioning period. The City would assume ownership and direct responsibility for operating the facility once the commissioning phase is successfully completed (i.e. the plant is operational *and* compliant).

In addition to the compliance plan for the WWTP, there are a number of other actions required by the City to achieve compliance with the expired water licence. Table 2 below summarizes these required actions required along with their respective target dates for completion, and associated reference in the Water Licence.

Table 2 – Summary of Required Actions to Achieve Water Licence Compliance

Outstanding Actions	Expected Completion Date	Reference
Install screen on water intake pipe at Lake Geraldine Dam	Summer 2016	Water Licence: Part D, Item 3
Complete SWWT Phase 2 Upgrades	December 31, 2018	Water Licence: Part E, Items 3 & 4
Install Outdoor Monitoring Program Station Signs	Completed Summer 2013	Water Licence: Part I, Item 2
Further treatment of landfill run-off	Summer 2016 ¹ ; each summer thereafter (annual basis)	Water Licence: Part E, Item 17

Annotations:

1. As a result of the landfill fire, and the collection of water impacted through the extinguishment process, an expanded treatment program is planned for the summers of 2015 and 2016. The range and concentration of contaminants to be treated has changed, resulting in a requirement for a more extensive and lengthy treatment process. After 2016, the annual treatment process should return to that which was originally planned.

Landfill Water Management

In October 2015, the initial treatment of the Landfill Run-off inside the perimeter berms was completed. This was accomplished by turning the South-West onsite pond into a loop and injecting a lime slurry and a flocculating agent to allow the metals to precipitate and the suspended solids to settle to the bottom of the pond. Once the initial treatment was complete the run-off was transferred to the newly constructed pond for final treatment in 2016.

In 2016, initial and final treatment of the run-off contained in the old retention pond and the drafting pond and the final treatment of the run-off contained in the new pond will be completed. The City will also aim to complete partial rehabilitation of the drafting pond by removing the liner and installing a culvert in the new driveway that acts as the west berm to allow for proper drainage and complete the full rehabilitation in 2017.

Installation of Screen on Water Intake Pipe at Lake Geraldine Dam

The design for the repairs and installation of a screen on the intake of the dam is scheduled to be completed on December 10, 2015. The City will submit to the Nunavut Water Board a notification of modifications letter describing the project as well as discussing environmental protections for the project in 2016.