Ashbridges Bay Treatment Plant Environmental Assessment: Implementation of the Approved Undertaking

2020 Annual Compliance Report

March 2021

TORONTO Water

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1. Introduction

As described in the City's Compliance Monitoring Program regarding the implementation of the Approved Undertaking under the Ashbridges Bay Treatment Plant (ABTP) Environmental Assessment (EA) approval, the City must prepare and submit an Annual Compliance Report (ACR) to the Director of the Ministry of Environment Conservation and Parks (MECP) Environmental Approvals Branch (EAB) for placement on the Public Record.

The format for the ACR is described in 6(1) of the Conditions of Approval. It is to include:

1) A description of compliance with the provisions of the Environmental Assessment (EA), as amended by the Mediation Agreement (MA), specifically relating to the three projects within the Undertaking;

2) A summary of all initiatives undertaken during the year to implement the EA approval;

3) A summary of initiatives intended to be undertaken to implement the EA approval in the next calendar year;

4) A description of compliance with the Conditions of Approval;

5) The results of the proponent's Environmental Assessment Compliance Monitoring Program;

6) A summary of any other complaints, such as noise, odour and water quality, received regarding the construction or operation of the projects of the Undertaking or compliance with the EA approval, and a response from the City;

7) An indication of progress made towards achieving compliance with the provisions of the MOE Procedures set forth in Condition 19; and

8) An update of the study and implementation schedules for the plans, programs and measures set forth in Condition 19.

This is the 11th such ACR to be submitted for the Public Record. The ACR covers the period of January 1 through December 31, 2020. A new report will be issued for the Public Record each year thereafter until the projects within the Approved Undertaking have been implemented and all related Conditions of Approval have been satisfied.

2. Initiatives Undertaken in 2020

2.1. Outfall Project

In 2011, an Outfall Modelling Study was initiated with the intent to define the scope for the future design and construction of a new outfall pipe at the ABTP. The scope of work for the study included updating the work done in the 1995 Outfall Modelling Study used to prepare the original EA, taking into consideration existing and projected effluent quantity and quality, updated background water quality, the City's Wet Weather Flow Management Master Plan (WWFMMP), existing water quality models and the requirements outlined in the EA Conditions of Approval.

The information compiled was used to prepare a conceptual design and a detailed cost estimate of the new outfall pipe. The conceptual design was presented at the Implementation Compliance and Monitoring Committee (ICMC) meeting in March 2015, and the final report was submitted to the City in April 2015.

The original 1997 ABTP EA approved concept contemplated that the new disinfection system would be built together with a new outfall pipe in order to achieve an optimal design solution and eliminate the shore-based seawall gate discharge during wet weather conditions as per the MECP Conditions

of Approval. However, due to the high costs (estimated at $350 million) and timeline associated with the construction of a new outfall coupled with the pressing timelines imposed by the new federal wastewater effluent Regulations, the new outfall construction start has been deferred to 2019. As such, for the 1- to 3-year period between commissioning of the disinfection project and commissioning of the new outfall, the new Disinfection facility will require continued and potentially more frequent use of the existing seawall gates during wet weather flow events; however, the bacteriological quality of the effluent is expected to improve significantly compared to present conditions. This seawall gate discharge will be eliminated once the new outfall is commissioned.

The design and construction of the outfall is fully funded within the 2020 to 2029 Toronto Water ten (10) year Capital Plan.

A request for proposal for the preliminary design, detailed design and construction administration of the ABTP outfall pipe was issued on May 13, 2015. The engineering assignment was awarded on August 19, 2015 to a team of engineering consulting firms consisting of Hatch Mott MacDonald, CH2m (now Jacobs) and Baird.

The preliminary design of the outfall began in September 2015 and was completed in November 2017. Detailed Design of the outfall was completed in May 2018, tendering was completed in July 2018, and the contract was awarded in November 2018. The Order to Commence was issued in January 2019, and the construction of the outfall is currently underway.

The timeline for the design and construction of the new outfall is summarized in Table 1 below.

Table 1 - Timeline for Design and Construction of Outfall Pipe

Complete Preliminary Design	November 2017
Complete Detailed Design	May 2018
Start of Construction	January 2019
Commissioning	Mid 2024

2.2. UV Disinfection Facility

The City engaged the engineering consulting firm used to prepare the disinfection EA to further develop a conceptual design for the disinfection strategy as directed by Council and as outlined in the MOE Conditions of Approval. This conceptual design for the new disinfection facilities was completed in November 2012.

A Request for Proposal for the preliminary design, detailed design and construction administration of the ABTP disinfection system was issued on March 1, 2013. The engineering assignment was awarded to AECOM on July 10, 2013 and preliminary design commenced in September 2013. The detailed design has been completed in August 2017, the tender closed in December 2017, and the contract was awarded in February 2018. The Order to Commence was issued in April 2018, and the construction of the UV Disinfection Facility is currently underway.

The timeline for the design and construction of the new disinfection facility is summarized in Table 2 below.

Table 2 - Timeline for Design and Construction of Disinfection Facilities

Complete Preliminary Design	September 2016
Complete Detailed Design	August 2017
Start of Construction	April 2018
Commissioning	Early 2023

2.3. Public and Stakeholder Consultation

No ICMC/NLC meetings in relation to the Approved Undertakings were held in 2020. A combined ICMC/NLC meeting may be scheduled in 2021, depending on the construction progress of the Disinfection and Outfall projects.

2.4. Compliance with the Conditions of Approval

The following table lists the Conditions that have been triggered as a result of the City's work over the past year in implementing the Approved Undertaking and how the City has complied with the Condition.

Table 3 - Summary of 2019 Compliance with MOE Conditions of Approval

Condition	Compliance with Condition
2	• Disinfection system construction is underway; • Outfall pipe construction is underway
5	• A Compliance Monitoring Program has been prepared and is attached as Appendix A to this Annual Compliance Report.
6	• An Annual Compliance Report for 2020 has been prepared and submitted
10, 12 & 21	• Outfall Pipe and UV Disinfection Design - The engineering assignments scope of work included requirements outlined in these Conditions. T he results have been used to obtain approval under the OWRA. • Outfall modelling has been completed as part of the Outfall Design and final findings from the Receiving Water Impact Assessment have been submitted to the MECP as part of the approval process early 2018
18	• As discussed in section 2.3
19, 20	• As discussed in section 5 below.

3. Summary of Complaints Received

There were no complaints regarding the construction of UV Disinfection facility or the Treated Effluent Outfall in 2020.

4. Initiatives to be Undertaken in 2021

A summary of initiatives scheduled to be undertaken in the upcoming 2020 calendar year are as follows:

- Continue construction of the Outfall pipe and UV Disinfection facility.

5. Progress on Sewershed and Plant Optimization Initiatives

Condition 19 describes the requirement to continue to develop and implement plans, programs and measures to optimize the use of the plant's approved wastewater treatment capacity as part of the City achieving compliance (in the plant's service area) with the relevant provisions *of Procedure F-5-1 - Determination of Treatment Requirements for Municipal and Private Sewage Treatment Works Discharging to Surface Waters* and *Procedure F-5-5 - Determination of Treatment Requirements for*

Municipal and Private Combined and Partially Separated Sewer Systems. The relevant provisions include, for example, those pertaining to combined sewer systems and pollution prevention and control plans. The City's plans for optimizing the use of the ABTP in complying with these procedures in the plant's service area reflect the goals of F-5-5. These include:

- Eliminating the occurrence of dry weather flow overflows;
- Minimizing the potential for impacts on human health and aquatic life resulting from Combined Sewer Overflows (CSOs);
- Utilizing secondary treatment capacity as much as possible for treating wet weather flows with the balance of flows being subject to primary treatment; and
- Minimizing the pollutant loadings under wet weather conditions.

It is City's understanding that the Ashbridges Bay Treatment Plant complies with Procedure F-5-1. Lake Ontario is Policy 1, and as such a secondary level of treatment, as per the compliance limits in the current ECA, is appropriate. Furthermore, the plant is partially nitrifying to achieve a non-acutely lethal effluent as verified by the majority of effluent toxicity testing results. The future addition of Chemically Enhanced Primary Treatment and of the UV Disinfection to plant's process will result in improved effluent quality.

The City has completed sewer system improvements, including conveyance controls and a CSO storage tank in the Coatsworth Cut combined sewershed as per the objective of the Environmental Assessment Study (2008) to achieve Procedure F-5-5 (90% volumetric control) at four outfalls in the vicinity of the ABTP.

The progress made towards achieving compliance with the provisions of the MECP procedures set forth in Condition 19 is described in the sections that follow.

5.1. Combined Sewer Overflows

In 2003, Toronto City Council approved the City-wide Wet Weather Flow Master Plan (WWFMP) to reduce and ultimately eliminate the adverse impacts of stormwater runoff and CSO discharges. The 25-year WWFMP identified a series of projects for implementation, with the ultimate goal of improving water quality conditions and ecosystem health in the City's six watersheds and along the City's waterfront. The WWFMP was developed on a watershed basis and adopted a hierarchical approach to wet weather flow management wherein source control measures are considered first, followed by conveyance controls and then end-of-pipe controls.

In addition to the Coatsworth Cut CSO Controls Sewershed improvements, the City is implementing its most significant CSO control project resulting from the WWFMP - the Don River and Central Waterfront Wet Weather Flow System (DR&CW WWF System). The DR&CW WWF System is an integrated wet weather flow management system that when fully implemented will capture CSOs and stormwater discharges from all combined sewer outfalls along the Lower Don River, Taylor Massey Creek and Toronto's Inner Harbour.

In 2012, the City completed the Municipal Class Environmental Assessment (EA) study for the Don River and Central Waterfront (DR&CW) Project. The recommended solution for the DR&CW WWF System includes three integrated underground wet weather flow tunnels totalling approximately 22 kilometres in length (Coxwell Bypass, Taylor-Massey Creek and Inner Harbour West), connected to 12 underground vertical storage shafts that will capture at 27 connections points, store and transport stormwater and CSOs for treatment at a future wet weather flow high-rate treatment facility (to be built on a future landform south of the ABTP). The project also includes seven offline storage tanks to store peak sanitary flows and to capture sewer overflows from remote outfall locations.

The DR&CW WWF System has an estimated cost of over $2.5 billion and is being implemented in phases over a 25-year timeframe, with the initial phase of implementation focused on the Coxwell Bypass Tunnel that runs along the lower Don River & Lakeshore Boulevard East to a new Integrated Pumping Station (currently in the detailed design stage) near Ashbridges Bay. The preliminary design of the DR&CW WWF System began in 2014 and was completed in 2015. Detailed design

of Phase 1 of the Project - the Coxwell Bypass Tunnel was completed in 2017, with tendering completed and construction started in 2018. The design of the Inner Harbour West Tunnel (IHW) commenced in 2020.

When fully implemented, the DR&CW WWF System will achieve significant water quality improvements to advance the delisting of Toronto's Inner Harbour as an Area of Concern in the Great Lakes Basin. It is expected to surpass the F-5-5 criteria (90% volumetric control) for all combined sewer outfalls along the Don River, Taylor Massey Creek and Toronto's Inner Harbour.

The City is fully committed and has budgeted for the DR&CW WWF System and is focused on advancing the design and construction of same, and also continuing to implement other projects identified in the Wet Weather Flow Master Plan in its 10-Year Capital Program, which will lead to water quality improvements, improve swimming conditions at City's waterfront beaches and the virtual elimination of CSOs.

5.2. Wet Weather Flow Management at ABTP

The City has developed a strategy to improve treatment during wet weather events when secondary bypasses may occur at the ABTP. The overall strategy for the treatment of wet weather flows which are currently conveyed or will be conveyed to the ABTP from the DR&CW tunnels is currently under implementation and includes:

- Split flow treatment
- Chemically enhanced primary treatment (CEPT); and
- High rate treatment (HRT)

5.2.1. Split Flow Treatment

A Split Treatment Conduit (STC) has been constructed under the D Building Upgrade Project but it is not yet commissioned. Commissioning will be delayed until new gates will be installed under a future plant upgrade project. Split treatment involves operating primary and secondary treatment in parallel during wet weather flow conditions rather than in series in order to improve effluent quality. Under dry weather flow conditions, the facility will operate in conventional mode, with all flows going through primary treatment followed by secondary treatment. Peak flows through the secondary treatment process will continue to be limited according to the existing plant operational procedure to prevent washout of solids from the secondary clarifiers.

During high flow events, a portion of the D Building screened and de-gritted flow will be diverted directly to aeration. This will reduce overloading and solids washout from the D Building primary tanks during high flow events, improving the quality of the D Building primary effluent that may bypass secondary treatment in wet weather conditions.

5.2.2. Chemically Enhanced Primary Treatment (CEPT)

CEPT is being pursued to improve secondary bypass quality from P Building and improve its treatment capacity. Experience at other plants has shown promising results in terms of using CEPT to enable higher clarifier throughput while also improving TSS and BOD removal.

This proposed improvement came out of the Value Engineering study for P Building. Engineering design of P building was awarded in late 2008 and construction is now completed.

Full scale CEPT facilities have been constructed as part of the P Building project, which has been commissioned in Q3 2020. Full scale trials are scheduled to be conducted for the CEPT system performance optimization in Q2 2021. Analysis of CEPT performance at other facilities indicates that it is possible that high rate treatment will not be required to improve wet weather performance.

5.2.3. High Rate Treatment (HRT)

Even if CEPT is successful, Toronto Water's plan remains to proceed with the development of the HRT facility to provide equivalent to primary treatment for wet weather flows exceeding the capacity of the ABTP. The HRT facility will be located on a Landform (lake fill) being constructed on the south side of the ABTP. The HRT units would be used only during high flow events, and because of their small footprint and modular nature, there will adequate space for HRT units to be added if required in the future. Construction of the Landform has begun in January 2020 and is progressing well.

5.3. Other Plans and Programs

5.3.1. Sewers By-law

The Sewers By-law (Chapter 681 of the City of Toronto Municipal Code) was adopted by City Council in 2000 and is being actively enforced by the City. Each year Toronto Water inspects and samples industries in the City of Toronto with respect to the Sewers By-law. Toronto Water uses an established sampling and inspection target for businesses based on the risk potential to pollute.

Generally, there are three types of risk categories (1) High Potential (HP) (2) Medium Potential (MP) and, (3) Low Potential (LP). These categories were developed in order to allocate Toronto Water resources efficiently to industries posing the greatest risk to the sewer system and waste water treatment plants.

Toronto Water also monitors storm sewer outfall discharges to receiving waters during dry weather to find contaminated outfalls. This program is known as the Outfall Monitoring Program and samples are obtained from sewer outfalls and/or within the sewer system for analysis and compliance with the Sewers By-law. Investigation and identification of illegal discharges to the sewer system (including cross connections) is part of this program.

In addition, the City of Toronto handles the Pollution Prevention (P2) Program which covers over 6,000 facilities to ensure continuous improvement of biosolids quality. Toronto Water's Biosolids Beneficial Use Program itself diverts 100% of biosolids from the Ashbridges Bay, Humber and North Toronto Treatment Plants from landfill and has done so since 2014.

Following Council approval in December 2012, the parameter TKN (Total Kjeldahl Nitrogen) was added in 2013 as a surcharge (over-strength) parameter to the Industrial Waste Surcharge Program. Additionally, fees associated with surcharge parameters were increased to ensure cost recovery. The formula the City uses to calculate surcharges was included in the Sewers By-law as well. The City charged a fee only on the highest parameter concentration discharged from the industrial property following Council's Direction and Sewers Bylaw Amendments. On April 1 2016 the fees for the Industrial Waste Surcharge Program parameters increased per City Council's approval in December 2015 to address increased wastewater treatment costs.

On March 7, 2019 City Council adopted the following Surcharge (Overstrength) motion:

“Effective April 1, 2019 the industrial waste surcharge program formula for the calculation of surcharge fees be applied to all treatable parameters that exceed the Sewers By-law limits, instead of only the one parameter that exceeds the Sewers By-law limits by the greatest amount, allowing full cost recovery for the wastewater services provided by the City, such surcharges for any additional parameters (beyond the one parameter exceeds the sewers by-law limits by the greatest amount) to be phased in over a six year period using an annual adjustment factor as determined by the General Manager, Toronto Water to mitigate impacts to existing companies.”

Further to adoption of this motion, Bill 0517 was enacted by City Council to make necessary amendments to Toronto Municipal Code Chapters 441, 681, 849 and 851.

In recent years, Toronto Water has been active in the extensive construction and development occurring within the City. Groundwater quality and quantity is being addressed during construction and post construction as marginal lands are being used or development is going into the ground at

greater depths. Private Water, which includes groundwater and any water not purchased from Toronto Water, discharged into a City sewer must meet quality and quantity limits. Customers discharging to a sanitary sewer for treatment are charged a fee based on the volume of private water being discharged. No fee is charged for approved discharges to the storm sewer, as no treatment service is provided by the City. In order to discharge Private Water to the city sewer, the discharger must complete an application to enter into a discharge permit or agreement. For developers to comply with environmental protection, groundwater is generally being redirected to the sanitary sewer during construction and post construction.

In December 2013, City Council authorized stakeholder consultation over proposed changes to the Sewers By-law with respect to P2 Program enhancements, grease interceptors and mobile wash operations. Consultations occurred in 2014 and 2015 with staff reporting back to City Council in December 2015. Council was supportive of the following changes:

- Removal of legacy pesticides to align with the MECP update of chemical lists of the Ontario Drinking Water Quality Standards, where legacy pesticides no longer in use and which have been delisted from the Canadian Drinking Water Quality Guidelines are being removed;
- Changes to the P2 Program dental office submission requirements to better monitor amalgam separator maintenance;
- Creating a Best Management Practice for the Automotive Refinishing Sector; and
- The establishment of an Environmental Code of Practice for Food Service Establishments to reduce grease discharges to the sewer to protect the sanitary sewer, storm sewer and the environment.

The City Council supported changes came into effect and were implemented starting with 2016. Toronto Water has continued stakeholder consultations with the mobile wash sector and other relevant stakeholders resulting in implementing a pilot bulk water fill station, reviewing City yard washing practices and drafting a Code of Practice.

Also, in 2016, City Council directed a risk-based approach be taken when establishing P2 subject pollutant thresholds and to conduct a comprehensive review of potential chemicals, impacting wastewater treatment plants, to add as subject pollutants. A consultant was retained to perform this review.

In 2019, City Council requested Toronto Water and Economic Development and Culture to undertake stakeholder consultation with water users to determine what, if any, water fees and charges, programs or other measures designed to support business retention, economic growth, investment and employment, Toronto Water might recommend to City Council in furtherance of the objectives of the City's economic competitiveness strategy and Resilience Strategy. Consultations took place in the fall of 2020 and several options concerning the Sewers Bylaw were discussed with water users, which will be reviewed in 2021 for a report back to City Council on the outcomes of the consultation.

5.3.2. Water Efficiency Plan

The City's Water Efficiency Plan (WEP), approved by City Council in 2003, was aimed at creating "in-system capacity" by reducing water consumption across the City to service the population and employment growth, which was projected to increase by 10 and 12 percent respectively by 2011.

In 2011, the Water Efficiency Program was updated based on the reductions achieved, the change in market conditions, significant consumer awareness and the budgetary pressures facing Toronto Water.

The City at that time phased out all financial incentive programs for the change-out of toilets, urinals, and clothes washers, as well as the Summer Water Saver Program. The City opted to continue to offer the Capacity Buy-Back Program and the Industrial Water Rate program that began in 2008.

Changes have been implemented to the City's continued water efficiency and conservation efforts. These include continued public education and communication to further promote water conservation

initiatives; support for the City's industrial and commercial business community to achieve efficiencies in water usage and reduce consumption; and implementation of a City-Wide Water Loss Reduction and Leak Detection Program in support of Toronto Water's infrastructure renewal programs.

The Capacity Buyback Program (targeting water efficiency within the commercial and institutional sector) saved just over 140 million litres of water in 2020.

Also in 2020, 129 industrial clients participated in the Industrial Water Rate initiative, which requires companies to submit water conservation plans for their facilities and commit to completing water efficiency projects. This initiative has led to total water savings in 2020 of over 16.8 million litres.

Since the inception of rebate programs related to water efficiency (which includes the Capacity Buyback program), savings of over 89.7 million litres of water per day have been achieved.

In 2019, City Council requested Toronto Water and Economic Development and Culture to undertake stakeholder consultation with water users to determine what, if any, water fees and charges, programs or other measures designed to support business retention, economic growth, investment and employment, Toronto Water might recommend to City Council in furtherance of the objectives of the City's economic competitiveness strategy and Resilience Strategy. Consultations took place in the fall of 2020 and several options concerning the Capacity Buyback Program were discussed with water users, which will be reviewed in 2021 for a report back to City Council on the outcomes of the consultation.

6. Update of Implementation Schedules for Plant Optimization

An update of the study and implementation schedules for the plans and programs described above is provided in Table 4 below.

Table 4: Plant Optimization Implementation Schedule

Plan or Project	Status
Water Efficiency Plan	• No changes in 2020
Don River Trunk EA	• Completed 2012
Sewers Bylaw	• Enforce surcharge (Overstrength) changes in 2019 • Public consultation on changes to Sewers Bylaw in support of business retention and economic growth
Split Flow Treatment	• Awaiting commissioning
ABTP Chemically Enhanced Primary Treatment Project	• P Building commissioned end 2020 • CEPT full scale trial testing to start Q2 2021
High Rate Treatment	• Earliest implementation 2023-2030

APPENDIX A

Ashbridges Bay Treatment Plant Environmental Assessment: Implementation of the Approved Undertaking

2020 Compliance Monitoring Program

March 2021

TORONTO Water

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1. Background

The Municipal Class Environmental Assessment for the Main Treatment Plant (currently known as Ashbridges Bay Treatment Plant) was started in 1989 by the former Municipality of Metropolitan Toronto to address future plant expansion requirements. In 1991, the municipality amended its approach and continued preparation of the document as an Individual Environmental Assessment.

The former municipality of Metropolitan Toronto submitted the Ashbridges Bay Treatment Plant Environmental Assessment (ABTP EA) to the Minister of the Environment for approval under the *Environmental Assessment Act* (EAA) in December 1997. The purpose of the ABTP EA was to establish a plan to meet future wastewater needs in the ABTP service area to the year 2011 and to improve the effectiveness of the ABTP at reducing environmental impacts.

To address several different public comments regarding the Individual Environmental Assessment, the City entered in early 1999 into a self-directed mediation process, in an effort to resolve outstanding issues prior to final MOE review. The outcome of this process between numerous stakeholders and the City resulted in the drafting of a Mediation Agreement documenting all issues including those that were successfully resolved and those that the parties had failed to reach agreement.

The Mediator's Report dated April 16, 1999 contains eleven resolutions that the City and the signatories agreed to, only a few of which form part of the Conditions of Approval for the Individual Environmental Assessment. In the Mediation Agreement, provision was made for the creation of the Implementation, Compliance and Monitoring Committee (ICMC). The overall purpose of the ICMC is to assist the City of Toronto by providing input to the City on issues relating to the implementation of the EA Approval. The ICMC was formed and has been meeting regularly since the signing of the Mediation Agreement in 1999.

The MOE released their review of the ABTP EA in April of 2004. They concluded that the EA had satisfied all the requirements of the EA Act and they would be recommending approval. The public comment period on the review closed in June 2004.

The Ministry of the Environment (MOE) approved the City of Toronto's EA for Ashbridges Bay Treatment Plant on January 24, 2008, subject to several conditions that include:

1. The establishment and submittal of an EA Compliance Monitoring Program
2. Preparation and submittal of an Annual Compliance Report
3. Preparation and submittal of an Annual Mediation Agreement Status Update
4. Undertaking a comprehensive Public Consultation Program

2. Purpose of the Program

The purpose of the Compliance Monitoring Program (CMP) is to monitor the City's progress in fulfilling requirements of the MOE Conditions of Approval of the EA and the provisions of the EA, as amended by the MA.

The CMP describes:

- Commitments to be monitored
- The phase of the project at which the commitment will be addressed
- Actions required by the City to address the commitments
- The indicators to be used to verify compliance
- The schedule to be followed for completion of the commitments.

In addition to the CMP, an Annual Compliance Report (ACR) is to be submitted under the Conditions of Approval. The ACR is to describe what steps the City has taken to implement steps of the CMP during the previous year and outlines the steps that will be taken to implement the Approved Undertaking in the upcoming year.

This document outlines the monitoring requirements for each project during the design, construction and operations phases in tabular format. It is intended that the CMP will be updated annually and submitted with the ACR to the Ministry.

3. Project Implementation

The City has subdivided the Approved Undertaking into three separate projects. The projects receiving approval as part of the Undertaking under this EA are:

1. An Ultraviolet (UV) disinfection system;
2. A new outfall pipe; and
3. An effluent pumping station.

The first two projects included in the Undertaking will progress from design phase (preliminary and detailed design) through the construction phase and then to commissioning and operation.

The need for the third project included in the Undertaking has been reviewed during the preliminary design phase of the outfall pipe and UV disinfection facility, and the hydraulic modelling has determined that an effluent pumping station is not required at this time.

The approved projects to be completed within this Undertaking are summarized in Table 1.

Table 1: Ashbridges Bay Treatment Plant Projects

Upgrade	Reason for Upgrade	Planned Completion / Implementation Date	Approvals Necessary
Preliminary Design Report incl. Final Outfall Modelling Study	To update the 1995 outfall study and to define the scope for the future detailed design and construction of a new outfall pipe at the ABTP	Completed 2017	• Ontario Water Resources Act
Disinfection Study (Schedule B EA)	To determine whether UV disinfection is still the best alternative to treat effluent and bypass from the ABTP	Completed 2010 Peer Review completed 2011	• Ontario EA Act
Design & construct new UV disinfection system	To improve the effectiveness of the ABTP and reducing environmental impacts by producing improved effluent quality with respect to disinfection	Construction started April 2018 Estimated construction completion: Early 2023	• Ontario EA Act • Ontario Water Resources Act
Design and Construct new outfall pipe	To handle peak flows at the plant and eliminate the need for the use of seawall gates	Construction started January 2019 Estimated construction completion: Mid 2024	• Ontario EA Act • Canada EA Act • Fisheries Act • Ontario Water Resources Act
Design and Construct effluent pumping station	To deal with any hydraulic limitations that may be associated with the new outfall and disinfection system	Deemed not required at this time	

4. Monitoring the Conditions of Approval

As stated in the introduction to this document, the Compliance Monitoring Program was prepared to assist the City in monitoring compliance with the Conditions of Approval as well as the commitments made in the EA, as amended by the MA.

Table 2 outlines the Conditions of Approval set out by the MOE in their notice of decision dated January 24, 2008 and how and when they will be addressed, and by whom.

Table 2: How Conditions of Approval are Addressed

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
1. The projects which are receiving approval as part of the Undertaking under this EA are a new outfall pipe, an effluent pumping station and a UV disinfection system. No projects related to this approval shall result in the increase of the rated capacity of the plant for secondary treatment (average) above 818 mega litres per day or the capacity of the new outfall above 3,923 mega litres per day at high lake water level or the other capacities set forth in Resolution #3 of the MA or in the expansion of the current solids handling capacity of the plant (as per page 29 of the MA, "Addendum: Explanatory Text Regarding Tables 17.4 and 17.5").	City	Design	Construction In progress (UV Disinfection and Outfall) Effluent Pumping Station not required at this time
2. The proponent shall comply with the provisions of the EA, as amended by the MA, relating to the construction or pre-construction study and assessment of the three approved projects of the Undertaking, excluding timing and scheduling, except as provided in these conditions and except as provided in any OWRA or EPA approvals for the projects of the Undertaking, and in any other approvals or permits that may be issued.	City	Design, Construction and Post-Construction	Construction In progress (UV Disinfection and Outfall) Effluent Pumping Station deemed not required at this time
3. These conditions do not prevent more restrictive conditions being imposed under other statutes.	City	As applicable	Acknowledged
4. Where a document is required for the Public Record, a copy shall be provided to the Director for filing with the Public Record maintained for this Undertaking and a copy shall be provided to the Director for MOE staff use. Additional copies of such documents shall be provided by the proponent for public access to: i. the Regional Director; ii. the District Manager iii the Clerk's offices of the City of Toronto; iv. the ICMC and the NLC.	City	Study, Design, Construction and Post-Construction	In progress (as part of the annual reporting process)

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
5. (1) The proponent shall prepare and submit to the Director for the Public Record an EA Compliance Monitoring Program (Program) which has the purpose of monitoring the proponent's fulfilment of: i. the provisions of the EA, as amended by the MA, relating to the construction or pre-construction study and assessment of the projects within the Undertaking; and ii. the conditions of approval of the EA.	City	Design, Construction and Post-Construction	In progress (Included in each ABTP EA Annual Compliance Report)
(2) Items (1) i) and ii) shall both include, but not be limited to, matters regarding: i. public consultation; ii. additional studies and work to be carried out; iii. additional approvals required prior to construction of projects; and mitigation measures.	City	Design, Construction and Post-Construction	In progress (Included in each ABTP EA Annual Compliance Report)

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
6. (1) The proponent shall prepare an Annual Compliance Report (Report) which includes: i. a description of compliance with the provisions of the EA, as amended by the MA, specifically relating to the three projects within the Undertaking; ii. a description of compliance with the conditions of approval set out in this document; iii. the results of the proponent's Environmental Assessment Compliance Monitoring Program (Program); iv. a summary of the evaluation of compliance with the EA approval provided by the ICMC and a response from the proponent. The entire evaluation shall be provided in an appendix; v. a summary of any other complaints, such as noise, odour and water quality, received regarding the construction or operation of the projects of the Undertaking or compliance with the EA approval, and a response from the proponent. Copies of the complaints including the names and addresses of the complainants shall be provided in an appendix; vi. a summary of all initiatives undertaken during the year to implement the EA approval; vii. a summary of initiatives intended to be undertaken to implement the EA approval in the next calendar year; viii. an indication of progress made towards achieving compliance with the provisions of the MOE Procedures set forth in Condition 19; and ix. an update of the study and implementation schedules for the plans, programs and measures set forth in Condition 19.	City/ICMC	Design, Construction, Post-Construction annually	In progress (ABTP EA Annual Compliance Report submitted annually) iv. Last ICMC report prepared in 2010. No further reports by ICMC necessary after the expiry of planning horizon in 2011. The ICMC has continued to receive periodic updates at each stage of the projects which are part of the approved undertaking.
(2) The first Report shall be issued and submitted for the Public Record no later than the March 31 following the date of this approval. If the Program has not been finalized by then, the results of the Program would not need to be described in that edition of the Report, although best efforts shall be made to provide information likely to be provided by the Program.	City	ABTP EA	Completed (2008)
(3) Subsequent Reports shall be issued and submitted for the Public Record on or before March 31 each year thereafter and shall cover the previous calendar year.	City	Design, Construction, Post-Construction annually	In progress (ABTP EA Annual Compliance Report submitted annually)

	MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
	(4) The proponent shall submit Annual Compliance Reports until the projects within the Undertaking have been implemented and all conditions of this approval have been satisfied. When all conditions have been satisfied, the proponent shall indicate in the Report that this is its final submission.	City	Post-Construction	Not Yet Initiated
7.	(1) The proponent shall prepare and submit for the Public Record an annual Mediation Agreement Status Update no later than the March 31 following the date of this approval. The format shall be similar to that provided by the November 28, 2002 Mediation Agreement Status Update.	City	Design and Construction	Completed
	(2) The Mediation Agreement Status update shall include: i. compliance status with the commitments made in the MA; ii. ICMC comments; iii. progress update; iv. explanation of any delays in fulfilling commitments and revised schedules for fulfilling such commitments; and v. items set out in Resolution #10, Item 3.5 of the MA as they relate to all commitments made in the MA.	City, ICMC	Design and Construction	In Progress ii. ICMC has not commented on the Mediation Report after 2011 (the expiry of planning horizon). The ICMC has continued to receive periodic updates at each stage of the projects which are part of the approved undertaking iii. 2020 Mediation Agreement Status Update is attached in Appendix B
	(3) The proponent shall submit the annual Mediation Agreement Status Update until the projects within the Undertaking have been implemented and all conditions of approval have been satisfied. The Mediation Report Status Update may be submitted as an appendix to the Annual Compliance Monitoring Report.	City	Design and Construction	In Progress 2020 Mediation Agreement Status Update is attached
8.	(1) The ICMC shall be continued by the proponent at least until the projects within the Undertaking have been implemented and all conditions of approval have been satisfied.	City	Design and Construction	In progress

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
(2) The ICMC's purpose shall be to: i. assist with the implementation of all aspects of the EA approval by providing public input to the proponent on issues relating to the implementation of the EA approval and the MA; ii. serve as the focal point for the dissemination, review and exchange of information and monitoring results relevant to the City's compliance with the EA approval and the MA; iii. fulfill a mandate as described in the Terms of Reference for the ICMC included in the MA after Resolution #10, with the exception that any references to the EA approval, including all commitments made as part of the MA, are removed, and the ICMC shall be identified as having the two different roles of monitoring the City's compliance with the EA approval and with the MA; and iv. function as the steering committee for any studies related to the detailed design of and/or applications for approval under the OWRA for the outfall and the UV disinfection system, as stated in Resolution #8, Items 2.6 and 2.5, respectively, of the MA.	City, ICMC	Design and Construction	In progress ICMC role now focused on the approved undertaking after the expiry of the planning horizon in 2011
(3) The ICMC shall have the membership, duration of existence, operating procedures, resource support and information access, as follows: i. as specified in Terms of Reference for the ICMC, included in the MA after Resolution #10; ii. as specifically expanded upon by any other text of any item of the MA which pertains to matters within this EA approval; and iii. a "majority of members of the ICMC" shall mean a majority of the members present at a given meeting of the ICMC.	ICMC	Design and Construction	In progress ICMC role now focused on the approved undertaking after the expiry of the planning horizon in 2011
(4) The provisions in subsections (2) or (3) shall not be reduced from that specified unless unanimous consent of the ICMC is granted or if a majority of both the ICMC's members and City Council request the Director of the Ministry of the Environment's Environmental Assessment and Approvals Branch to make such changes, at which time the Director may consult other parties prior to reaching a determination. This does not prohibit the ICMC and City Council from both agreeing to expand the provisions without any decision of the Director being required.	ICMC	As applicable	In Progress ICMC role now focused on the approved undertaking after the expiry of the planning horizon in 2011

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
9. (1) The NLC shall be maintained by the proponent in accordance with the Terms of Reference included in the MA after Resolution #9 and shall serve as a focal point for the dissemination, review and exchange of information and monitoring results relevant to the operation of the ABTP.	City, NLC	As applicable	In progress NLC role now focused on the approved undertaking after the expiry of the planning horizon in 2011
(2) A majority of members of the NLC shall mean a majority of the members present at a given meeting of the NLC.	NLC	As applicable	Acknowledged
(3) If there is no interest from the public in continuing the existing NLC, the committee may be discontinued. However, the need for a NLC shall be reviewed by the proponent if any future interest is expressed and also reviewed annually regardless of whether any interest is expressed.	City, NLC	As applicable	Not Applicable There is no plan to discontinue the NLC, whose role is now focused on the approved undertaking after the expiry of the planning horizon in 2011
(4) A review of the need for a NLC shall include the publishing of a notice in newspapers with general circulation in the subject area inviting expressions of interest in the formation of NLC, as well as the notification of parties who the proponent reasonably knows may be interested, including past members.	City	As applicable	Not Applicable There is no plan to discontinue the NLC, whose role is now focused on the approved undertaking after the expiry of the planning horizon in 2011
(5) If there is interest in forming a NLC and members are willing to serve, the NLC shall be re- established.	City, NLC	As applicable	Not Applicable There is no plan to discontinue the NLC, whose role is now focused on the approved undertaking after the expiry of the planning horizon in 2011
(6) If, during any time a NLC is not in existence, the proponent is required to comply with any of the conditions set forth in this approval which require consultation with the NLC, the proponent shall undertake the necessary consultation through mailing notice to the list of members of the NLC within the last year of its existence, and providing, upon request, appropriate documentation related to the item. Comments received through this consultation shall be treated as comments obtained from public consultation.	City	As applicable	Not Applicable There is no plan to discontinue the NLC, whose role is now focused on the approved undertaking after the expiry of the planning horizon in 2011
10. (1) The proponent's application for approval under the OWRA for the proposed enlarged outfall pipe and the proposed UV disinfection system shall include, but shall not be limited to: i. information regarding the anticipated effluent quality (i.e. Biochemical oxygen demand, total suspended solids, total phosphorous and E. coli) of the blended (primary and secondary treated) effluent during secondary bypass events, so it can be determined if a receiving water assimilation assessment, taking into consideration the full effluent loadings of the plant, including any decant from the plant's ash lagoons, is necessary;	City	Design	Completed through the Modelling Study as part of the Outfall Detailed Design

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
ii. a revised mixing zone analysis using the final diffuser design and dilution ratios, with the secondary effluent flows and quality, as well as the bypass (blended effluent) flows and quality, for the purpose of demonstrating that the average daily flow of secondary effluent with the new diffuser and under different discharge scenarios will meet the PWQOs at the edge of the mixing zone;	City	Design	Completed through the Modelling Study as part of the Outfall Detailed Design
iii. consideration of all items outlined in Resolution #8 - Section 2 - Proposed Outfall Pipe - Item 2.4 of the MA, unless the OWRA Director determines otherwise;	City	Design	Completed through the Modelling Study as part of the Outfall Detailed Design
iv. an assessment of the feasibility of using 0.5 mg/L as an objective for total phosphorous for Section 3 - Operation and Maintenance of the Certificate of Approval, wherein the Proponent is required to use best efforts to operate the plant with the objective that concentrations lower than those generally established for compliance purposes are met;	City	Design	Completed The Outfall RWIA modelling study considered 1.0 mg/L TP to determine the extent of the mixing zone in the worst-case scenario. If TP<1.0 mg/L, the PWQO will be met in a reduced mixing zone It should be noted that Lake Ontario is a Policy 1 for P. The feasibility of using 0.5 mg/L as an objective for TP was reviewed under a different assignment
v. an assessment, in consultation with MOE's Central Region Water Resources Unit, of the feasibility of whether the concentration levels of the biochemical oxygen demand, suspended solids, total phosphorous, E. coli and pH in the blended effluent (combined primary and secondary) should be calculated annually by the City for information purposes;	City	Design	Completed As part of the ABTP Environmental Compliance Approval process
vi. an assessment, in consultation with MOE's Central Region Water Resources Unit, of the establishment of a compliance limit for E. coli for secondary effluent; and	City	Design	Completed (New Disinfection Facility ECA)
vii. monitoring and contingency plans to provide verification that the UV disinfection system is working as predicted.	City	Design	Completed (New Disinfection Facility Detailed Design)
viii. modeling and monitoring of the impacts of the effluent combined with other factors (e.g. lake currents) on water quality along beaches of central Toronto shoreline to ensure there are no negative impacts.	City	Design	Completed through the Modelling Study as part of the Outfall Detailed Design

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
(2) Environment Canada shall be circulated on the complete OWRA application by the Proponent.	City	Design	Completed Deemed not required in consultation with Dept. of Fisheries and Oceans
11. (1) In accordance with Resolution 8, Item 2.5, of the MA, the proponent shall undertake a comprehensive public consultation program on the preparation of studies required to be completed as part of the OWRA application and detailed design processes for the outfall. Further, the ICMC and NLC shall be consulted by the proponent regarding the design of an appropriate public consultation process. As stated in Resolution 8, Item 2.6, of the MA, and in Condition 8 (2) iv) the ICMC shall be the Steering Committee for these processes and shall be given the opportunity to review the terms of reference of all OWRA studies and participate in the selection of consultants hired to complete them.	City	Initiation of project and during project implementation	Completed (2013 - UV Disinfection and 2015 - Outfall)
12. (1) The outfall design and construction will be carried out so that effects on fish and fish habitat, both permanent effects and temporary effects during construction, as well as any other identified effects, are minimized and appropriately mitigated, as required by the OWRA and other required approvals. The design study shall include an examination of: i. methods of construction - tunnel versus open trench; ii. sediment quality in area of construction; iii. proposed location for disposal of dredged material (depends on sediment quality); iv. proposed methods to prevent/minimize turbidity from the construction; v. the capacity/diameter of the individual components and of the outfall itself; vi. length and design of diffusers; vii. the treatment (for example, removal or decommissioning) of the existing outfall pipe; and viii. other relevant items identified by other interested agencies or the public.	City	Design and Construction	Completed as part of the Outfall Detailed Design
(2) As part of these requirements, MOE's *Evaluating Construction Activities Impacting on Water Resources. Parts 111/A-C,* 1994 shall be complied with.	City	Construction	Completed as part of the Outfall Detailed Design

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
13. (1) If through studies completed as part of the OWRA application or during preparation of the detailed design it is shown that it is not technically or economically reasonable to disinfect secondary bypass effluent solely by UV disinfection, the method(s) of disinfection to be used for this portion of the effluent shall be determined by the proponent, in consultation with MOE, through consideration of: i. the results of the UV design optimization study and any other relevant studies; ii. the options identified in Resolution #7, Item 4 iii, of the MA; iii. the principles outlined on page 84 of the MA; iv. consultation with other government agencies who the proponent believes may be interested in the matter; v. consultation with the ICMC and NLC; and	City	Design	Completed (2013 UV Disinfection / 2015 Outfall)
(2) A comprehensive public consultation process, designed in consultation with the ICMC and the NLC, and with appropriate documentation of the additional analysis completed being made available, will be undertaken by the proponent.	City, ICMC, NLC	Initiation of project and updated through implementation as necessary	Completed (2013 UV Disinfection / 2015 Outfall)
(3) The method to be used can be implemented by the City under this EA approval, subject to the other requirements of this condition.	City	Design as necessary	Completed (2013 UV Disinfection / 2015 Outfall) City moving forward with UV Disinfection for secondary effluent and chlorination and de-chlorination of primary effluent as per City Council direction and MOE Conditions of Approval
(4) In the event that the majority of members of the ICMC are not in agreement with the proponent's final selected disinfection option, once government agency consultation is complete, the proponent shall provide notice of its selected option to all parties who expressed an interest in the matter. The notice shall state: i. that any party may, within 30 days of the notice, request that the Minister of the Environment require the proponent to follow the process set forth for either a Schedule B or C Project under the Municipal Class Environmental Assessment; and ii. that any such request must contain the environmental reasons for the request being made.	City	Disinfection EA	Not Applicable ICMC is in agreement with the selected options

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
(5) In making a decision on the request outlined in the Minister will consider: i. the request and the reasons set forth in it; ii. all documentation prepared by the City in fulfilment of the above portions of these conditions; iii. the response provided by the City regarding the request; iv. the public and agency consultation undertaken by the City and the results of such consultation; and v. relevant documentation of the decisions of the ICMC and the NLC. vi. If the Minister directs that the processes set forth for either Schedule B or C Projects under the Municipal Class Environmental Assessment be undertaken, the Minister will also direct that the principles outlined in Condition 13 (1) and (2) shall be followed. However, the Minister may also indicate that certain requirements of the processes have already been fulfilled by the City's previous public consultation process and that certain provisions of the Class EA process do not apply to this matter.	Minster of the Environment		Completed (2010) City moving forward with UV Disinfection for secondary effluent and chlorination and de-chlorination of primary effluent as per City Council direction and MOE Conditions of Approval
14. (1) If, through studies completed as part of the OWRA application or during preparation of the detailed design, and in consultation with the MOE, it is shown that: i. it is not technically or economically reasonable to disinfect effluent that receives secondary treatment with UV disinfection system; and ii. some other form of disinfection must be utilized; the Proponent shall proceed through, at a minimum, the process set forth for Schedule B projects under the *Municipal Class Environmental Assessment* and shall also follow the principles outlined in Condition 13 (1) and (2). The Proponent will be subject to all provisions of the *Municipal Class Environmental Assessment* as it applies to Schedule B projects, including Part II Order Request (request for individual EA) provisions.	City	Disinfection EA	Completed (2010) City moving forward with UV Disinfection for secondary effluent and chlorination and de-chlorination of primary effluent as per City Council direction and MOE Conditions of Approval

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
15. (1) If, through studies completed as part of the OWRA application or during preparation of the detailed design, and in consultation with MOE, it is shown that an alternative other than, or in addition to, the proposed enlarged outfall is required for discharging any portion of the ABTP's effluent at any time in order for the secondary effluent to meet the PWQOs, the Proponent shall proceed, at a minimum, through the process set forth for Schedule B projects under the *Municipal Class Environmental Assessment*.	City	Design as necessary	Not Applicable Upon completion of the outfall and plant conduit reconfiguration, all flows will be discharged through the enlarged proposed outfall
16. (1) If, through studies completed as part of the OWRA application or during preparation of the detailed design, and in consultation with MOE, it is shown that both the UV disinfection system and the proposed enlarged outfall require replacement by other alternatives, the planning and implementation of both alternative projects shall proceed, as one Schedule B project, at a minimum, under the *Municipal Class Environmental Assessment* and for the replacement of the UV disinfection system, shall also follow the principles outlined in Condition 13 (1) and (2). The Proponent will be subject to all provisions of the *Municipal Class Environmental Assessment* as it applies to Schedule B projects, including Part II Order Request (request for individual EA) provisions.	City	Disinfection EA and Design as necessary	Not Applicable Design is proceeding with the enlarged outfall and UV Disinfection Facility
17. (1) The proponent shall only release UV treated effluent through the new outfall as approved under the OWRA unless a suitable assessment of an alternative method is completed to the satisfaction of MOE's Central Region Water Resources Unit and the OWRA Director, and then, only in accordance with all requirements or conditions set forth by MOE's Central Water Resources Unit and the OWRA Director.	City	Design	Not Applicable Design is proceeding with the enlarged outfall and UV Disinfection Facility
(2) The assessment must include mitigation measures and illustrate that there are no negative effects on human health or aquatic habitat in the near shore and shoreline areas of water bodies in the vicinity of the ABTP associated with the alternative method of discharge.	City	Design	Not Applicable Design is proceeding with the enlarged outfall and UV Disinfection Facility

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
18. (1) As stated in Resolution 8, Items 2.6 and 2.5, respectively, of the MA, (and mentioned in Condition 8, Clause (2) iii), the ICMC shall be the steering committee for any studies related to the detailed design of and/or applications for approval under the OWRA for the outfall and the UV disinfection system and the Undertaking of such studies shall include a comprehensive public consultation program.	City	Study and Design	Completed
19. (1) The City of Toronto (City) shall continue to develop and implement plans, programs and measures to optimize the use of the plant's approved wastewater treatment capacity as part of the City achieving compliance (in the plant's service area) with the relevant provisions of MOE Procedure F-5-1 - Determination of Treatment Requirements for Municipal and Private Sewage Treatment Works Discharging to Surface Waters and MOE Procedure F-5-5 - Determination of Treatment Requirements for Municipal and Private Combined and Partially Separated Sewer Systems. The relevant provisions include, for example, those pertaining to combined sewer systems and pollution prevention and control plans. The City's plans for optimizing the use of the plant in complying with these procedures in the plant's service area shall reflect the goals of F-5-5, which include: i. eliminating the occurrence of dry weather flow overflows (presently met by City but which needs to be sustained); ii. minimizing the potential for impacts on human health and aquatic life resulting from combined sewer overflows; iii. utilizing secondary treatment capacity as much as possible for treating wet weather flows with the balance of flows being subject to primary treatment; and iv. minimizing the pollutant loadings under wet weather conditions.	City	As applicable through projects resulting from the Wet Weather Flow Master Plan and implementation of the Approved EA Undertaking	In Progress It is City's understanding that the ABTP complies with MOE Procedure F-5-1. Lake Ontario is Policy 1, and as such a secondary level of treatment, as per the compliance limits in the current ECA, is appropriate. Furthermore, the ABTP process is partially nitrifying to achieve a non-acutely lethal effluent as verified by the effluent toxicity testing results
(2) The plans, programs and measures (for example, the City's Wet Weather Flow Management Master Plan) shall consider items related to wet weather flows, water use efficiency, sewer usage, and pesticide use reduction, amongst others.	City	As applicable	In Progress
(3) As set forth in Condition 6, clauses (1) viii) and ix), as part of the Annual Compliance Report submitted to MOE, progress made towards the above shall be outlined and study and implementation schedules for the above items shall be updated.	City	As applicable	In Progress

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
20. (1) On a date before the sixth anniversary of the date of approval of the Undertaking, the City shall, to the satisfaction of MOE's Central Region Water Resources Unit, produce a report for the public record quantifying the progress towards compliance with MOE Procedure F-5-1 - Determination of Treatment Requirements for Municipal and Private Sewage Treatment Works Discharging to Surface Waters and MOE Procedure F-5-5 - Determination of Treatment Requirements for Municipal and Private Combined and Partially Separated Sewer Systems at the plant and in the plant's service area.	City	Design	In Progress Annual Compliance Report updated on an annual basis as per section 5. ABTP complies with MOE Procedure F-5-1 as indicated in item 19
(2) The report shall also assess how the programs set forth in Condition 19 have contributed towards these reductions or if other factors such as population growth in the service area, have had an effect, and if additional programs should be implemented to increase the reductions of effluent flows through the plant.	City	Design	In Progress Annual Compliance Report updated on an annual basis as per Section 5
21. (1) The text under the heading Lapse of Time Between Approval and Construction found in Section 19 of the EA, is replaced by the following text: "If the construction of an Undertaking receiving approval through this EA approval is not commenced 5 years from the date of this approval, the proponent shall review and document whether any changes have taken place since the approval to ensure that the project and any mitigation measures related to it are still valid. The changes may include, for example, natural, social, cultural and economic environmental conditions, new engineering standards or new technologies for mitigating measures. The documentation shall be provided to the ICMC, the NLC, MOE and any other governmental agencies which expressed an interest in any relevant matter during the review of the EA, for review."	City	Design	Completed Outfall Modelling Study and Disinfection EA and accompanying disinfection Conceptual Design Report have updated work done in the original EA. All new information has been presented to the MECP, ICMC and NLC during the development of all studies. As well, the ICMC and NLC have been involved in reviewing RFPs for these studies and selecting consultants to undertake the work outlined in the RFP. A report was prepared and submitted to the MECP to substantiate that there are no changes to the original EA conditions.
22. (1) The proponent shall ensure that the intent of the provisions of Resolution #9 - Good Neighbour Issues - Item 2 - Noise and Item 6 - Site Plan and Visual Aesthetics are followed for all construction activities and regular operations pertaining to the new outfall, the UV disinfection system and the effluent pumping station and for removal of any redundant equipment.	City	Construction and Post-Construction	In progress

5. Compliance Management

5.1. City's Role and Responsibilities

In general, the City will verify the requirements of the CMP are being followed and commitments are being met by the responsible parties identified during each phase of the project.

The City will also:

- Prepare an inventory and monitor project requirements and activities in fulfilment of the CMP, EA Conditions of Approval and all other EA commitments;
- Maintain records;
- Highlight changes to the implementation of the Undertaking annually, if applicable;
- Prepare and submit an Annual Compliance Report outlining the work completed by the City in the previous year in implementing the Approved EA Undertaking.

6. Actions Required to Address Commitments

The Compliance Monitoring Program defines specific actions that are required to address the compliance conditions stipulated in the Conditions of Approval for the EA and provisions for the project implementation and monitoring commitments described in the EA as amended by the MA with respect to:

- Public Consultation activities;
- Additional studies and work to be carried out;
- Additional approvals required prior to the construction of projects; and
- Mitigation and monitoring measures required during construction of projects.

The monitoring actions are presented in tabular format to assist the City with:

- Record keeping of the status of monitoring activities for the ACR submitted for the duration of the implementation of the Approved Undertaking;
- Monitoring specific environmental compliance activities; and
- Providing verification that specific commitments made have been met.

The structure of the tables will be used as the format to facilitate recording of the status of the monitoring activities in annual reports submitted during the implementation of the Undertaking.

The commitments listed represent the initial monitoring requirements, and it is understood that as the implementation of the Approved Undertaking progresses the requirements may be updated as necessary as stated in the Section 3 of Conditions of Approval.

The ACR will document these additional commitments and/or changes to commitments or monitoring activities, if any are identified through additional studies or the public consultation program.

6.1. Monitoring During Design

Monitoring activities to implement the Approved Undertaking include:

- Design projects within the Undertaking in order to minimize impacts to human health and the natural environment;
- Evaluation of disinfection technologies with respect to the ability to achieve performance targets for disinfection of secondary and bypass effluent;
- Evaluation of impacts on near shore water quality related to the construction and operation of an enlarged outfall pipe. Including additional studies to be undertaken to meet requirements for the OWRA approval process;

- Application of design standards to meet regulatory requirements;
- Procedures to obtain regulatory approvals; and
- Opportunities to obtain input from affected communities and stakeholders through the Public Consultation Program.

During the preliminary and detailed design phase all design-related commitments will be carried out by the City / Consultant and presented to the ICMC for comment. The NLC will also receive updates on projects resulting from the Conditions of Approval during regularly scheduled meetings.

Monitoring activities will be integrated with the design schedule for each project within the Undertaking in order to verify that commitments have been met before construction activities commence.

Table 3: Monitoring During Design

ID #	Monitoring Element	Commitment to be Monitored	Responsible Person / Agency	Reference	Status & Description of how Element has been Addressed	Additional Requirements Identified for Construction Phase of Project
					Specific information to be added by the City during annual compliance reporting for all cells in this column. Where appropriate, recommendations for future studies and/or additional work will be added by the City, including sequence of how recommendations of additional work will be implemented during design and construction.	Requirements at the construction stage are still pending and will be determined by the City. Specific information to be added by the City with annual compliance reporting for all cells in this column.
Design of Outfall						
D1	Assessment of Anticipated Effluent Quality	Information regarding the anticipated effluent quality (i.e. Biochemical oxygen demand, total suspended solids, total phosphorous and E. coli) of the blended (primary and secondary treated) effluent during secondary bypass events, so it can be determined if a receiving water assimilation assessment, taking into consideration the full effluent loadings of the plant, including any decant from the plant's ash lagoons, is necessary;	City	CA.10.1.i	Completed through the Modelling study as part of the Outfall Detailed Design	No Action Required
D2	Mixing Zone Analysis	A revised mixing zone analysis using the final diffuser design and dilution ratios, with the secondary effluent flows and quality, as well as the bypass (blended effluent) flows and quality, for the purpose of demonstrating that the average daily flow of secondary effluent with the new diffuser and under different discharge scenarios will meet the PWQOs at the edge of the mixing zone;	City	CA.10.1.ii	Completed through the Modelling study as part of the Outfall Detailed Design	No Action Required

ID #	Monitoring Element	Commitment to be Monitored	Responsible Person / Agency	Reference	Status & Description of how Element has been Addressed	Additional Requirements Identified for Construction Phase of Project
D3	Assessment of Total Phosphorus Compliance Limit	An assessment of the feasibility of using 0.5 mg/L as an objective for total phosphorous for Section 3 - Operation and Maintenance of the Certificate of Approval, wherein the Proponent is required to use best efforts to operate the plant with the objective that concentrations lower than those generally established for compliance purposes are met	City	CA.10.1.iv	Completed The Outfall RWIA modelling study considers 1.0 mg/L TP to determine the extent of the mixing zone in the worst-case scenario. If TP<1.0 mg/L, the PWQO will be met in a reduced mixing zone It should be noted that Lake Ontario is a Policy 1 for P. The feasibility of using 0.5 mg/L as an objective for TP has been reviewed under a different assignment	No Action Required
D4	Assessment of Key Parameters for Annual Report on Effluent Quality	An assessment, in consultation with MOE's Central Region Water Resources Unit, of the feasibility of whether the concentration levels of the biochemical oxygen demand, suspended solids, total phosphorous, E. coli and pH in the blended effluent (combined primary and secondary) should be calculated annually by the City for information purposes;	City and MOE	CA.10.1.v	Completed (New ABTP Disinfection and Outfall ECA)	No Action Required
D5	Assessment of E. Coli Compliance Limit	An assessment, in consultation with MOE's Central Region Water Resources Unit, of the establishment of a compliance limit for E. coli for secondary effluent;	City and MOE	CA.10.1.vi	Completed (New ABTP Disinfection and Outfall ECA)	No Action Required
D6	Near-shore Water Quality Monitoring	Modeling and monitoring of the impacts of the effluent combined with other factors (e.g. lake currents) on water quality along beaches of central Toronto shoreline to ensure there are no negative impacts.	City	CA.10.1.viii	Completed through the Modelling study as part of the Outfall Detailed Design	No Action Required
D7	Fish and Fish Habitat Design Study	The outfall design will be carried out so that effects on fish and fish habitat are minimized and appropriately mitigated.	City / Consultant and DFO	CA.12.1	Completed in the Outfall Preliminary Design	No Action Required
D8	Compliance for Evaluation of Construction Activities	Compliance with MOE's *Evaluating Construction Activities Impacting on Water Resources. Parts 11/A-C,* 1994, to mitigate effects on fish and fish habitat.	City / Consultant	CA.12.2	Completed in the Outfall Detailed Design	No Action Required
D9	Mitigation of Fisheries Impacts	Mitigation against fisheries impacts will be developed in concert with the Federal Department of Fisheries and Oceans, the Ministry of Natural Resources and the TRCA. The consultation process may require approvals under *Federal Fisheries Act, Lakes and Rivers Improvement Act,* and *Navigable Water Act.*	City / Consultant	EA.18-1	Completed through the Outfall Design (fish netting studies determined that there is no noticeable impact on the aquatic habitat)	No Action Required

ID #	Monitoring Element	Commitment to be Monitored	Responsible Person / Agency	Reference	Status & Description of how Element has been Addressed	Additional Requirements Identified for Construction Phase of Project
Design of Disinfection System						
D10	Assessment of Blended Effluent Quality	Undertake studies to address and determine whether mixing the effluent that now leaves the ABTP through the seawall gates during by-pass conditions with the effluent that now leaves the ABTP through the existing outfall pipe and sending the mixture out the proposed new outfall would make disinfection of the ABTP effluent by (UV) less possible from a regulatory standpoint or less effective from a physical standpoint.	City	CA.10.1.iii	Completed through the Modelling study as part of the Outfall Detailed Design	No Action Required
D11	Assessment of Interim disinfection facility	Undertake studies to address and determine whether an interim (UV) disinfection facility/connection could be built to utilize the existing outfall, allowing for a potential deferral of the construction of the new outfall, without delaying the implementation of (UV) disinfection.	City	CA.10.1.iii	Not Applicable Interim UV Disinfection Facility not feasible	No Action Required
D12	Assessment of Source Water Protection	Undertake studies to address and determine whether there are any potential impacts on the Island water filtration plant and the Harris water filtration plant.	City	CA.10.1.iii	Completed through the Modelling study as part of the Outfall Detailed Design	No Action Required
D13	Assessment of Secondary Bypass Effluent	Undertake studies to address and determine whether there are alternative ways of eliminating the need to discharge effluent through the seawall gates that would make some or all of the proposed outfall pipe unnecessary.	City	CA.10.1.iii	Not Applicable No alternate ways (other than the new outfall) to eliminate the use of seawall gates	No Action Required
D14	Disinfection Monitoring Plan	Develop monitoring and contingency plans to provide verification that the (UV) disinfection system is working as predicted.	City	CA.10.1.vii	Completed through the Disinfection Detailed Design	No Action Required
D15	Updated Assessment of Disinfection Options	Develop a Schedule B Class EA to reassess all possible disinfection methods in order to ensure that the EA approved method of disinfection remains the best solution given changes in both technology and regulations since the original recommendation was provided.	City	CA 14(1)	Completed Schedule B EA initiated in the fall of 2008 and completed in 2010. Toronto City Council requested a Peer Review of the EA (completed in 2011). City Council directed staff to implement UV disinfection for secondary effluent and chlorination/de-chlorination for primary effluent.	No Action Required

ID #	Monitoring Element	Commitment to be Monitored	Responsible Person / Agency	Reference	Status & Description of how Element has been Addressed	Additional Requirements Identified for Construction Phase of Project
Public Consultation and Review						
D16	Public Consultation Process	The undertaking of the abovementioned studies, design, and application process for OWRA approval for the outfall and the disinfection system shall include a comprehensive public consultation program, developed in consultation with the ICMC and the NLC	City / ICMC / NLC	CA.18	A Public Consultation and Communication Plan (PCCP) was developed in consultation with the ICMC steering committee and the NLC. The final plan was completed in early 2009.	No Action Required
D17	ICMC Review	ICMC shall be the steering committee for the abovementioned studies and for the approval under the OWRA for the outfall and the disinfection system.	City and ICMC	CA.18	Please refer to the 2020 Annual Report for ICMC participation for the 2020 calendar year.	No Action Required
Optimization of Plant Infrastructure						
D18	Minimize Dry Weather Overflows	Demonstrate implementation of measures taken to eliminate the occurrence of dry weather flow overflows (presently met by City but which needs to be sustained);	City	CA.19.i	Completed	No Action Required
D19	Minimize Combined Sewer Overflows	Demonstrate implementation of measures taken to minimize the potential for impacts on human health and aquatic life resulting from combined sewer overflows;	City	CA.19.1.ii	Completed Don River and Central Waterfront Class EA	No Action Required
D20	Optimize Secondary Treatment for Wet Weather Flows	Demonstrate implementation of measures taken to utilize secondary treatment capacity as much as possible for treating wet weather flows with the balance of flows being subject to primary treatment;	City	CA.19.1.iii	In progress Split Flow Treatment Conduit	
D21	Minimize Pollutant Loading under Wet Weather Loading	Demonstrate implementation of measures taken to minimize the pollutant loadings under wet weather conditions.	City	CA.19.1.iv	In progress CEPT, Split Flow Treatment Conduit	
D22	Update on Optimization Programs	Demonstrate consideration of plans, programs and measures related to wet weather flows, water use efficiency, sewer usage, and pesticide use reduction, amongst others.	City	CA.19.2	Completed Sewers Use By-law, Wet Weather Flow Master Plan, Water Efficiency Plan, Biosolids Master Plan	No Action Required

6.2. Monitoring During Construction

During construction of the enlarged outfall, disinfection facility and effluent pumping station, the City will carry out the monitoring activities as described to measure the impacts of construction activities on the monitoring elements listed.

During the construction phase of the project all parties to construction contracts (including those responsible for public safety as well as construction management and administration) are to comply with the procedures established to manage and mitigate construction effects on:

- The natural environmental features within the influence of the works
- Community activities such as waterfront enjoyment and good neighbour issues (noise, vibration).

The CMP environmental protection measures will be stipulated in all relevant construction specifications that will form the contractual basis for carrying out the work. The City and its Consultant(s) will monitor the Contractor's performance regarding these requirements.

Table 4: Monitoring During Construction

ID #	Monitoring Element	Purpose of Monitoring	Monitoring Method	Monitoring Frequency	Responsible Person/Agency	Reference	Status & Description of how Element has been Addressed
							Specific information to be added by the City during annual compliance reporting for all cells in this column.
C1	Noise, Dust, and Vibration Impacts	To address nuisance impacts (i.e. noise, dust and vibration impacts) that may occur over the short term during construction.	The public will be notified of construction scheduling. With staged construction, impacts are expected to be modest in intensity and duration and can be mitigated by including clauses in contract specifications regarding hours of operation, equipment use and dust control measures.	As applicable	Site inspectors will ensure specifications are implemented	ABTP Environmental Assessment	In Progress

ID #	Monitoring Element	Purpose of Monitoring	Monitoring Method	Monitoring Frequency	Responsible Person/Agency	Reference	Status & Description of how Element has been Addressed
C2	Advance Notice for Noisy Activities	To minimize disruption to nearby community when potentially noisy activities are scheduled to take place	Provide reasonable notice to all potentially affected neighbours of potentially noisy activities that are scheduled in advance, including a description of what is going to be done, where and when. Notification of proposed activities will be provided to the NLC and the NLC will advise when neighbours should be notified.	As applicable	City	MA.R.9.2.1.3	In Progress
C3	Noise Guidelines and Bylaws	To ensure compliance with noise-related guidelines and by-laws during construction activities	The Contractors will comply with the City of Toronto noise by-laws during all construction at ABTP.	As applicable	Site inspector will ensure specifications are implemented	MA.R.9.2.1.1 / MA.R.8.2.1.2	In Progress
C4	Complaint Monitoring	To develop protocols for tracking complaints during the construction of the Undertaking or compliance with the EA approval.	A summary or log-book of any other complaints, such as noise, odour and water quality, received during construction activities.	As applicable	City	CA.6.1.v	In Progress
C5	Noise Complaint Hotline	To establish a noise complaint protocol to report complaints.	Work with the NLC to establish a noise complaint protocol that will be implemented by the City, “hotline” number that people can call to report complaints.	As applicable	City	MA.R.9.2.1.4	In Progress
C6	Noise Complaint Reporting	To ensure that all noise complaints are investigated, resolved, and reported to appropriate parties	Ensure that all noise complaints are logged, investigated and resolved and reported to the Ministry and the ABTP NLC.	As applicable	City	MA.R.9.2.1.5	In Progress
C7	Site Aesthetics	To create a unified aesthetic vision for the ABTP site.	Future buildings and structures at the ABTP Site, and renovations of existing ones, will be constructed in an aesthetically pleasing manner which is harmonious with the neighbouring natural and recreational setting.	As applicable	City	MA.R9.6.1.4	In progress
C8	Soils	To determine if material onsite is contaminated.	Prior to excavation on the ABTP site, soils will be tested and properly disposed of.	As applicable	Consultant/ Contractor	ABTP Environmental Assessment	In progress

ID #	Monitoring Element	Purpose of Monitoring	Monitoring Method	Monitoring Frequency	Responsible Person/Agency	Reference	Status & Description of how Element has been Addressed
C9	Shoreline Protection	To ensure that the existing shoreline is stable under design storm conditions (i.e. 1:100-year design storm occurring at 1:100 year design water level).	No significant changes in the shoreline configuration are anticipated through the construction of new facilities as part of the Approved Undertakings.	As applicable	Consultant/ Contractor	ABTP Environmental Assessment	Not Applicable
C10	Navigation	To minimize disruption of waterways with regard to navigation during construction and operation of the new outfall	The outfall is not in the vicinity of the large shipping routes. Cautionary marker buoys will be placed along the outfall, if necessary, to deter pleasure boats from being in the vicinity during and after construction.	As applicable	Consultant/ Contractor	ABTP Environmental Assessment	In Progress
C11	Fisheries	To minimize displacement of the littoral (i.e. near shore) zone nursery and spawning areas for fish and benthic macro invertebrates by siltation, sedimentation and disturbance during construction of the outfall.	These impacts are short term and will be minimized by selection of appropriate construction techniques. Any construction on dry land will require silt protection and sediment traps to prevent erosion along the waterfront. The outfall construction will be carried out so that effects on fish and fish habitat are minimized and appropriately mitigated (i.e. methods of construction for the outfall, sediment quality in the area of construction, proposed location for disposal of dredged material, proposed methods to minimize turbidity from the construction, the capacity of the outfall, the design of the diffusers, treatment of the existing outfall, other relevant items)	As applicable	Consultant/ Contractor	ABTP Environmental Assessment	In progress

6.3. Monitoring During Operations

The CMP includes regular monitoring activities during operation in addition to procedures to be adopted in the event that adverse effects are identified between regular inspections.

Once construction is complete and operations commence, the City will assume responsibility for monitoring the effects of operations and maintenance in accordance with the applicable Certificates of Approval.

All parties responsible for safety, design and operation are to comply with the procedures established to manage and mitigate the effects of accidents or incidents on the natural or social environment during operation and maintenance activities.

Table 5: Monitoring During Operations

ID #	Monitoring Element	Purpose of Monitoring	Monitoring Method	Monitoring Frequency	Responsible person/agency	Reference	Agency Response and Date
							Specific information to be added by the City during annual compliance reporting for all cells in this column.
O1	Social Impacts	To improve the recreational opportunities around the ABTP site.	It is expected that the construction of the new outfall, recreational opportunities around the ABTP (e.g. yacht club, nearby beaches and parks, along the Martin Goodman trail, etc.) will be enhanced.	As applicable	City	ABTP Environmental Assessment	Not Yet Initiated
O2	Complaint Monitoring	To develop protocols for tracking complaints related to operation of the project	A summary of any other complaints, such as noise, odour and water quality, received as a result of operations activities with respect to compliance with the EA approval	Ongoing	City	CA.6.1.v	Not Yet Initiated
O3	Noise Guidelines and Bylaws	To ensure compliance with noise- related guidelines and by-laws during operations activities	The City will comply with City of Toronto noise by-laws during operation of the new facilities at ABTP.	Ongoing	City	MA.R.9.2.1.1 / MA.R.8.2.1.2	Not Yet Initiated
O4	Disinfection Monitoring	To verify the efficacy of the disinfection system.	Implementation of monitoring and contingency plans to provide verification that the disinfection system is working as predicted.	Ongoing	City	CA.10.1.vii	Not Yet Initiated

7. Modifications to the Design of the Undertaking

Changes may be required to the design of the Approved Undertaking if it is shown through:

- Studies completed as part of the OWRA application
- Preparation of the detailed design
- Consultation with the MOE

In the event that there is a change to the design of any of the projects in the Approved Undertaking:

- If the change is minor and does not adversely impact the expected net environmental effects of the Undertaking, changes will be documented in the Annual Compliance Report.
- If the change results in a material increase in expected net environmental effects of the Undertaking, a process for modifying the design of the Undertaking is presented in sections 13, 14, 15 and 16 of the Conditions of Approval.

8. Public Consultation and Communications Program

The City will undertake a comprehensive Public Consultation and Communications Program in the implementation of the Approved Undertaking.

The City will consult with the ICMC and NLC regarding the design of the Public Consultation and Communications Plan.

As part of the consultation process, the ICMC shall be the steering committee for these processes and shall be given the opportunity to review the terms of reference of all OWRA studies and participate in the selection of consultants hired to complete them.

9. Compliance Monitoring Program Schedule

The Compliance Monitoring Program (CMP) will be conducted during the implementation of all segments of the ABTP EA Approved Undertaking.

CMP activities programmed for each phase will be carried out throughout the implementation of the project and will continue during operations and maintenance until it can be verified that all commitments relating to operational effects have been met.

As described in 21(1) of the Conditions of Approval, if the construction of a project in the Approved Undertaking is not commenced within 5 years from the date of this approval, the City shall review and document whether any changes have taken place since the approval to ensure that the project and any mitigation measures related to it are still valid.

10. Submission and Circulation of the Compliance Monitoring Program

This document is submitted for review and approval to the Director of the Environmental Assessments and Approvals Branch (EAAB) of the Ministry of the Environment (MOE).

Following approval, the CMP will be provided to the Director for filing with the Public Record maintained for this Undertaking and a copy shall be provided to the Director for MOE staff use. Additional copies will be provided by the City for public access to:

1) The Regional Director
2) The District Manager
3) The Clerk's offices of the City of Toronto
4) The ICMC and the NLC

10.1 Annual Compliance Report

The City will prepare an Annual Compliance Report (ACR) that outlines the steps the City has taken the previous year to implement the projects resulting from the EA Approved Undertaking. The ACR will be submitted to the Director of the EAAB for placement on the Public Record.

As described in 6(1) of the Conditions of Approval, the ACR will provide:

1) A description of compliance with the provisions of the Environmental Assessment (EA), as amended by the Mediation Agreement (MA), specifically relating to the three projects within the Undertaking;

2) A summary of all initiatives undertaken during the year to implement the EA approval;

3) A summary of initiatives intended to be undertaken to implement the EA approval in the next calendar year;

4) A description of compliance with the Conditions of Approval;

5) The results of the proponent's Environmental Assessment Compliance Monitoring Program;

6) A summary of the evaluation of compliance with the EA approval provided by the ICMC and a response from the City;

7) A summary of any other complaints, such as noise, odour and water quality, received regarding the construction or operation of the projects of the undertaking or compliance with the EA approval, and a response from the City;

8) An indication of progress made towards achieving compliance with the provisions of the MOE Procedures set forth in Condition 19; and

9) An update of the study and implementation schedules for the plans, programs and measures set forth in Condition 19.

The first ACR will be submitted for the Public Record on or before March 31, 2009, with subsequent submissions on or before March 31 of each year thereafter until the projects within the Undertaking have been implemented and all the Conditions of Approval have been satisfied. When all conditions have been satisfied, the City will indicate its final submission, as stated in 6(2) and 6(3) of the Conditions of Approval.

APPENDIX B

Ashbridges Bay Treatment Plant Environmental Assessment: Implementation of the Approved Undertakings

Mediation Agreement Status Update 2020

March 2021

TORONTO Water

Mediation Agreement Status Update
For Year 2020

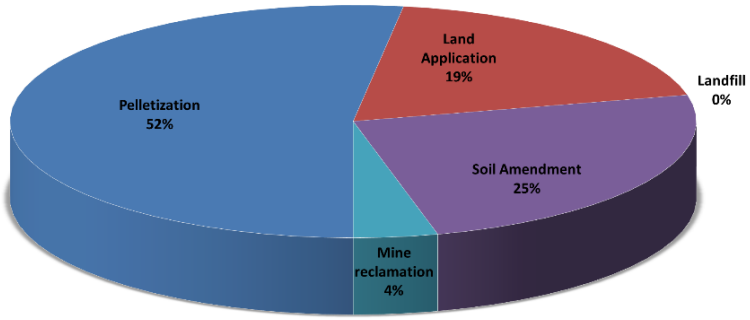
RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
Resolution #1	Guiding Principles	This resolution establishes guiding principles that are to apply to all initiatives that implement any of the matters dealt with in the EA Approval, including the Mediation Agreement (MA).	None specifically noted in the Mediation Agreement under this Resolution. These principles are applied to the other resolutions in a continuous, on-going fashion, as required.	All commitments completed to date have been implemented in a manner consistent with the goals and objectives laid out in the Environmental Assessment. The City has accomplished this through many different avenues and included consideration of the guiding principle contained in Resolution #1 as Part of its decision-making processes.
Resolution #2	Source Control Issues	This resolution addresses three topics: Sewer Use Bylaw; a Water Efficiency Plan; and a Wet Weather Flow Management Master Plan. These topics are related as they all play an important role in controlling the quality and quantity of wastewater flow that arrives at the ABTP. All these initiatives were already underway at the time of the MA. The commitments in the MA provide specific input on how the development of these initiatives should be carried out.	1) The establishment, implementation and enforcement of a new Sewer Use Bylaw. 2) The development, adoption and implementation of a Water Efficiency Plan	**SEWERS BY-LAW** All MA commitments with respect to the Sewers By-law (Resolution #2.1) have been completed. The new Sewers By-law (Chapter 681 of the City of Toronto Municipal Code) was adopted by City Council in 2000 and is being actively enforced by the City. The Sewers by-law was developed with consideration of the objectives, and consultation process provided in resolution 2 section 1. The City has phased out the use of pesticides on City owned land. The new by-law is broadly considered to be the best and most protective by-law of its kind in Canada. **WATER EFFICIENCY PLAN** All work on MA commitments with respect to the Water Efficiency Plan (WEP) (Resolution #2.2) has been completed. The WEP was adopted by Council in 2003 and continues to be implemented by the City. The WEP was developed to meet the objectives of resolution 2 section 2 and included the required public consultation as specified in the MA. The WEP was designed to create "in-system capacity" by reducing water consumption across the City. The City last updated the WEP in 2011 based on the significant

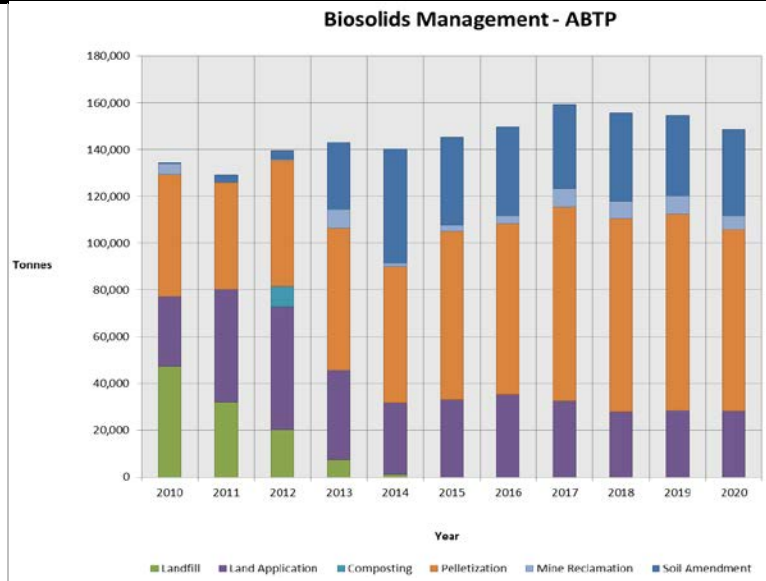
RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
				reductions achieved and to reflect changes in market conditions and increased consumer awareness about water efficiency. Current WEP initiatives include continued public education and communication to promote water conservation and City programs (e.g. Capacity Buy Back Program and Industrial Water Rate), which have achieved significant reductions in water use in the commercial and industrial sectors. While the WEP did not forecast reductions to 2020, per-capita residential consumption (based on Average Winter Day Demand, which is October to April) has remained relatively stable from 179.97 LCD in 2018 to 182.08 LCD in 2019.
			3) The establishment and implementation of the Wet Weather Flow Management Master Plan.	**WET WEATHER FLOW MANAGEMENT MASTER PLAN (WWFMMP)** The WWFMMP, now referred to as the Wet Weather Flow Master Plan (WWFMP) was completed and adopted by City Council in 2003. The development of the WWFMP followed the specific direction provided by the MA. The City has met all commitments possible up to this time for Resolution 2.3. The City has made significant progress in implementing the WWFMP. Since 2003, the City has invested over $1 billion in city-wide WWF management projects to improve water quality in Toronto's watercourses and Lake Ontario nearshore, build resilience to reduce basement flooding, and restore and protect watercourses and sewer infrastructure from future erosion, which supports ecosystem health. Toronto Water's 10-Year Capital Plan (2020-2029) identifies approximately $4.2 billion for the implementation of WWFMP projects over the next ten years. WWFMP implementation includes the following initiatives: • **Public Outreach and Education** - multi-media campaigns and a dedicated stormwater webpage on the City's website to provide information on actions residents can take to reduce the impacts of stormwater

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
				• **Source control measures:** Wet Weather Flow Management Guidelines (adopted 2006) for new and redevelopment; City-wide Mandatory Downspout Disconnection Program (MDDP) has been implemented city-wide as of December 2016; Green Roof Bylaw adopted in 2009; ongoing implementation of the City's Green Roofs Strategy and Eco-Roof Incentive Program • **Municipal operations**: City's Outfall Monitoring Program, enhanced catch basin cleaning, street sweeping, beach grooming, and shoreline cleanup • **Conveyance control:** Release of Green Streets Technical Guidelines (2018) to facilitate the implementation of green infrastructure on City streets to better manage stormwater and the construction of green infrastructure demonstration projects within the road right-of-way at various locations in the City • **Basement Flooding Protection Program:** Ongoing completion of studies that investigate existing drainage system capacities and recommend infrastructure upgrades to increase capacities; design and construction of recommended sewer infrastructure improvements to build resilience and reduce future basement flooding during extreme storms; and the provision of subsidies to improve private property drainage systems. Basement Flooding Protection Program studies for the remaining study areas across the City were accelerated and began in 2019, and will continue through 2023. • **Stream Restoration**: Completion of Stream Geomorphic Master Planning Studies and implementation of recommended projects for Highland Creek, Taylor-Massey Creek, Humber Creek and smaller watercourses • **Environmental monitoring:** 14 monitoring stations to monitor stream flow and collect water quality data to characterize wet weather flow conditions for the six major watercourses • **End-of-pipe facilities:** The WWFMP included a wide range of recommended projects for end-of-pipe WWF management facilities from underground tanks to stormwater ponds. The City has made significant

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
				progress in completing subsequent Environmental Assessment (EA) studies and implementation of prioritized projects that improve water quality in Toronto's Inner Harbour, Lake Ontario shoreline and Toronto's beaches. Other projects are identified for implementation within Toronto Water's 10-Year Wet Weather Flow Management Program. Key projects pertaining to the ABTP sewershed include: • **Coatsworth Cut CSO and Storm Outfalls Control -** Class EA completed in 2008; conveyance controls and CSO storage tank completed in 2012 *(see also Resolution #8)* • **Don River and Central Waterfront Wet Weather Flow System** - most significant CSO control project in the City that includes a series of integrated underground tunnels and storage shafts that will capture, store, and transport stormwater and combined sewer overflows from all CSO outfalls along the Lower Don River, Taylor Massey Creek and Inner Harbour to a new wet weather flow treatment facility. Class EA completed in 2012; preliminary design was completed in 2015; construction of Coxwell Bypass Tunnel (1st phase) of the DR&CW WWF System began in 2018; design of the Inner Harbour West (IHW) tunnel began in 2020; full project implementation is forecasted for 2038. In July 2019, Toronto City Council adopted a staff report titled "Don River and Central Waterfront Project Accelerated Plan", which set out a plan to accelerate the completion of the DR&CW WWF System by 8 years. The implementation of the DRCW Accelerated Plan is contingent on federal and/or provincial funding and City staff are pursuing infrastructure funding opportunities from other levels of government as they become available • **Earl Bales Stormwater Management Pond** - **Class** EA completed in 2006; stormwater pond constructed in 2011; Phase 2 of the SWM Pond was completed in 2017 to capture and treat stormwater from an additional 15 hectares • **North Toronto Treatment Plant CSO Tank** - construction of retrofitted CSO tank to provide high-rate

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
				treatment was completed in 2016. A study is planned to begin in 2021 to identify further improvements for future design and construction.
Resolution #3	Plant Capacity	This resolution sets out the parameters that define the capacity of the ABTP and that no expansion of that capacity is being sought within this EA Approval.	The City and other participants agree that any capacity increase in any of the parameters noted which define the existing approved capacity of ABTP must meet approval under EAA and OWRA or other legislation.	All commitments with respect to Resolution #3 have been met. No expansion of the ABTP is planned at this time.
Resolution #4	Plant Optimization & Economic Issues	This resolution specifies that the City will optimize plant operations and energy use at the ABTP and will make certain economic information relating to the water and wastewater systems, including the ABTP, available in accordance with the details of the resolution.	The City and other participants agree that issues relating to Plant Optimization, Economic Issues and Energy Optimization will be resolved by the amendments and conditions to the EA outlined in Sections 1, 2 and 3 of this resolution.	All commitments with respect to Resolution #4 have been met. The City continues to optimize its operations in an ongoing manner. The specific optimization targets in the MA have been achieved. New initiatives have been identified outside of this EA approval. These include hydro, natural gas and chemical usage reductions.
Resolution #5	Biosolids Utilization Issues	This resolution specifies the details of the City's commitment to end incineration at the ABTP; establishes a requirement for a long-term market study for beneficial uses; requires the City to seek short term contingency options; and sets the process in place for the completion of a Master Plan for the management of all sludge and solids in the City's water and wastewater systems.	The City and other participants agree that issues relating to biosolids utilization will be resolved by the initiatives outlined in Sections 1, 2, 3, 4 and 5 of this resolution, and that their implementation shall be guided by the Guiding Principles in Resolution #1.	**BIOSOLIDS BENEFICIAL USE PROGRAM** The City has met all commitments for Resolution #5. The City's Biosolids Beneficial Program for the ABTP is fully implemented. The City maintained 100% beneficial use in 2020 and remains at 100% for 2021 year-to-date. No biosolids are being directed to landfill. Biosolids are either being land applied (as per MA), pelletized, processed into soil conditioning products or used in mine reclamation.

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
				Biosolids Management - Ashbridges Bay Treatment Plant 2020 **100% Beneficial Use**  The City's program is anchored by the on-site pelletizer facility in operation since 2007. Performance and reliability of the pelletizer has improved each year and is at present processing in excess of 50% of the biosolids generated at ABTP. Operations, maintenance and pellet marketing duties have been outsourced and the initial ten-year term of this agreement has been renewed in 2020. A recent condition assessment of the pelletizer has identified measures that should be taken to ensure reliable performance beyond the initial ten-year period. The City's objective is to secure twenty years of useful life and planning for facility replacement during the mid-2020's is currently underway. Over the past ten years, the performance of the ABTP Biosolids Beneficial Program has been as follows:

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
				 **BIOSOLIDS MASTER PLAN** The Biosolids Master Plan was completed and closed in May 2011 through approval from City Council. Council accepted the recommendation related to the ABTP, Humber Treatment Plant and the North Toronto Treatment Plant. Council rejected the recommendations related the Highland Creek Treatment plant and therefore a Schedule B Class EA for the Highland Creek facility was initiated and subsequently completed in 2016. Upon receipt of approval from MECP in 2017, the City proceeded with retaining a consultant for the implementation of Fluidized Bed Incinerators (FBI) replacement. A Consultant was retained in 2018 and the design of FBI replacement is currently underway.

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
Resolution #6	Tertiary Treatment	This resolution specifies that the City seeks EA approval for tertiary treatment of the plant effluent although it does not intend to seek other necessary approvals or implement tertiary treatment unless it is necessary to meet MOE requirements for effluent quality.	With amendment to the EA for seeking approval for tertiary treatment, the City agrees to conduct a cost-benefit analysis of different treatment options in accordance with the Guiding Principles in Resolution #1 and with public consultation, prior to implementing any specific tertiary treatment.	The commitment in Resolution #6 is no longer applicable, as the MECP review of the EA indicated that approval of tertiary treatment would not be provided. The City does not have any need, nor plans, to implement tertiary treatment at the ABTP at this time. Separate from the conditions of this EA approval, the City has completed a "Process Roadmap" study with the objective of identifying process improvements and technologies that may be considered over the next 20-40 years. No further work on this resolution is required.
Resolution #7	UV Disinfection	This resolution sets out the City's commitment to implement an UV disinfection system for the ABTP effluent and discontinue the use of chlorine disinfection.	The commitment includes implementation of UV for effluent disinfection at the ABTP, undertaking a design optimization study, specific direction on the role of the ICMC in studies required for UV approval, and a decision-making process for selection of disinfection methods for use on the bypass effluent.	The City has met all commitments possible up to this time for Resolution #7. Further to the completion of a 4-year UV disinfection study by Trojan Technologies Inc. in accordance with the requirements of the MA, it was determined that a disinfection standard of 200 E. Coli/100 mL could be met for secondary effluent. This same study indicates that UV disinfection of the bypass is not possible. The City has completed the preliminary design and detailed design of the UV disinfection Facility for Secondary effluent and chlorination /de-chlorination for the bypass effluent, in accordance with the MECP approval and City Council direction (2010). The City has worked with the ICMC on the UV implementation as required by the MA. The UV disinfection facility construction contract was tendered late 2017, the construction of the UV disinfection facility started in April 2018 and continued through 2020.

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
Resolution #8	Near Shore Water Quality and MTP Outfall Pipe	This resolution sets out the City's agreement that the near shore water quality in the vicinity of the ABTP and in Coatsworth Cut is unacceptable and is to be improved as soon as possible, recognizing that 80% of the problem is caused by CSO and storm sewer outlets; and clarifies that EA approval for the outfall pipe is generic and does not preclude the need for the OWRA approval process.	For purposes of the ABTP EA, the City and other participants agree that issues relating to near shore water quality (WQ) will be resolved by amendments to the EA outlined under this resolution that regard actions on monitoring and improvement of the near shore area where the outfall will address a portion of the problem and the WWFMMP will address CSO and other source control issues.	The City has met all commitments possible up to this time for Resolution #8. The City has completed the detailed design and tendering of the outfall pipe in accordance with the MECP approval. The City worked with the ICMC on the outfall implementation as required by the MA. The construction of the new outfall pipe started in January 2019. The City is actively working to co-ordinate infrastructure planning in the area to facilitate construction of the outfall pipe. Improvements to water quality in the Ashbridges Bay Cut have been achieved through the implementation of the Coatsworth Cut CSO and Stormwater Outfalls Control Class EA, which was completed in 2008. The Coatsworth Cut Class EA study recommended the construction of a Stormwater treatment facility south of the ABTP and storage within the sewer system to reduce CSO and stormwater discharges. Improvements within the sewer system, including conveyance controls and a CSO storage tank to achieve F-5-5 criteria, i.e., 90% volumetric control were completed in 2012. Information on other nearshore water quality improvement projects also provided in Resolution #3. Future projects in this area include a wet weather flow treatment facility from the DR&CW Class EA (completed in 2012) and a new Landform south of the ABTP (EA completed in 2014). TRCA has completed the detailed design of the Landform that will provide the land base for future stormwater treatment facilities and reduce sediment deposition and dredging requirements for the Ashbridges Bay. Landform construction started in January 2020 and is progressing well. The City continues to monitor beach water quality and constantly achieves Blue Flag status. The City also monitors and reports on CSO discharges from all outfalls in the City through Federal Wastewater Systems Effluent Regulations.

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
Resolution #9	Good Neighbour Issues	This resolution establishes details for addressing issues such as noise, odour, air emissions, truck traffic, visual impacts and the storage of chemicals on site.	The City and other participants agree the various issues outlined in this resolution will be resolved by several commitments also outlined being incorporated as amendments to the EA and guided by the Guiding Principles in Resolution #1.	The City has met all commitments possible at this time with regards to Resolution #9. The City established and continues to hold NLC meetings as required to provide updates to the community on the two approved undertakings that are being implemented at the ABTP (i.e. UV disinfection and the outfall). All of the studies and initiatives identified in Resolution #9 have been completed. The commitments that need to be completed include the completion of the odour control project which is currently underway, and the landscaping plan, which has been pushed back 10 years. The studies being conducted by Toronto Public Health (TPH) have been completed. This set of studies was conducted by TPH, as agreed in March 2002, to address Resolution #9 item 4.2.2. The three studies consisted of a 1) a plant wide air emission study that consolidated existing information and conducted dispersion modeling for various past and future plant configurations. 2) a health status study of the neighbourhoods adjacent to the ABTP based on existing health records, and 3) a risk assessment of the use of biosolids pellets within Toronto. Upon completion of all odour control projects, modelling will be conducted to confirm the effectiveness of the implemented measures. A Landscape Plan was developed using a highly consultative process and has resulted in an award-winning landscape plan. Portions of the plan have already been constructed under the Leslie street greening initiative. The Design of Phase 1 commenced but was suspended due to interference with other critical capital projects. The budget for this work has been deferred for 10 years.

RESOLUTIONS		MAIN POINT OF RESOLUTION	COMMITMENTS	CURRENT STATUS
Resolution #10	Implementation Review and Compliance Monitoring	This resolution establishes the ABTP EA Approval Implementation and Compliance Monitoring Committee (ICMC) with a mandate to provide public input and review of implementation issues.	The City and other participants agree that issues under this resolution will be resolved by various commitments being incorporated as amendments to the EA, including forming the ICMC and the cooperative work by the ICMC with City staff for reports to WES Commissioner on the implementation of the EA Approval.	The City has met all the commitments in Resolution #10 that it is able to do at this time. It is City's understanding that item 3.5 of Resolution #10 of the Mediation Agreement is fully addressed by the reporting on the UV Disinfection and Outfall projects, and other projects and initiatives described in Sections 4, 5 and 6 of the ACR. After completion of the detailed design, the City is focused on advancing the construction of the approved undertakings. The Implementation and Compliance Monitoring Committee (ICMC) has been maintained throughout the planning of the approved undertaking and meets as necessary for updates on City's progress related to the two EA approved undertakings. Per the MA, the ICMC produced annual reports for review of the City's compliance with the MA (last report prepared in 2010). No further ICMC reports have been prepared after the expiry of the planning horizon in 2011. The City continues to work cooperatively with the ICMC on fulfilling their mandate.
Resolution #11	The Role of the Private Sector	This resolution addresses that the City will not consider the role that the private sector could play in the ownership or management of either the ABTP or the wastewater system as part of this EA.	There are no actionable commitments within this resolution.	No action required.

Note: in stating that "all commitments have been met" the City takes the position that for recurring commitments such as annual reviews etc., where a process has been put in place to provide for such reviews, the commitment to provide such recurring items has been fulfilled. Similarly for commitments that persist in time such as "implement the WWFMMP" or "enforce the Sewers Bylaw", it is assumed that once a program or process is in place and underway to achieve that end, then the commitment has been met.