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SENT BY E-MAIL AND COURIER

March 31, 2010

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Project Officer of the Environmental Assessment
& Approvals Branch
Ministry of the Environment
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Dear Mr. Battarino:

Ashbridges Bay Treatment Plant Environmental Assessment Approved Undertaking 2009 Annual Compliance Report

Please find enclosed the City's 2009 Annual Compliance Report as per Condition 6 of the Conditions of Approval for the Ashbridges Bay Treatment Plant Environmental Assessment dated February 22, 2008.

Please do not hesitate to call if you have any questions or concerns.

Sincerely,

Frank Quarisa, MBA, P.Eng.
Director
Wastewater Treatment
Toronto Water

c.c.

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

2009 Annual Compliance Report

March 2010



Table Of Contents

List of Appendices	0
Appendix A: Compliance Monitoring Program	0
Appendix B: ICMC Annual Compliance Report with City's Response	Error!
Bookmark not defined.	
1. Introduction	1
2. Initiatives Undertaken in 2009	1
2.1. Effluent Disinfection Study	1
2.2. Public Consultation	2
2.2.1. Public Consultation and Communication Facilitator	2
2.2.2. Public Consultation Plan	2
2.2.3. Involvement of the Implementation and Compliance Monitoring Committee ...	2
2.3. Compliance with the Conditions of Approval	3
2.4. Results of Compliance Monitoring Program	3
2.5. ICMC 2009 Compliance Report.....	3
3. Summary of Complaints Received	3
4. Initiatives to be Undertaken in 2010	3
5. Progress on Plant Optimization Initiatives	4
5.1. Combined Sewer Overflows.....	4
5.2. Wet Weather Flows	5
5.2.1. Split Flow Treatment.....	5
5.2.2. Chemically Enhanced Primary Treatment.....	5
5.2.3. High Rate Treatment.....	5
5.3. Other Plans and Programs.....	6
5.3.1. Biosolids Master Plan.....	6
5.3.2. Sewer Use By-law	6
5.3.3. Water Efficiency Plan	6
6. Update of Implementation Schedules for Plant Optimization	7

List of Appendices

Appendix A: Compliance Monitoring Program

1. Introduction

As described in the City's Compliance Monitoring Program regarding the implementation of the Approved Undertaking under the ABTP EA approval, the City must prepare and submit an Annual Compliance Report (ACR) to the Director of the Ministry of Environment's Environmental Approvals and Assessment Branch (EAAB) 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 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.

This is the second such ACR to be submitted for the Public Record. The ACR covers the period of January 1, 2009 to December 31, 2009. By March 31 each year, a new report will be issued for the Public Record until the projects within the Approved Undertaking have been implemented and all Conditions of Approval have been satisfied.

2. Initiatives Undertaken in 2009

2.1. Effluent Disinfection Study

The Approved Undertaking includes a new outfall pipe, an effluent pumping station and a UV Disinfection system. As the original EA document is over 12 years old and both technology and regulations have evolved during this time, the City has opted to review the disinfection methods currently available to determine whether UV disinfection is still the best alternative to treat effluent and bypass from the ABTP.

**Ashbridges Bay Treatment Plant Environmental Assessment: Implementation of the
Approved Undertaking
2009 Annual Compliance Report**

The City released a Request for Proposal (RFP) in October 2008 for engineering consulting services to undertake a study and assess alternatives for the disinfection of effluent and bypass from the ABTP. AECOM was the successful proponent and has been working on the study.

This study is being undertaken as a Schedule B project under the *Municipal Class Environmental Assessment* process, as described in 13 and 14 of the Conditions of Approval and will be completed by early 2010.

2.2. Public Consultation

2.2.1. Public Consultation and Communication Facilitator

In order to support the public consultation requirements under the Conditions of Approval, the City released an RFP in August 2008 to hire a firm with expertise in public consultation, communications, and Environmental Assessment planning. The facilitation is intended to perform the following functions:

1. Facilitate and provide logistical and administrative support for the Implementation, Compliance and Monitoring Committee (ICMC) meetings as it relates to the implementation of the Approved EA Undertaking.
2. Assist in developing and implementing a comprehensive Public Consultation and Communications Plan for the implementation of the Approved EA Undertaking.
3. Oversee planning, design, implementation, facilitation and logistics for public meetings that result from the implementation of the Approved EA Undertaking as listed in the Public Consultation and Communications Plan.

LURA was selected as the successful proponent through this RFP process.

2.2.2. Public Consultation Plan

In late 2008, LURA began drafting a Public Consultation and Communications Plan (PCCP) for the implementation of the Approved EA Undertaking. The ICMC participated through a workshop format to help draft the PCCP. The first draft of the PCCP was then taken to the Neighbourhood Liaison Committee (NLC) for comment and input. The PCCP was finalized in early 2009 and will be continually updated as more projects in the Undertaking are started.

2.2.3. Involvement of the Implementation and Compliance Monitoring Committee

The role of the Implementation, Compliance and Monitoring Committee (ICMC) regarding the implementation of the EA is that of a steering committee for the studies, approval and design of the Approved Undertaking. The role of the ICMC steering committee as defined in the Conditions of Approval includes:

- Opportunity to review terms of reference for OWRA studies;
- Participation in the selection of the consultants hired to complete the studies
- Ability to provide input into the design of the Public Consultation and Communications Plan.

**Ashbridges Bay Treatment Plant Environmental Assessment: Implementation of the
Approved Undertaking
2009 Annual Compliance Report**

In 2009, the ICMC steering committee has:

- Provided input in the design of the Public Consultation and Communications Plan
- Provided input regarding disinfection EA study.

2.3. 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.

Condition	Compliance with Condition
5	A Compliance Monitoring Program has been prepared and is attached as an Appendix A to this Annual Compliance Report.
6	An Annual Compliance Report for 2009 has been prepared and submitted by March 31, 201009
8&9	The Public Consultation and Communications Plan (PCCP) for the implementation of the Approved EA Undertaking was finalized in early 2009 with input form the ICMC and the NLC.
13(1) & 16(1)	The City released a Request for Proposal (RFP) in October 2008 to retain engineering consulting services for a study to assess alternatives for the disinfection of effluent and bypass from the ABTP. This study underway by AECOM is being completed as a Schedule B Class EA.
19	As discussed in section 5 below.

2.4. Results of Compliance Monitoring Program

The status of components of the Compliance Monitoring Program (CMP) that the City has undertaken during the 2009 calendar year are explained in detail in Appendix A. Work has been initiated on monitoring elements D15, D16 and D17 of the CMP.

2.5 ICMC 2009 Compliance Report

At the of time of issuance of this document the ICMC have not yet completed a 2009 Annual Compliance Report that provides their comments on both the EA Approval and the Mediation Agreement Compliance Status. The City will provide a response to the ICMC's comments as per the Conditions of Approval once the final report is received and reviewed.

3. Summary of Complaints Received

No complaints were received during the 2009 calendar year regarding the construction or operation of the projects within of the Approved Undertaking.

4. Initiatives to be Undertaken in 2010

A summary of initiatives scheduled to be undertaken in the upcoming 2010 calendar year are as follows:

1. Completion of the Disinfection EA

**Ashbridges Bay Treatment Plant Environmental Assessment: Implementation of the
Approved Undertaking
2009 Annual Compliance Report**

2. Preparation of a terms of reference for the design of the disinfection system, pumping station and outfall pipe

5. Progress on 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 *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 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 overflow;
- 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.

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

The occurrence of dry weather overflows has not been, and continues not to be an issue at the Ashbridges Bay Treatment Plant (ABTP).

5.1. Combined Sewer Overflows

In 2003, Toronto City Council approved the City-wide Wet Weather Flow Master Plan (WWFMP) to mitigate the impacts of storm water runoff and combined sewer overflow discharges. The 25 year WWFMP identifies a series of projects for implementation, with the ultimate goal of improving water quality conditions and ecosystem health in all six watersheds across the City, and along the waterfront; and thereby advancing the delisting of Toronto as an Area of Concern in the Great Lakes Basin. The Plan, developed on a watershed basis, adopted a hierarchical approach to wet weather flow management wherein source control measures were considered first, followed by conveyance controls and then end-of-pipe controls.

One of the projects resulting from the WWFMP is the Don and Waterfront Trunk Sewers and CSO Control Strategy EA Project. This EA is currently underway with a planned completion date in early 2010. The sewer shed for this EA is within the capture zone of the ABTP treatment plant. It is intended to provide a comprehensive systems integration approach to incorporate the wet weather flow control projects for discharges to the Don River and the Inner Harbour; with infrastructure upgrades necessary to provide security and efficiency of operation and upgrades which may be necessary to meet the longer term servicing needs within the Don Trunk and Waterfront Interceptor Sewers.

Once completed, the implementation of the strategy is expected to lead to the delisting of the Inner Harbour as a polluted area of concern and will result in a plan to build new infrastructure, such as sewers, tanks and tunnels, to store and treat storm water and combined sewer overflows

before they flow into the Don River and Central Waterfront. It will also identify any changes or upgrades needed to the sewer system.

5.2. Wet Weather Flows

The City has developed a strategy to improve treatment during wet weather events when secondary bypasses may occur at the ABTP plant. The overall strategy for the treatment of wet weather flows which are currently conveyed to the ABTP includes:

- Split flow treatment;
- Chemically enhanced primary treatment (CEPT); and,
- If required, High rate treatment (HRT).

5.2.1. Split Flow Treatment

A Split Treatment Conduit (STC) will be constructed under the D Building 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 flow 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.

ABTP D Building preliminary treatment upgrade, currently in design phase under the ABTP Odour Control Facilities project, includes the installation of fine screens, a new automated grit removal system as well as a new split treatment conduit around the primary clarifiers 10, 11 and 12. A tender for detailed design will be released in the summer of 2009 with construction expected in early 2010.

5.2.2. Chemically Enhanced Primary Treatment

Chemically Enhanced Primary Treatment (CEPT) is being pursued as a way 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 primary clarifier throughput while also improving TSS and BOD removals. This proposed improvement came out of the Value Engineering study for P Building. Upgrades to P building were tendered and awarded for design in late 2008. As part of this upgrade, the infrastructure to enable a full-scale pilot CEPT trial in P Building is being designed. It is planned that the trial will start in the spring/summer of 2011 and continue for 1 to 2 years.

If the CEPT trials are successful, the plan will be to construct full scale CEPT facilities at P Building to improve the quality of secondary bypass flows during wet weather events. The analysis shows that if CEPT is successful, High rate treatment will not be required.

5.2.3. High Rate Treatment

If CEPT is shown to be successful at improving the quality of secondary bypass flows, High Rate Treatment (HRT) will likely not be required. If however CEPT is not effective, it is proposed to use

HRT to provide equivalent to primary treatment for wet weather flows exceeding the capacity of the ABTP. The HRT units would be used only during high flow events. Because of their small footprint and modular nature, there is adequate space for HRT units to be added if required in the future.

5.3. Other Plans and Programs

5.3.1. Biosolids Master Plan

The Biosolids Master Plan (BMP) was updated and approved by council in late 2009 for the Ashbridges Bay, Humber and North Toronto Treatment Plants. The BMP has evaluated all viable biosolids management options and provides direction on the future management of biosolids generated at each of the City's wastewater treatment plants. The BMP components related to the Highland Creek Treatment Plant have not yet been approved by council and will be finalized in 2010.

5.3.2. Sewer Use By-law

The Sewer Use By-Law sets strict limits on heavy metals and toxic organic compounds in wastewater discharged to the sanitary and storm water sewers and natural watercourses, helps facilities identify ways of reducing and/or eliminating pollutants at source and works to improve the quality of biosolids.

The 2009 Sewer Use By-Law activities can be found within the following 2009 Annual Report: <http://www.toronto.ca/legdocs/mmis/2010/pw/bgrd/backgroundfile-27381.pdf>

5.3.3. Water Efficiency Plan

The Water Efficiency Plan's overall objective is to achieve net water consumption reductions to derive "in-system" capacity to support the projected population and employment growth to the year 2011.

In 2009, over 58,000 incentives were issued. As of December 31, 2008, the water efficiency incentive programs have achieved water savings of approximately 72.6 million litres per day (72.6ML/d).

Beginning January 1, 2008, the City of Toronto implemented an Industrial Process Block Water Rate as part of a new water rate structure. This new structure is intended to both support the growth of existing businesses using water for processing purposes and encourage water conservation among the City's industrial water users, by requesting submissions of a water conservation plan and annual progress report. In 2009, 13 new Industrial customers submitted a Water Conservation Plan to participate in this program, in addition to the 78 customers that had submitted Water Conservation Plans by the end of 2008. Annual progress reports, to report on the status of each water efficiency project are required, to continue their participation in this initiative. Customers must also be in compliance with City's Sewer Use By-law and meet water efficiency project implementation deadlines in order to maintain the lower industrial water rate.

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 1 below.

Table 1: Implementation Schedule

Plan or Project	Status
Water Efficiency Plan	<ul style="list-style-type: none"> • Plan in place until 2011
Don Trunk EA	<ul style="list-style-type: none"> • Completion 2010
Sewer Use Bylaw	<ul style="list-style-type: none"> • No additional amendments in 2009
Biosolids Master Plan	<ul style="list-style-type: none"> • Approved by City Council in late 2009 for the Ashbridges Bay Treatment Plant and Humber Treatment Plant
Split Flow Treatment	<ul style="list-style-type: none"> • To be tendered as part of D Building project spring 2010.
ABTP Chemically Enhanced Primary Treatment Project	<ul style="list-style-type: none"> • RFP issued for design of P building upgrades and CEPT pilot scale technologies in late 2008. • CEPT trial to begin spring/summer/fall 2011
High Rate Treatment	<ul style="list-style-type: none"> • Need to be determined following CEPT trial. Earliest implementation 2020 – 2025.

APPENDIX “A”

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

Compliance Monitoring Program

March 2010

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

Table of Contents

1.0 Background.....	3
2.0 Purpose of the Program.....	3
3.0 Project Implementation	4
4.0 Monitoring the Conditions of Approval.....	5
5.0 Compliance Management.....	17
5.1 City's Role and Responsibilities	17
6.0 Actions Required to Address Commitments	18
6.1 Monitoring During Design.....	18
6.2 Monitoring During Construction.....	24
6.3 Monitoring During Operations	27
7.0 Modifications to the Design of the Undertaking	29
7.1 Study to Review Effluent Disinfection Methods.....	29
8.0 Public Consultation and Communications Program	29
9.0 Compliance Monitoring Program Schedule	29
10.0 Submission and Circulation of the Compliance Monitoring Program.....	30
10.1 Annual Compliance Report	30
10.2 Mediation Agreement Status Update	31

List of Tables

Table 1: Ashbridges Bay Treatment Plant Projects.....	4
Table 2: How Conditions of Approval we be Addressed	5
Table 3 Monitoring During Design.....	20
Table 4: Monitoring During Construction.....	24
Table 5: Monitoring During Operations	27

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

1.0 Background

The Municipal Class Environmental Assessment for the Main Treatment Plant (now 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 a number of different public comments regarding the Individual Environmental Assessment, the City entered into a self-directed mediation process in early 1999, 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 on February 13, 2008, subject to a number of conditions that includes:

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

2.0 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.

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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 MOE.

3.0 Project Implementation

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

1. An UV disinfection system
2. A new Outfall Pipe
3. An effluent pumping station

As the original EA document is over 12 years old, the City wanted to review the disinfection methods currently available to determine whether UV disinfection is still the best alternative to treat effluent and secondary bypass from the ABTP. Since approval of the EA in February 2008, the City has retained professional engineering consulting services to undertake a review of disinfection options. This study is being carried out as a Schedule B project under the *Municipal Class Environmental Assessment* process.

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

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 Implementation Date	Approvals Necessary
Disinfection Study (Schedule B EA)	To determine whether UV disinfection is still the best alternative to treat effluent and bypass from the ABTP	Completion spring 2010	<ul style="list-style-type: none"> • Ontario EA Act
Design and construct new disinfection system	To improve the effectiveness of the ABTP and reducing environmental impacts by producing improved effluent quality with respect to disinfection.	To phase in with new outfall. 2010-2015	<ul style="list-style-type: none"> • Ontario EA Act • Ontario Water Resources Act
Design and Construct new outfall	To handle peak flows at the plant and eliminate the need for the seawall gates	2010 to 2015	<ul style="list-style-type: none"> • 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.	2010 to 2015	<ul style="list-style-type: none"> • Ontario EA Act • Ontario Water Resources Act

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

4.0 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 February 22, 2008 (Appendix A) and how and when they will be addressed and by whom.

Table 2: How Conditions of Approval we be 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	
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	
3. These conditions do not prevent more restrictive conditions being imposed under other statutes.	City	As applicable	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>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:</p> <ul style="list-style-type: none"> 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	
<p>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:</p> <ul style="list-style-type: none"> 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	
<p>2) Items (1) i) and ii) shall both include, but not be limited to, matters regarding:</p> <ul style="list-style-type: none"> 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	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>6. (1) The proponent shall prepare an Annual Compliance Report (Report) which includes:</p> <ul style="list-style-type: none"> 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	Design, Construction, Post- Construction annually	
<p>(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.</p>	City	Design, Construction, Post- Construction annually	
<p>(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.</p>	City	Design, Construction, Post- Construction annually	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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	
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, Construction, Post-Construction	
(2) The Mediation Agreement Status update shall include: <ul style="list-style-type: none"> 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	
(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	
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	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>(2) The ICMC's purpose shall be to:</p> <ul style="list-style-type: none"> 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. 	<p>City, ICMC</p>	<p>Design and Construction,</p>	
<p>(3) The ICMC shall have the membership, duration of existence, operating procedures, resource support and information access, as follows:</p> <ul style="list-style-type: none"> 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. 	<p>ICMC</p>	<p>Design, and Construction</p>	
<p>(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.</p>	<p>ICMC</p>	<p>As applicable</p>	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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	
(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	
(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	
(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	
(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	
(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	
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	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>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;</p>	City	Design	
<p>iii. consideration of all items outlined in Resolution #8 - Section 2 - <i>Proposed Outfall Pipe</i> - Item 2.4 of the MA, unless the OWRA Director determines otherwise;</p>	City	Design	
<p>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;</p>	City	Design	
<p>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;</p>	City	Design	
<p>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</p>	City	Design	
<p>vii. monitoring and contingency plans to provide verification that the UV disinfection system is working as predicted.</p>	City	Design	
<p>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.</p>	City	Design	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
(2) Environment Canada shall be circulated the complete OWRA application by the Proponent.	City	Design	
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	
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: <ul style="list-style-type: none"> 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	
(2) As part of these requirements, MOE's <i>Evaluating Construction Activities Impacting on Water Resources. Parts 111/A-C, 1994</i> shall be complied with.	City	Construction and Post-construction	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>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:</p> <ul style="list-style-type: none"> 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 vi. consultation with the public. 	City	Disinfection EA and Design	
<p>(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.</p>	City, ICMC, NLC	Initiation of project and updated through implementation as necessary	
<p>(3) The method to be used can be implemented by the City under this EA approval, subject to the other requirements of this condition.</p>	City	Design as necessary	
<p>(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:</p> <ul style="list-style-type: none"> 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	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>(5) In making a decision on the request outlined in the Minister will consider:</p> <ul style="list-style-type: none"> 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. 	<p>Minster of the Environment</p>	<p>Filing of Disinfection EA</p>	
<p>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:</p> <ul style="list-style-type: none"> 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; <p>the Proponent shall proceed through, at a minimum, the process set forth for Schedule B projects under the <i>Municipal Class Environmental Assessment</i>, and shall also follow the principles outlined in Condition 13 (1) and (2). The Proponent will be subject to all provisions of the <i>Municipal Class Environmental Assessment</i> as it applies to Schedule B projects, including Part II Order Request (request for individual EA) provisions.</p>	<p>City</p>	<p>Disinfection EA</p>	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>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 <i>Municipal Class Environmental Assessment</i>.</p>	City	Design as necessary	
<p>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 <i>Municipal Class Environmental Assessment</i> 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 <i>Municipal Class Environmental Assessment</i> as it applies to Schedule B projects, including Part II Order Request (request for individual EA) provisions.</p>	City	Disinfection EA and Design as necessary	
<p>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.</p>	City	Design	
<p>(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.</p>	City	Design	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>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.</p>	City	Study and Design	
<p>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:</p> <ul style="list-style-type: none"> 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	
<p>(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.</p>	City	As applicable	
<p>(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.</p>	City	As applicable	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

MOE Condition of EA Approval	Responsibility	Stage Element will be Addressed	Status & Description how Element has been Addressed
<p>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.</p>	City	Condition to be addressed as specified with a progress report on or before February, 2014	
<p>(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.</p>	City	As applicable	
<p>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."</p>	City	A review of the projects included in the Undertaking to be carried out if construction has not commenced on or before February 2013	
<p>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.</p>	City	Construction and Post-Construction	

5.0 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.

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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 record-keeping
- 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.

6.0 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
- 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
- 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

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

- 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
- 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.

Contract provisions of the Request for Proposal (RFP) will include a copy of the CMP to ensure commitments outlined in the CMP are fulfilled by the consultant hired to undertake the work.

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.

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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
<p style="text-align: center;">Design of Outfall</p>						
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		
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		

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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		
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		
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		
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		
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		
D8	Compliance for Evaluation of Construction Activities	Compliance with MOE's <i>Evaluating Construction Activities Impacting on Water Resources. Parts 11/A-C, 1994</i> , to mitigate effects on fish and fish habitat.	City / Consultant	CA.12.2		
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 <i>Federal Fisheries Act, Lakes and Rivers Improvement Act, and Navigable Water Act</i> .	City / Consultant	EA.18-1		Approvals under <i>Federal Fisheries Act, Lakes and Rivers Improvement Act, and Navigable Water Act</i>
Design of Disinfection System						

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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
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		
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		
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		
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		
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		
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)	<i>This EA was initiated in the fall of 2008 with an expected completion date in early 2010. AECOM is currently undertaking the work required to complete this EA.</i>	
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	<i>A Public Consultation and Communication Plan (PCCP) was developed in consultation with the ICMC steering committee and the</i>	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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
					<i>NLC. The final plan was completed in early 2009.</i>	
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	<i>In 2008, the ICMC steering committee participated in the review of the terms of reference for the disinfection EA and the selection of the consultant to undertake this work.</i>	
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		
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	Don Trunk EA	
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	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	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	Sewer Use Bylaw, Wet Weather Flow Management Master Plan, Water Efficiency Plan, Biosolids Master Plan	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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 inspector will ensure specifications are implemented	ABTP Environmental Assessment	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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	
C3	Noise Guidelines and Bylaws	To ensure compliance with noise-related guidelines and by-laws during construction activities	The City 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	
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	
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	
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	
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	
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	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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 this Undertaking.	As applicable	Consultant/ Contractor	ABTP Environmental Assessment	
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	
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	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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	
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	
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	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

ID #	Monitoring Element	Purpose of Monitoring	Monitoring Method	Monitoring Frequency	Responsible person/agency	Reference	Agency Response and Date
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	

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

7.0 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.

7.1 Study to Review Effluent 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 provided the City is Undertaking Schedule B Project under the *Municipal Class Environmental Assessment* to reassess all possible disinfection methods available to treat the secondary effluent and bypass.

Should the study conclude that UV Disinfection is no longer the preferred option to disinfect plant effluent (secondary bypass and/or secondary treatment), the method of disinfection to be used shall be determined in consultation with the MOE through consideration of items described in 13 of the Conditions of Approval.

8.0 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.

The Public Consultation and Communications Plan will be attached to the City's ACR when complete.

9.0 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.

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

The Schedule B Disinfection Environmental Assessment was undertaken in 2009 with preliminary design of the preferred disinfection method, outfall and pumping station to begin in 2010-2011.

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.

10.0 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.

**Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking
Compliance Monitoring Program**

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.

10.2 Mediation Agreement Status Update

As described in 7(1) of the Conditions of Approval, the City will prepare a Mediation Agreement Status Update in response to the comments made by the ICMC in their Annual Report.

The Mediation Agreement Status Update will be prepared and submitted for the Public Record on an annual basis. The Mediation Report Status Update will be submitted as an appendix to the ACR.