



STAFF REPORT ACTION REQUIRED

Ashbridges Bay Treatment Plant Environmental Assessment Annual Compliance Reports 2009

Date:	August 3, 2010
To:	Public Works and Infrastructure Committee
From:	General Manager, Toronto Water
Wards:	32
Reference Number:	P:\2010\Cluster B\TW\pw10022

SUMMARY

The purpose of this report is to submit: (i) the Ashbridges Bay Treatment Plant Environmental Assessment Approved Undertaking 2009 Annual Compliance Report as submitted by staff to the Ministry of the Environment (MOE) in March 2010; and (ii) the 2009 Mediation Agreement Interim Compliance Report on behalf of the Implementation and Compliance Monitoring Committee (ICMC).

The Approved Undertaking Annual Compliance Report summarizes the City's activities undertaken during the preceding year and is submitted to the MOE to fulfill a condition of approval of the Environmental Assessment. The Interim Compliance Report summarizes the ICMC's concerns with respect to the implementation of the Ashbridges Bay Treatment Plant Environmental Assessment Mediation Agreement and provides a set of staff responses for each concern raised.

RECOMMENDATIONS

The General Manager, Toronto Water, recommends that:

1. the Public Works and Infrastructure Committee receive for information the "Ashbridges Bay Treatment Plant Environmental Assessment: Implementation of the Approved Undertaking – 2009 Annual Compliance Report", as submitted to the Ministry of the Environment by staff on March 31, 2010; and
2. the Public Works and Infrastructure Committee receive for information the Implementation and Compliance Monitoring Committee's (ICMC)

2009 Mediation Agreement Interim Compliance Report with staff responses to concerns and comments raised by the ICMC contained therein.

Financial Impact

There are no financial impacts resulting from this report.

DECISION HISTORY

At its June 9, 1999 meeting, City Council adopted Works Committee Report No.9, Clause No.2 to approve the Ashbridges Bay Treatment Plant Mediation Agreement, which included within it the formation of the Implementation Compliance and Monitoring Committee (ICMC) to monitor the City's compliance with the Mediation Agreement and the requirement for the ICMC to report back annually through the General Manager of Toronto Water on the progress made in implementing the commitments made in the Mediation Agreement.

<http://www.toronto.ca/legdocs/1999/agendas/council/cc/cc990609/wu9rpt/cl002.htm>

At its April 23, 24, 25, 26 and 27, 2001 meeting, City Council adopted Works Committee Report No. 4, Clause No. 9 and received for information the ICMC's 2000 Interim Compliance Report with a response prepared by City staff.

<http://www.toronto.ca/legdocs/2001/agendas/council/cc010424/wks4rpt/cl002.pdf>

At its February 13, 2002 meeting, City Council adopted Works Committee Report No. 2, Clause No. 28 and received for information the ICMC's 2001 Interim Compliance Report with a response prepared by City staff.

<http://www.toronto.ca/legdocs/2002/agendas/council/cc020213/wks2rpt/cl028.pdf>

At its February 4, 5 and 6, 2003 meeting, City Council adopted Works Committee Report No. 2, Clause No. 5 and received for information the ICMC's 2002 Interim Compliance Report with a response prepared by City staff.

<http://www.toronto.ca/legdocs/2003/agendas/council/cc030204/wks2rpt/cl005.pdf>

At its March 1, 2 and 3, 2004 meeting, City Council adopted Works Committee Report No. 2, Clause No. 20 and received for information the ICMC's 2003 annual Interim Compliance Report with a response prepared by City staff.

<http://www.toronto.ca/legdocs/2004/agendas/council/cc040301/wks2rpt/cl020.pdf>

At its September 28, 29 and 30 2005 meeting, City Council adopted Works Committee Report No. 8, Clause No. 9 and received for information the ICMC's 2004 Interim Compliance Report with a response prepared by City staff.

<http://www.toronto.ca/legdocs/2005/agendas/council/cc050928/wks8rpt/cl009.pdf>

At its September 25, 26 and 27 2006 meeting, City Council adopted Works Committee Report No. 6, Clause No. 35 and received for information the ICMC's 2005/2006 Interim Compliance Report with a response prepared by City staff.

<http://www.toronto.ca/legdocs/2006/agendas/council/cc060925/wks6rpt/cl035.pdf>

At its September 14, 2009 meeting, the Public Works and Infrastructure Committee received, for information, the ICMC's 2007/2008 Interim Compliance Report with a response prepared by City staff.

<http://www.toronto.ca/legdocs/mmis/2009/pw/decisions/2009-09-14-pw26-dd.htm>

ISSUE BACKGROUND

The City submitted an Environmental Assessment (EA) for the Ashbridges Bay Treatment Plant (ABTP) to the Ontario Ministry of the Environment (MOE) in 1997. In 1999, the City undertook a self-directed mediation with a number of interested parties in response to a series of concerns raised by various stakeholders. The outcome of the process was the drafting of an Environmental Assessment Mediation Agreement (MA) and the formation of the Implementation and Compliance Monitoring Committee (ICMC).

The ICMC is comprised of citizen volunteers and signatories to the Mediation Agreement. The MA contains 11 resolutions designed to resolve outstanding issues relating to the ABTP EA. The ICMC is to provide advice to the City as it implements the commitments made in the MA and annually reviews and reports on compliance with the terms of the MA.

The City submitted an amended EA and a copy of the MA to the MOE for review in 1999. MOE staff released their review of the EA as amended by the MA in April 2004. They concluded that the EA had satisfied all the requirements of the Environmental Assessment Act and would be recommending approval. Outstanding issues identified by the public or various stakeholders were concluded to be either outside the scope of the EA, were being addressed through other City initiatives, or were better addressed at the Certificate of Approval stage after more detailed design information becomes available. The public comment period on the review ended in June 2004.

On January 24, 2008 the City of Toronto received approval from the MOE for the ABTP EA undertakings which include a new outfall pipe, an effluent pumping station and disinfection system. The City has begun to implement the projects resulting from the approved EA.

COMMENTS

Approved Undertaking 2009 Annual Compliance Report

The MOE approved the City's ABTP EA subject to a number of conditions that includes but is not limited to the following:

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;
and
4. Undertaking a comprehensive Public Consultation Program.

The purpose of these conditions 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 Mediation Agreement. Specifically, the submission of the Approved Undertaking Annual Compliance Report to the MOE fulfills the requirements of Condition 6 of the Conditions of Approval.

ICMC 2009 Mediation Agreement Interim Compliance Report

The 2009 Interim Compliance Report summarizes the ICMC's concerns with respect to the City's efforts to implement the commitments made in the Mediation Agreement and provides a set of recommendations surrounding commitments in the areas they feel the City requires further improvement. Staff have provided detailed responses to each of the recommendations made by the ICMC in the attachment to this report. Toronto Water's response to some of the key concerns identified in the Interim Compliance Report is as follows:

Ultraviolet Disinfection

The Approved EA Undertaking includes a new outfall pipe, an effluent pumping station and an ultraviolet (UV) disinfection system. Disinfection is the final stage of wastewater treatment and its purpose is to protect human health by destroying or inactivating pathogenic organisms. As the original EA document is over 12 years old and both technology and regulations have evolved during this time, the City opted to review, as allowed for under the terms of the EA approval, the various disinfection methods currently available to determine whether UV disinfection is still the best alternative to treat effluent and bypass from the ABTP. To this end, as required by both the terms of the Mediation Agreement and MOE's EA approval conditions, the City of Toronto conducted a Schedule B Class Environmental Assessment (EA) study.

The outcome of the study is intended to help the City achieve the following objectives:

- To provide adequate disinfection of Ashbridges Bay TP effluent to meet regulations and criteria set out by the Ontario Ministry of the Environment;
- To improve the Blue Flag beach status in the vicinity of the Ashbridges Bay TP;
- To eliminate chlorine residual from the effluent to meet Federal Pollution Prevention regulations; and
- To eliminate reliance on chlorine gas in order to eliminate any real or perceived public health risk associated with use of chlorine rail cars.

The original 1997 EA undertaken by the City acknowledged that a chlorination / dechlorination strategy is a viable alternative should UV disinfection not be deemed effective and/or cost efficient at the Ashbridges Bay TP.

The study compared various alternate disinfection strategies against UV disinfection and, in light of the most current information on effectiveness, environmental impacts and capital and operating costs, recommended chlorination with sodium hypochlorite and dechlorination with sodium bisulphite for all effluent.

A Notice of Completion was published in local newspapers and was distributed to those on the project contact list. The 30-day public review period commenced February 25, 2010 and closed on March 26, 2010. As a result, the MOE received four Part II order requests and is presently assessing the file.

Once the disinfection method has been finalized, staff will move forward with releasing a Request for Proposal for the design and completion of the Certificate of Approval process for the preferred disinfection system, pumping station and outfall pipe.

Biosolids Management

In the fall of 2002, the City initiated a Biosolids and Residual Master Plan (BRMP) process that prepared a long-term strategy to manage wastewater treatment plant biosolids and water treatment plant residuals in an environmentally sound and sustainable manner. The BRMP process was undertaken as a Class Environmental Assessment that required the City to consider all viable management options.

The Biosolids Master Plan (BMP) was completed in late 2009 and recommendations for Ashbridges Bay TP were approved by Council at its meeting on November 30, December 1, 2, 4 and 7, 2009. The strategy for Ashbridges Bay TP is 100% Beneficial Use and as such the process of formally abandoning existing incineration has been completed. Documentation has been received from the MOE that has removed use of the old multi-hearth incinerators from the ABTP's operating Certificate of Approval.

Odour Control

Subject to adequate levels of capital funding, the City is moving forward with its odour control project and is using a combination of odour control technologies, including biofilters and carbon scrubbers, to treat odourous air generated at the Ashbridges Bay Treatment Plant.

Wet Weather Flow

The Don River and Central Waterfront Project is carrying forward the recommendations of the Wet Weather Flow Master Plan for managing impacts of wet weather flow and combined sewer overflows from the Lower Don River and Inner Harbour. It is being conducted as a Schedule C, Municipal Class EA and a series of Public Open Houses to obtain feedback on the preferred alternative have been held. The preferred approach involves the capture and treatment of stormwater discharges and combined sewer overflows to the Lower Don River and Inner Harbour. The captured flows from this area

would be pumped to a wet weather flow treatment facility in the vicinity of the Ashbridges Bay Treatment Plant. The proposed system would have the capacity to capture and treat all but one discharge event in the average year.

The Coatsworth Cut Environmental Assessment Study has been completed and approved by the Ontario Ministry of the Environment. The works required to reduce the amount of discharge by improving the conveyance system are undergoing detailed design now and will be constructed this winter. The implementation of the treatment wetland will be coordinated with other agency works being planned in the immediate area.

Planning

Toronto Water uses its facility forecast reports to identify required system upgrades and to determine if a treatment plant will require future expansion. In the last facility forecast completed for Ashbridges Bay Treatment Plant in 2002, no expansion requirement was identified in the 20 year horizon. The facility forecasts for all Wastewater Treatment Plants is scheduled to be updated in 2011.

Conclusion

The City remains committed to meeting its obligations under the Mediation Agreement and continues to work to implement the resulting projects and initiatives as approved by the Environmental Assessment.

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SIGNATURE

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ATTACHMENTS

Attachment 1 - Ashbridges Bay Treatment Plant Environmental Assessment:
Implementation of the Approved Undertaking – 2009 Annual Compliance Report

Attachment 2 - ICMC 2009 Compliance Report with City Response