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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JANUARY 5, 2016
FROM:	JOHN BRAAM, P. ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	APPEAL OF THE GREENWAY WASTE WATER TREATMENT PLANT ENVIRONMENTAL COMPLIANCE APPROVAL

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the Civic Administration **BE DIRECTED** to take such steps, including retaining such external expert advice, as may be necessary, to appeal Condition 10 of the Amended ECA No. 8081-9Z4H48, issued by the MOECC on October 20, 2015, to the Environmental Review Tribunal.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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ETC Report of 2010-07-19, Item 9, Greenway Pollution Control Centre Class Environmental Assessment (EA)

CWC Report of 2012-05-22, Item 11, Consultant Appointment Greenway Wastewater Treatment Plant

CWC Report of 2015-07-20, Item 3, Greenway Wastewater Treatment Plant Expansion & Upgrades – Construction Contract Award

PURPOSE

The purpose of this report is to recommend that the Municipal Council authorize the Civic Administration to pursue an appeal of the current Environmental Compliance Approval (ECA) for Greenway Wastewater Treatment Plant (“WWTP”). Specifically, the appeal will request the deletion of Condition 10, which relates to bio-monitoring requirements in the Thames River.

In response to this report, it is open to the Municipal Council to do any one of the following:

- (a) direct Civic Administration to pursue the appeal, and to take such steps as are necessary for that purpose as in the Recommendation of this report; or
- (b) direct Civic Administration to withdraw the appeal and take no further steps to dispute the Amended ECA.

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BACKGROUND

The City is currently undertaking an expansion of its largest wastewater treatment plant, Greenway WWTP. Planning and public consultation for this project commenced in 2009 with a Schedule C Class Environmental Assessment. Subsequently, detailed design was undertaken, culminating in tender and award of the construction contract in 2015. The Contractor is on site and construction has commenced.

Every wastewater treatment plant in Ontario requires an approval from the Ontario Ministry of the Environment and Climate Change (MOECC). This is called an Environmental Compliance Approval (ECA) and it gives an Owner the authority to operate the plant. In order to modify or expand an existing WWTP, Owners are required to obtain an amendment to their current ECA from the MOECC.

Separate from the day to day operations of wastewater treatment plants, Civic Administration is also undertaking a Pollution Prevention and Control Plan (PPCP). The purpose of the PPCP is to attempt to characterize the health of the Thames River and identify areas of impairment. The results of this Plan, constantly being updated and adapted based on field observations and data analysis, are then used by Civic Administration to prioritize and maximize mitigation efforts across the City, especially combined sewer overflows (CSOs). At the direction of the local office of the MOECC, the PPCP includes a study of benthic communities in the Thames River.

Upon completion of the design of the Greenway WWTP expansion, the City applied to the MOECC for an Amendment to the existing ECA, to reflect the planned upgrades and incorporate the new effluent criteria established through the planning and consultation process. Following an extensive process with the MOECC, the amended ECA was issued by the MOECC (attached as Appendix “A”) containing a new condition (Condition 10) that requires the City to undertake a benthic monitoring program, using a specific methodology (BioMap), that enables the Ministry to assess the health of the River and evaluate impacts to the health of the River as a result of Greenway WWTP effluent.

Condition 10 requires the following:

“10. RECEIVER IMPACT ASSESSMENT MONITORING AND REPORTING

(1) The Owner shall conduct annual monitoring of Thames River water quality (benthic invertebrates) using the BioMAP method consistent with previous BioMAP study reports (2006 to 2012) by the City of London. The monitoring shall include quantitative and qualitative sampling and taxonomic identification to the lowest practical level (species or genus). The taxonomic work shall be conducted by a qualified professional who has a minimum of ten years relevant experience or possesses genus-level certifications for Groups 2, 3 and 4 taxa issued by the SFS taxonomic certification program. River monitoring locations shall be the two established sites from previous studies, one upstream (T5) and one downstream (T6) of the sewage effluent outfall. The sampling shall take place in the autumn of each year.

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(2) The owner shall provide an annual monitoring report, consistent in format and level of detail with previous study reports, to the Southwestern Regional Office within six (6) months of the sampling period each year. A report shall include but is not limited to: details of the methods used, complete results including field measurements and species taxa list with density data and a comparative assessment of monitoring results between the two sampling locations over time.”

It is this condition that staff objects to, and is the focus of the appeal.

ANALYSIS

Undertaking the appeal does not impact the City’s ability to proceed with the Greenway WWTP Expansion; construction has commenced and the City retains the authority to operate the plant as granted by the Amended ECA.

The grounds for appeal relate to the requirement for benthic monitoring of the Thames River using a specified method within an operating approval for a wastewater treatment plant. The full text of the appeal can be found attached at Appendix “B”. The Amended ECA was issued on October 20, 2015 and received by the City Clerk on November 2, 2015. Any appeal to the amended conditions contained in the ECA were required to be filed within 15 days of receipt. In order to preserve the City’s appeal rights, and pending direction by the Municipal Council, the appeal was filed on November 4, 2015. Should the Municipal Council direct that the appeal not be pursued, it can be withdrawn with no adverse consequences to the City beyond the reasons for the appeal.

It is the position of City staff that such a program pertaining to overall river health does not belong in an ECA specific to the operation of a wastewater treatment plant, and is more properly part of other existing City river health monitoring programs, including the PPCP.

The planning and consultation process for the Greenway WWTP included an environmental assessment and analysis to establish the appropriate effluent criteria that must be met by the City. The ECA includes these effluent criteria, in addition to other monitoring requirements, and the City is responsible for ensuring that the plant continues to monitor and meet or exceed them on an ongoing basis. It is not practical for an Operator to adjust plant operation or be assessed for compliance based upon River biological monitoring programs, and the MOECC has multiple alternatives available to it for evaluating the health of the River.

It is important to appeal the inclusion of Condition 10 because there are implications for other City projects at present and in the future. For example: Wastewater Operations has undertaken a project to remove the Southland WWTP from service and replace it with a pumping station that would convey wastewater to Wonderland Pump Station, and ultimately to Greenway WWTP. This has indisputable benefits to the environment because it would remove a nutrient load from Dingman Creek, a watercourse widely accepted to be impaired. Post project monitoring conditions have held up this project from proceeding. In this case, an Environmental Assessment Study recently approved by the Municipal Council on the Dingman Creek Watershed is the appropriate, broad based mechanism to establish a long term health monitoring program.

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In addition to our basic objection to the inclusion of bio-monitoring in an ECA, the methodology required by Condition 10 is very specific in its scope, while at the same time being completely open-ended in terms of limitations to application. Any adjustment to a biomonitoring program would require an amendment to the Greenway WWTP ECA, and there is no end date or opportunity to modify the program based on results or expert analysis. Staff experience with the method includes variable results from year to year that are difficult to rationalize; such results are not appropriate to managing the operations of a treatment plant.

Staff have conducted literature reviews and have obtained third party expert advice on the use of BioMap, and have confirmed that BioMap is a methodology that is not widely accepted in the scientific community and finds limited use throughout the province. There are very few consultants who can provide BioMap sampling services with the qualifications specifically required by Condition 10. In addition, the MOECC and federal government have developed standards for biomonitoring programs, and these standards do not include the use of BioMap in any form.

Finally, the Upper Thames River Conservation Authority (UTRCA) conducts its own biomonitoring program which does not employ BioMap. As such, any results obtained from a biomonitoring program employing BioMap cannot be correlated to the decades of data available from the UTRCA. Such correlation is important to monitoring the overall health of the Thames River, a subject of the Thames River Clear Water Revival and the City Pollution Prevention and Control Plan.

CONCLUSION

Civic Administration continues to work diligently on initiatives that will reduce the impact of the City and its residents on the Thames River. We take our stewardship role very seriously, and our ongoing efforts such as the Pollution Prevention and Control Plan under development, new river embracing policies in the London Plan, our leadership in the Thames River Clear Water Revival and our optimization program on our wastewater treatment plants, all form part of our strategy to help improve the health of the Thames River by mitigating the effects of our community on it.

Criteria for plant performance and monitoring / reporting requirements in the ECA are not in dispute; however, linking overall health of the river to one specific plant is. The health of the river as measured by biomonitoring takes into account all contributing factors, including those upstream of the City, and is being pursued by staff on the broader scale that it is intended for.

For the reasons outline above, it is recommended that Municipal Council direct the Civic Administration, specifically the Managing Director, Environmental & Engineering Services and City Engineer and the City Solicitor's Office, to take such steps as are necessary to appeal Condition 10 of the Amended ECA No. 8081-9Z4H48, issued by the MOECC on October 20, 2015, to the Environmental Review Tribunal.

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ACKNOWLEDGEMENTS:

This report was prepared by Kirby Oudekerk, in consultation with the City Solicitor's Office.

PREPARED BY:	REVIEWED & CONCURRED BY:
GEORDIE GAULD DIVISION MANAGER, WASTEWATER TREATMENT OPERATIONS	JOHN LUCAS, P. ENG. DIRECTOR, WATER, WASTEWATER & TREATMENT
RECOMMENDED BY:	
JOHN BRAAM, P.ENG. MANAGING DIRECTOR OF ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

Attach: Appendix "A": Amended Environmental Compliance
Approval No.8081-9Z4H48

Appendix "B": Notice of Appeal Letter

cc. City Solicitor's Office, Nicole D. Hall

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APPENDIX "A"

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APPENDIX "B"