

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY: Original Signed

Carl Yates, General Manager, Halifax Water

DATE: February 21, 2011

SUBJECT: **Halifax Harbour Solutions Project (HHSP) Activity Report**
August 1, 2010 to December 31, 2010

INFORMATION REPORT

ORIGIN

HRM Council session of October 22, 2002, and subsequent direction following the transfer of the HHSP to Halifax Water effective August 1, 2010, to provide regular information reports to HRM Council and the Halifax Water Board for the duration of the HHSP project.

BACKGROUND/DISCUSSION

The background and discussion is contained in the attached Information Report to the Halifax Water Board, dated January 24, 2011.

BUDGET IMPLICATIONS

N/A

ALTERNATIVES

N/A

ATTACHMENT

Item #6-I, Halifax Water Board Report dated January 24, 2011, Halifax Harbour Solutions Project (HHSP) – Activity Report August 1, 2010 to December 31, 2010


Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.


Report Prepared by:

Original Signed

Carl D. Yates, M.A.Sc., P.Eng., General Manager, HRWC, 490-4840

TO: Colleen Purcell, CA, Chair, and Members of the
Halifax Regional Water Commission Board

SUBMITTED BY: 
Susheel Arora, M.A.Sc., P.Eng.
Director – Wastewater and Stormwater Services

APPROVED: 
Carl Yates M.A.Sc., P.Eng., General Manager

DATE: January 24, 2011

SUBJECT: Halifax Harbour Solutions Project (HHSP) – Activity Report
August 1, 2010 to December 31, 2010

INFORMATION REPORT

ORIGIN

This report originates from the Council session of October 22, 2002 when staff was authorized to submit quarterly reports for the duration of the project. The HHSP was transferred to Halifax Water (HW) effective August 1, 2010 with the understanding that regular information reports would be provided to HRM Council and the HW board.

BACKGROUND

Halifax Regional Municipality (HRM) entered into five contracts for the implementation of the Halifax Harbour Solutions Project, namely:

- An infrastructure development agreement for the construction of the three Wastewater Collection Systems on October 15, 2003 with Dexter Construction; and
- A development agreement for the construction of three advanced primary Wastewater Treatment Facilities on June 15, 2004 with D&D Water Solutions, Inc.; and
- A development agreement for the construction of a Biosolids Processing Facility on November 30, 2004 with SGE Acres Limited; and
- An operating and maintenance agreement for the Biosolids Processing Facility on November 30, 2004, with N-Viro Systems Canada Inc; and

- An operating agreement for the transportation of dewatered Biosolids from the three new Wastewater Treatment Facilities on May 31, 2006, with Seaboard Liquid Carriers Limited

DISCUSSION

The primary purpose of this report is to provide a historical report of project activities over the two months of the second quarter and previous quarter; up to December 31, 2010. The attachment to this report provides the required historical accounting of project activities in the format that has been used throughout the Harbour Solutions Project.

Staff are providing a brief executive overview of the project progress against the four strategic project priorities identified by staff in consultation with Regional Council and the Halifax Water Board, as follows:

1. Restore the Halifax Wastewater Treatment Facility as soon as possible to mitigate future flooding;
2. Shield tax and water/wastewater ratepayers to maximum extent possible from potential additional costs;
3. Complete the entire Halifax Harbour Solutions Project as soon as possible;
4. Transfer of HHSP to Halifax Water.

Restore the Halifax Wastewater Treatment Facility (WWTF)

The Halifax WWTF was shut down on January 14, 2009 due to wastewater flooding in the wet well and basement areas of the plant. As reported in the first quarter report, a two-phase plan was developed to fully restore the facility and re-establish the required treatment levels. Phase 1 included restoration of the odour control system and re-establishing the wastewater flows through the plant which involved screening and bypassing the treatment process with effluent discharge into the harbour via the existing Halifax WWTF outfall. Phase 2 involved restoring the remainder of the facility, including replacing and/or repairing the damaged equipment in the basement back to the original or modified condition to re-establish the treatment process and capacity.

Phase 1 was completed in September 2009 and Phase 2 was completed in June 2010 when the plant was brought back to full operation.

As part of the recovery process, Halifax Water and Allianz, the builders' risk insurer, successfully negotiated with D&D Water Solutions Inc. to participate in the recovery and re-commission the Halifax facility. A comprehensive commissioning plan was developed and all commissioning activities were successfully completed on October 15, 2010.

Shield Tax and Water/Wastewater Ratepayers to Maximum Extent Possible from Potential Additional Costs

Overall, the \$333 million Harbour Solutions Project remains within budget. As a result of the flooding incident at the Halifax WWTF, there has been widespread public speculation that taxes and/or ratepayers will be “on the hook” for any additional costs that arise. In addition to a substantial security package that guarantees Contractor performance during the three-year performance warranty period following delivery of each asset to HRM, the Harbour Solutions Project also has numerous substantial insurance policies in place including property, builders’ risk, professional liability, and wrap-up liability policies.

The flooding incident is insured under the Project’s builder’s risk policy. Policy coverage provides for repair of the WWTF to its pre-incident state with all affected equipment/systems being repaired or replaced, and three year warranty provisions restored. As a result, HRM and Halifax Water (HW) staff are working very closely with the insurer to ensure their position is not prejudiced in any way such that full cost recovery in accordance with the terms of the policy can be expected.

Thus far, approximately \$11 million dollars has been spent on the plant recovery with insurance claims submitted on a regular schedule. HW has received approximately \$9 million to date from the insurance company and a claim in the amount of approximately \$1.1 million has been recently submitted; payment of this claim is expected in the near future. HW is in the process of compiling its final claim to maximize recovery through the builder’s risk insurance policy.

To the extent that HW/HRM may incur WWTF recovery costs not eligible for reimbursement under the terms of the insurance policy, staff will seek recovery from the Contractor if it is determined that the associated work should have initially been provided under the scope and terms of the Project Agreement.

Regarding the successful completion of the Harbour Solutions Project wastewater collection systems and treatment facilities in each of Halifax, Dartmouth and Herring Cove, each of these assets has a three-year performance warranty backed by corporate guarantees and a security package designed to mitigate financial risk in the event of a default by the Contractor. The security package includes:

Wastewater Collection Systems (WWCS):

- Performance Bond in the face amount of 100% of the Guaranteed Maximum Price (approximately \$120 million);
- Labour and Materials Payment Bond in the face amount of 50% of the Guaranteed Maximum Price (approximately \$60 million);
- Corporate Guarantee by Municipal Enterprises Limited.

Wastewater Treatment Facilities (WWTF):

- \$15 million irrevocable, stand-by Letter of Credit;
- \$20 million Performance Bond;
- \$20 million Labour and Materials Payment Bond;
- Corporate Guarantees from Municipal Enterprises Limited, Degremont Ltd., and Suez, all parent companies to D&D Water Solutions.

The Project Agreement also includes provisions which permit HRM to withhold payments if there are defaults and to hold back monies to cover the costs of any unremedied deficiencies at the Date of Substantial Completion. Additionally, HRM has withheld 10% of all payments made to date to D&D under the WWTF Agreement, and Dexter under the WWCS Agreement, in accordance with the requirements of the Builder's Lien Act to address any lien claims that may arise. In accordance with the agreements, for WWTFs, 75% of the Builder's Lien Holdback was released in September 2010 and the remaining 25% of the Builder's Lien Holdback, totalling approximately \$3.5 million plus HST is being held by Halifax Water pending achievement of Final Completion. For the WWCS, as per the Agreement, the Builder's Lien holdbacks were released to Dexter in the third quarter of 2008 in exchange for Holdback Release Bonds of \$7.5 million for Halifax, \$5 million for Dartmouth, and \$1.9 million for the Herring Cove SCS. Additionally, there is \$250,000 held back under the Builder's Lien for invoices that were submitted after December 2008.

Staff will continue to employ the remedies provided under the Project Agreements outlined above to shield tax and water/wastewater ratepayers from potential additional costs to the maximum extent possible.

Complete the full Harbour Solutions Project ASAP

As of the date of writing of this report, all the WWTF and WWCS for Halifax, Dartmouth and Herring Cove have achieved substantial completion with the exception of the Halifax Pier A Pumping Station / Combined Sewer Overflow (CSO) chamber and the Halifax waterfront CSO Chambers. The Contractor continues to rectify the Punch List items for the WWTF and the Punch List items for the WWCS are basically completed.

Halifax

Substantial Completion of the Halifax Wastewater Treatment Facility (WWTF) and the Wastewater Collection System (WWCS) was achieved on December 19, 2008. The exceptions are Pier A Pumping Station and Combined Sewer Overflow (CSO) chamber, as well as the other Halifax CSO chambers (excluding the Balmoral CSO Chamber). These exceptions remain the responsibility of the Contractor until substantial completion is achieved. As of the date of this report, all the Punch List items for

Halifax WWCS (except Pier A and CSOs) have been resolved and the Contractor submitted the documentation for Final Completion on that portion of the Contract on December 22, 2010. Final Completion of the WWCS cannot be granted until the Final Completion Certification for the Halifax WWTF has been submitted and accepted.

Regarding the Halifax WWTF, D&D Water Solutions Inc. continues to focus on the rectification of the few remaining identified deficiencies during the Substantial Completion process, as well as the defects identified following Substantial Completion. The submission by D&D of the Final Completion Certificate for the Halifax WWTF is expected to be in early February, 2011.

Dartmouth

The Dartmouth WWCS and WWTF have been treating flows since July 2008.

In October 2009, the Contractor submitted the documentation for Substantial Completion of the Dartmouth WWCS. In December 2009, the Contractor submitted the documentation for Substantial Completion of the Dartmouth WWTF. Substantial Completion of the Dartmouth WWTF was achieved on April 21, 2010, and the Substantial Completion of the Dartmouth WWCS was achieved on June 28, 2010.

With one minor exception, all deficiencies on the Punch List for the Dartmouth WWCS have been completed. The documentation for Final Completion of the Dartmouth WWCS was received on December 17, 2010. Final Completion cannot be granted until Final Completion Certificate for the Dartmouth WWTF has been submitted and accepted.

Herring Cove

The Herring Cove Pumping Station and the Herring Cove WWCS and WWTF have been treating sewage flows since December 14, 2009.

Substantial Completion of the Herring Cove WWTF and WWCS was achieved on June 28, 2010.

All deficiencies on the Punch List for the Herring Cove WWCS have been completed. The documentation for Final Completion of the Herring Cove WWCS was received on December 17, 2010. Final Completion cannot be granted until the Final Completion Certificate for the Herring Cove WWTF has been submitted and accepted.

As of the end of December, approximately 30 Punch List deficiencies were remaining to be completed.

The Contractor has indicated that documents for Final Completion will be submitted in early February, 2011.

Biosolids Processing Facility (BPF)

The Biosolids Processing Facility (BPF) has been producing soil amendment since July 2007. As of June 2010, dewatered sewage sludge is being provided from all three HHSP plants and the Aerotech Dewatering Facility. The finished product continues to meet the "Class A" biosolids standard for the Province of Nova Scotia. Consumer demand for the product has matched the production.

The resolution of outstanding plant deficiencies by the Contractors has advanced well since the last report. Halifax Water and HRM staff have reached an agreement with both SGE/Hatch and N-Viro for final resolution of all plant deficiencies. The most significant deficiency, which has recently been remedied, is the replacement of the original dust collection system with an improved and more efficient bag-house system, which is now operational.

Transfer of Halifax Harbour Solutions Project to Halifax Water

The Memorandum of Agreement (MOA) between HRM and HW was executed on June 30, 2010 and received approval from the Nova Scotia Utility and Review Board (NSUARB) on July 29, 2010. Therefore, on August 1, 2010, Halifax Water accepted the transfer of the Harbour Solutions Assets and Project Management responsibilities in accordance with the MOA. To date, all cash, assets and liabilities have been transferred to HW. As per the MOA, accounts payable (Builders' Lien Act and deficiency holdbacks) will remain on HRM's books and will be offset by a corresponding amount receivable from HW and any shortfalls incurred by HRM as a result from transferring the remaining balance in the EPC Reserve, will be reimbursed by HW.

BUDGET IMPLICATIONS

As of December 31st 2010, the Harbour Solutions Project has spent \$321.66 million of its \$332.7 million capital budget. Projections to meet the capital budget of \$332.7 million remain on target based on staff's understanding of the forecasted insurance recoveries relative to the Halifax WWTF flooding incident as discussed earlier in this report.

As all completion "dates certain" for the various components have now passed, there should be no additional inflation risk to the Project. Total inflation for the project is \$23.81 million. As the original inflation budget, assumed at a rate of 2.8%, was \$12.3 million, the remainder of \$11.51 million has been allocated from the contingency budget.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

The report complies with the HRM/HW transfer agreement of June 12, 2007 and the HHSP MOA of June 30, 2010.

ATTACHMENT

Appendix A – Halifax Harbour Solutions Project – 2nd and 3rd Quarter Report: August 1, 2010 to December 31, 2010 (5 Months)

Report Prepared by:	John Lam, P. Eng., Project Manager, Halifax Harbour Solutions Project - 490-6008
Report Approved by:	Susheel Arora, M.A.Sc., P.Eng., Director – Wastewater and Stormwater Services

Introduction

The intent of this document is to provide the Board and staff with a general overview of the Harbour Solutions Project progress during the period between August and December, 2010.

It is presented in sections:

- Section 1 - Wastewater Collection System (WWCS)
- Section 2 - Wastewater Treatment Facilities (WWTF)
- Section 3 - Biosolids Processing Facility (BPF)
- Section 4 - Pollution Prevention Program
- Section 5 - Water Quality Sampling Program
- Section 6 - Financial Information
- Section 7 - Public Involvement and Information Program (PIIP)
- Section 8 - Construction Safety

Section 1

Halifax Wastewater Collection System

Substantial Completion for the Halifax WWCS was achieved on December 19, 2008, and documents for Final Completion (except for Excluded Assets – Pier A and CSOs) were received on December 22, 2010. Final Completion cannot be granted until the Final Completion Certificate for the Halifax WWTF has been submitted and accepted.

As of the date of this report, all Punch List items for the Halifax WWCS (except Pier A and CSOs) have been resolved.

Dartmouth Wastewater Collection System

Substantial Completion for the Dartmouth WWCS was achieved on June 28, 2010 and documents for Final Completion were received on December 17, 2010. Final Completion cannot be granted until the Final Completion Certificate for the Dartmouth WWTF has been submitted and accepted.

With one minor exception, all deficiencies on the Punch List for the Dartmouth WWCS have been completed.

Herring Cove Wastewater Collection System

Substantial Completion for the Herring Cove WWCS was achieved on June 28, 2010. All deficiencies on the Punch List have been completed.

The Contractor submitted documents for Final Completion of the Herring Cove WWCS on December 17, 2010. Final Completion cannot be granted until the Final Completion Certificate for the Herring Cove WWTF has been submitted and accepted.

Section 2

Halifax Wastewater Treatment Facility

The commissioning of the Halifax Wastewater Treatment Facility was completed on October 15, 2010. The recovery contractor; Black and MacDonald completed the identified deficiencies. D&D continues to rectify the Punch List items.

The Contractor has addressed many of the Punch List items. As of the date of this report, there were only a few deficiencies remaining. D&D has indicated that submission of the Final Completion Certificate will be in early February, 2011.

Dartmouth Wastewater Treatment Facility

Substantial Completion for the Dartmouth WWTF was achieved on April 21, 2010. There were less than 10 deficiencies remaining as of the date of this report, as the Contractor continues to address these deficiency items.

D&D has indicated that submission of the Final Completion Certificate will be in early February, 2011.

Herring Cove Wastewater Treatment Facility

Substantial Completion for the Herring Cove WWTF was achieved on June 28, 2010. As of the end of December, approximately 30 Punch List deficiencies were remaining to be completed.

D&D has indicated that documents for Final Completion will be submitted in early February, 2011.

Section 3

Biosolids Processing Facility

As of June 2010, the dewatered sewage sludge is being provided from all three HHSP plants and the Aerotech Dewatering Facility. Halifax Water and HRM staff have reached an agreement with SGE/Hatch and N-Viro for resolution of all plant deficiencies. The most significant of these deficiencies was the replacement of the original dust collection system with an improved and more efficient bag-house system. This system has recently been installed and is now operational.

Section 4

Pollution Prevention Program

In support of the Harbour Solutions Project and as a requirement of Provincial legislation, HRM initiated a Source Control Strategy, now referred to as the Pollution Prevention (P2) Program. This program has been designed and implemented to reduce the levels of organic and inorganic compounds, toxins and other matter currently entering the municipal storm water and wastewater sewer systems, and ultimately, freshwater and marine environments including Halifax Harbour.

The P2 program requires compliance with Halifax Water's Rules and Regulations through planning, education, inspections and monitoring at the source of these discharges from all industrial, commercial and institutional locations within HRM. Additionally, educational information is provided through various mediums for the residential sector to allow direct participation by the public in the protection of our natural marine and freshwater resources.

Staff previously provided updates to Council on the status of this program. Since the last update provided to Regional Council, activities that P2 staff have undertaken or completed in support of the Harbour Solutions Project include the following:

- Sources of periodic elevated pH levels discharged to the municipal sewer system in Dartmouth had been identified. These Industrial/Commercial/Institutional locations discharging elevated pH were required to install and operate pH pre-treatment to meet Halifax Water's discharge parameters. Monitoring of these locations for elevated pH events has been ongoing since previously reported with no events observed either at the ICI locations or at the Dartmouth WWTF.
- Sampling and inspections had previously identified locations of sea water intrusion to the Dartmouth wastewater collection system. These locations were provided to the Contractor. Monitoring is ongoing with any deficiencies that may permit seawater inflow being identified and reported.
- Elevated chloride and conductivity levels caused by seawater inflow to the wastewater collection system has been observed in the Halifax wastewater collection system. Investigations to confirm these locations as possible sources of sea water intrusion to the Halifax WWTF collection system were completed. Currently, three sites have been identified and work to prevent inflow is planned or ongoing.

Section 5

Water Quality Sampling Program

The Harbour Water Quality Monitoring Program was initiated in June, 2004. Samples are collected at 35 stations in the harbour, from the head of Bedford Basin to the harbour mouth, past McNabs Island. Stations are located down the centre of the harbour, and at various additional points including areas of recreational use such as the yacht clubs. Since 2006, additional samples have been taken in Dartmouth Cove, Fairview Cove, and new sampling sites were established at Herring Cove. Additional sampling was performed at Fairview Cove during 2007 to monitor for effects of sewage diversion due to construction at the Duffus Street Pumping Station. Sites have been added in late 2007/2008 around the NW Arm to monitor for changes as the Halifax facility came online.

Regular sampling was performed until 2009 on a bi-weekly basis for bacteria, metals, nutrients and water chemistry (the program was modified in 2009 – *see below*). Samples are collected at the surface and 10 metres at each site. The data is compiled into bi-weekly and quarterly summary reports. Testing for oils and biochemical oxygen demand (a measure of organic constituents in the water) has been discontinued at regular sampling sites due to levels which are routinely below detection limits. Methods for more sensitive detection of metals have been instituted. The program remains on schedule and below budget.

The purpose of the program is to establish existing baseline water quality conditions in the harbour, and to track changes as each of the three new treatment facilities is commissioned. The

sampling program was scheduled to continue under the present contract until June 2009. Based upon oceanographic modeling of the harbour, it was predicted that the water quality objectives set by HRM, adapted from the Halifax Harbour Task Force, would be met through the advanced primary sewage treatment provided for Halifax and Dartmouth.

Water quality objectives differ for different parts of the harbour, but for the Outer Harbour, Northwest Arm and Bedford Basin, it was predicted that guidelines for contact recreation would be met. With full commissioning of the Halifax plant in 2008, conditions in the Northwest Arm and Point Pleasant Park areas rapidly improved. Beaches were opened at Black Rock and the Dingle for the month of August 2008. Contact recreation guidelines were met, the only exceptions being the few days during or immediately following heavy rainfall events, when designed wet weather overflows occur at some points in the collection system.

With the January 2009 shutdown of the Halifax treatment plant, bacteria levels again exceeded the swimming guidelines for many areas of the harbour. The sampling program was suspended. With the re-commissioning of the Halifax plant in June 2010, sampling resumed. Bacteria levels throughout the harbour were acceptable for swimming by June 2010. The Dingle and Black Rock beaches were opened for swimming during the life guarding season July – August of 2010.

Quarterly reports and weekly/bi-weekly data reports and spreadsheets are available online at: <http://www.halifax.ca/harboursol/waterqualitydata.html>

The 2010 sampling program has concluded as of October 2010. The sampling program has demonstrated that water quality objectives for the harbour (Harbour Task Force, 1990) have been met with sewage treatment. This fulfills the condition of the federal project approval for follow-up monitoring. A summary report for the overall sampling results and changes in harbour water quality 2004-2010 will be prepared.

Section 6

Financial Information

As of December 31, 2010, the Harbour Solutions Project has spent \$321.66 million of its \$332.7 million capital budget. Spending for the 2nd and 3rd quarter of 2010/11 was \$0.32 million.

Inflation

Contract progress payments were subject to inflation adjustments over the life of the WWCS and WWTF contracts, provided that the work is completed by the Contractors before the specified “Date Certain” for each project component. Payment for all work completed after this date receives no inflation adjustment.

Over the life of the project, 2004/05 was an extraordinary year for construction-related inflation in HRM in terms of its strong increase. In 2005/06 the inflation trend stabilized somewhat, and was lower than the revised inflation projection of 6% (4.31% vs. 7.87% in 2004/05). Inflation

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for fiscal years 2006/07 and 2007/08 was 5.25%, and 7.78% respectively, while the first quarter of 2008/09 saw inflation of 6.24%.

As of June 2008, the final "Date Certain", \$11.51 million over and above budgeted inflation of \$12.3 million has been spent on the wastewater collection system and the wastewater treatment facilities. As the completion dates for all components have passed, there should be no further inflation incurred.

Contingency Spending

The contingency budget of \$18.20 million is largely set aside for addressing inflation beyond budgeted levels. The contingency is also being used to fund small items that have arisen through the contract amendments. At this point, the contingency balance needs to be reserved to cover potential costs associated with the ongoing operation of the HSP Office, contract management, Halifax WWTF recovery costs, contractor claims - at the very least until these costs are recovered through insurance or contractual obligations. Actual and planned spending of contingency funds is as follows (shown in millions):

Realized inflation in excess of budget	\$11.51
Amount committed for diffusers	2.50
net of CSIF contribution	(2.50)
Project amendments	0.91
HST on amendments	0.12
Herring Cove Water & Sewer (adjusted)*	0.77
Commitments	0.65
Uncommitted	<u>4.24</u>
Total	\$18.20

* As per Schedule F in the MOA, the unused portion of the \$1,656,400 originally transferred to the Herring Cove Community Integration Fund, in the amount of \$887,000, has been returned to the Contingency Fund.

Harbour Solutions Project Table

The table on the next page contains all expenditures and funding received to date. As the Community Integration Funds were not part of the transfer to Halifax Water, but receive their funding from the EP Reserve Q105, these accounts were fully funded before the remaining Reserve balance was transferred to Halifax Water. The total amount funded was \$0.15 million. In addition, HRM is expecting an amount of \$1.3 million from CSIF in the near future.

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The difference between the amount spent and the amount funded can, therefore, be explained as follows:

Total expenditures for project to date	\$ 321.63
CIFs fully funded, but not yet spent	<u>.15</u>
Total projected expenditures	\$ 321.78
Total received for project	\$ 320.48
To be received from CSIF	<u>1.30</u>
Total projected revenues	\$ 321.78

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Harbour Solutions Project 2nd and 3rd Quarter 2010/11 (in millions of dollars)

	Q2	Year to Date	Project Total	Budget	CSIF Diffuser	Budget Adjustment	Revised Budget
Firm Price Contracts							
Sewage Collection System	0.03	0.14	118.63	112.30	2.50	1.28	116.08
Sewage Treatment Facilities	0.16	0.55	135.11	136.90		0.26	137.16
Biosolids Processing Facility	-	-	12.58	12.50		0.14	12.64
Net HST	-	-	-	9.60			9.60
Community Liaison Committees	-	-	7.54	7.00		0.77	7.77
Land	-	-	4.92	4.80			4.80
Pre-Construction Contract	-	-	7.11	7.10			7.10
Total Firm Price Costs	0.19	0.69	285.89	290.20	2.50	2.45	295.15
Variable Costs							
Admin, Contract Mgmt, Communication	0.14	0.03	11.93	12.00			12.00
Contingency	-	-	-	18.20		-13.96	4.24
Inflation	-	-	23.81	12.30		11.51	23.81
Total Variable Costs	0.14	0.03	35.74	42.50		-2.45	40.05
Harbour Solutions Project Total Cost	0.32	0.72	321.63	332.70	2.50	-	335.20
Funding							
EP Reserve Levies	-1.51	-1.51	149.12	160.20		2.50	162.70
Long-term debt							
N.S. Municipal Finance Corporation	-	-	110.00	110.00			110.00
Federation of Canadian Municipalities	-	-	20.00	20.00			20.00
Cost Sharing							
Province	-	2.00	10.01	10.00			10.00
Canada Strategic Infrastructure Fund	-	-	31.20	30.00	2.50		32.50
Potential Short-term debt	-	-	-	2.50		-2.50	0.00
Total Funding *	-	-	320.33	332.70	2.50		335.20

- The Province of Nova Scotia has committed \$30 Million to the Project over a 15 year span. The \$10 Million shown in the table above represents the portion that will be received during the construction period.

Section 7

Public Involvement and Information Program (PIIP)

Public Messaging

The Halifax WWTF back on-line, the opening of Black Rock and Dingle beaches continued to be the major focus of messaging over this period. Mayor Kelly joined residents and media for a harbour dip at Black Rock beach on September 1st. With perfect weather, the event was well attended and garnered positive media coverage.

With the beaches reopened in July, as per the HRM supervised schedule, continued media/public education on Combined Sewer Overflows (CSOs) proved helpful. Negative media coverage of CSO events waned and beach closures started to become an understood safety practice following CSO events. A recognition of WWTF system capacity, as opposed to design flaw, came to be understood and accepted. More messaging will be required to reinforce this concept over the coming years.

Biosolids became a hot public issue following odours generated after the application of a soil/N-Viro soil amendment blend to sections of grass along Dunbrack St in August. A similar application at Point Pleasant Park and a number of Halifax Water properties did not produce the same odour concerns.

Following the event, HRM ceased the application of soil/N-Viro soil amendment blends on HRM owned property. There was extensive media coverage on the issue which took up considerable amounts of time for both HRM and Halifax Water staff.

At the Nov.16,2010 HRM Council COW session a motion was passed requesting Halifax Water undertake an independent review, by a third party scientific body, of the N-Viro product and report back to council. This process is currently underway.

Halifax Water, in its work with the Pollution Prevention group, continued its radio campaign with the Metro Radio Group (Q104, C100, CJCH, KIXX and Sun FM) and expanded to include News 95.7 and Lite 92.9. The campaign focuses on pollution prevention and the protection of our harbour. Previous radio ad campaigns have been award winning and it is hoped this latest campaign will be equally successful. The ads continue to make the link between Harbour Solutions Project and the Pollution Prevention Program. A TV ad campaign is also being utilized on CTV, with the same focus.

Community Liaison Committees (CLC)

The Herring Cove CLC has essentially completed their mandate with respect to the WWTF exterior design. The focus of the CLC is now on the landscaping around the WWTF, the Herring Cove pumping station and Latter's Pond recreation area. Staff from HRM's Community Development Division are now assisting in these efforts. The last full CLC meeting was held in December 2008 where a plan for Latter's Pond development was presented by HRM staff member Kevin Connelly and community

member Brian Dempsey. The plan was well received by the CLC and endorsed. Corporate Communications staff will continue to meet with CLC members as required. Corporate Communications also continues to work with the community to address any concerns that might arise during construction.

Presentations

Presentations are developed on an on-going basis for conferences, workshops and community groups. The presentations are updated regularly to correspond with project progress. These presentations are available on compact discs and on the HSP website. Three Harbour Solutions display units continue to be used at public meetings, trade/home shows, wastewater treatment facility openings and other events. The display units focus on the positive message of the project, stewardship and integrating of messaging with Halifax Water's Pollution Prevention Program.

As part of our presentation materials, Mayflower Models has been contracted to construct three (3) scale models of the new wastewater treatment plants. The Halifax and Dartmouth models are complete. These are a valuable tool in explaining the advanced primary treatment process.

Harbour Solutions Website

The Harbour Solutions website continues to be updated on a regular basis and is a valuable, user-friendly public source of information on the Project. PIIP staff continues to maintain the site for Harbour Solutions. The site features a large photo gallery, reference materials, past and current presentations, and a large collection of information related to the Wastewater Collection Systems, Wastewater Treatment Facilities, and the Biosolids Processing Facility. Links from the Halifax Water website also direct users to the HSP site housed with HRM.

Construction Communications

With on-street construction now over, meetings with Dexter and D&D, as well as, other HRM departments have ended. A PIIP member will attend meetings as they are deemed necessary to discuss matters that may impact the public. A PIIP member also attends, where required, meetings with businesses and residents that may be directly impacted by HSP related activities.

As required, construction updates will be emailed to stakeholders and posted on the website. Newspaper and radio ads, media releases and web postings will be developed for construction that may impact traffic.

Signage

Temporary construction signage has been removed and permanent signage installed at the three (3) WWTF sites.

Correspondence

As requested/required, letters and e-mails are drafted to address concerns/enquiries from citizens regarding the project. Halifax Water staff also respond to numerous requests for

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Harbour Solutions Project information from the general public, interest groups, media, Mayor Kelly and HRM Councillors, staff and others. Letters are also drafted for the CLC's and other levels of government.

Section 8

There was no active construction during this period, deficiency rectification was underway, and there were no construction safety issues.