



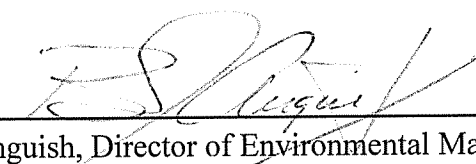
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Halifax Regional Council
January 25, 2005

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



Brad Anguish, Director of Environmental Management Services

DATE: January 20, 2004

SUBJECT: Aerotech/Airport Water System Transfer

INFORMATION REPORT

ORIGIN

2004/2005 Environmental Management Services/Wastewater Treatment Business Plan.

BACKGROUND

The Aerotech Park Industrial Park was officially opened in 1987 by the Halifax County Industrial Commission. Approximately \$25M was spent on infrastructure which included roads, site development, street lighting, water treatment/distribution, and wastewater treatment/collection systems.

Prior to 1987 Transport Canada had operated and maintained a sewage treatment plant and a water pumping station at the Halifax International Airport. As this infrastructure did not meet provincial and federal regulatory guidelines, an operating agreement was established between the Halifax County Industrial Commission and the Government of Canada whereby Halifax County provided new water and wastewater servicing to the Halifax International Airport in return for a payment of \$4.5M.

The Airport wastewater collection system was extended from the Airport to the Aerotech Park wastewater treatment facility. Potable water was provided to the Airport from the Bennery Lake treatment facility via an extension of the water distribution system from Aerotech Park to the Airport. The 1987 Agreement (between Transport Canada and HRM) provided for:

- a guaranteed water supply meeting Canadian Drinking Water Standards and wastewater secondary treatment maximum capability of 2,000,000 liters/day each;
- the ability to establish a combined water (65%) and sewer (35%) rate in order to recover operations and maintenance costs;
- continuation of the Agreement to successor organizations;
- joint approval pertaining to any additions or changes to the Airport water distribution or wastewater collection systems;
- specific water pressure and flow rate guarantees; and
- HRM operation and maintenance of the Government of Canada (Halifax International Airport) owned water distribution system, wastewater collection and fire protection infrastructure.

In 1987 a decision was made by the Halifax County Engineering and Public Works that the Aerotech water and sewer operations would be the responsibility of the Wastewater Treatment section as opposed to the Halifax County Water Utility. This was based upon on larger scale Wastewater Treatment operations expertise and cost considerations related to having two separate operations groups being located at Aerotech Park.

Amalgamation did not change the operations status of the Aerotech Park/Airport system. In February 1996 HRM Council considered various structure for the delivery of water services. In April 1996 a supplementary report was sent to Council to transfer all assets related to the supply of water (except those of Aerotech Business Park) to the Halifax Regional Water Commission - which is a public utility owned by the Halifax Regional Municipality. Provincial legislative changes were requested to retain the Halifax Regional Water Commission, and to dissolve the other utilities from the previous municipal units. Due to the complexity of amalgamation, senior staff agreed to defer discussions around the operation and ownership of the Aerotech/Airport water system to a future time. This discussion is occurring now as a recognition of the benefits of enabling EMS Wastewater Treatment to focus on their core service, and to move responsibility for Aerotech/Airport water services to the Halifax Regional Water Commission.

The Aerotech Water Treatment Plant located adjacent to Bennery Lake, is a 7.7 million liters per day (design capacity) conventional filtration plant similar in design to the Halifax Regional Water Commission's Pockwock and Lake Major plants. This treatment facility, which produces water that meets the guidelines for Canadian Drinking Water Quality, essentially consists of alum coagulation/flocculation, settling, and filtration followed by final pH adjustment and chlorine disinfection. A manganese removal process is incorporated during the summer months when high manganese levels are produced in the raw lake water.

Revenues for the water and wastewater operations and maintenance are generated by a water/sewer charge in accordance with the 1987 Agreement. Currently the combined Aerotech/Airport rate is \$1.324 per cubic metre. Additional revenue is realized from an allocation of fire protection rate revenues from HRM to the Aerotech operations budget. The 2005/06 gross operations and maintenance budget for the Aerotech/Airport water and wastewater services is \$710,000. Revenues generated in 2005/06 are expected to total \$534,000 with the balance of \$176,000 provided from the EMS/Wastewater Treatment operations budget. Staff expect to return to Council in 2005/06 to recommend approval of a rate increase. The Aerotech/Airport system is currently designated a commercial water utility which is not under the jurisdiction of the Nova Scotia Utility and Review Board.

In 2003 the Protected Water Area designation was approved by the Nova Scotia Minister of the Environment and Labour for the Bennery Lake Watershed. This process was initiated by staff and received HRM Council approval to proceed in December 1998. Land use regulations were developed in order to ensure maximum protection of Bennery Lake water quality. Development of the Bennery Lake Watershed Regulations included key stakeholders: Environmental Management Services and Planning and Development staff, NSDEL and Department of Natural Resources staff, Halifax/Halifax County Watershed Advisory Board, watershed landowners and the general public.

In accordance with Provincial requirements, the Aerotech (Bennery Lake) water treatment plant was issued a new permit in 2003 and a comprehensive systems audit was performed by CBCL Limited Consulting Engineers in 2004.

DISCUSSION

The purpose of this report is to provide Council with an overview of the Aerotech/Airport water system operations and explain the present staff position regarding the future of this service.

On several occasions (including Program & Service Review), various Councillors have questioned whether Halifax Regional Water Commission (HRWC) should be responsible for the Aerotech water operations. The Walkerton, Ontario disaster certainly highlighted the importance of properly operated water treatment and distribution systems. E. Coli contamination in Walkerton was a result of staff and regulatory agency negligence and having contaminated ground water (well) supply adjacent to cattle operations. The Walkerton system provided only minimal treatment consisting of periodic chlorine disinfection. Bennery Lake is a surface water supply having a protected watershed with a full conventional filtration treatment process.

Environmental Management Services staff believe the transfer of the Aerotech water operations to the HRWC should be considered for the following reasons:

- EMS/Wastewater Treatment should be concentrating on its core service - Wastewater Treatment. This division will be experiencing a large degree of operations and maintenance

growth during the next four to five years especially in relation to the Halifax Harbour Solutions treatment facilities, other existing plant expansions/upgrades and management of the overall biosolids program. HRM staff would no longer require dual certifications for both water and wastewater treatment;

- HRWC should concentrate on its core service and be responsible for management of all potable water treatment and distribution systems in HRM. HRWC has the expertise, organizational capacity and financial resources to provide a higher level of watershed protection, additional private (watershed) land purchases, water service approvals, capital planning, infrastructure depreciation, full cost recovery, security planning and overall due diligence. Further, ownership by HRWC will put the Aerotech water system at arm's length from the political process, as with other water systems in HRM. It is not known at this time if the water system operation and maintenance costs will increase or decrease as a result of ownership transfer to HRWC. Full details will be disclosed to Council once the analysis of the Rate Recovery study is complete;
- HRWC has historically assisted HRM with the Aerotech water operations. HRWC Design and Construction Standards are applied for both Aerotech Park and HIAA new water distribution projects, extensions, and modifications. The HRWC performs all leak detection procedures, and provided documentation and advice related to Security Planning. HRWC Pockwock and Lake Major watershed regulations provided the basic template for the Bennery Lake Watershed Protected Water Area regulations.

To date, the following actions have occurred regarding the potential transfer:

- Formation of an EMS/HRWC joint committee for information sharing and milestone planning;
- Meeting with HIAA to inform them of the possibility of the water system transfer; and
- Commissioning of a Rate Recovery Study (W.H. Gates/CBCL) by HRM in 2004. The purpose is to identify full operations and capital cost recovery for the water treatment and distribution systems. The final report will be issued in February, 2005.

Next steps:

- Financial assessment of the Rate Recovery Study by HRWC and HRM staff in order to determine customer cost impact and revenue options;
- Legal assessment of HRWC as the successor under the 1987 Agreement;
- Consultation with HIAA regarding amendments to the 1987 Agreement;
- HRWC staff to advise the HRWC Board of the potential request by HRM Council to transfer the Aerotech/Airport water system to the HRWC; and
- Report and recommendation to HRM Council by EMS staff (Spring 2005).

If approved by Council and accepted by the HRWC Board, the HRWC will proceed with an application to the Nova Scotia Utility and Review Board in June 2005 followed by a public hearing between September and November of 2005 and a final decision in early 2006. If approved, the projected transfer date is expected to be April 1, 2006.

BUDGET IMPLICATIONS

n/a

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

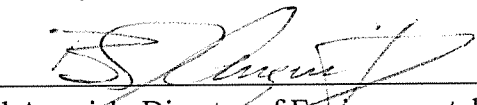
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ATTACHMENTS

None

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.

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Report Approved by: 
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