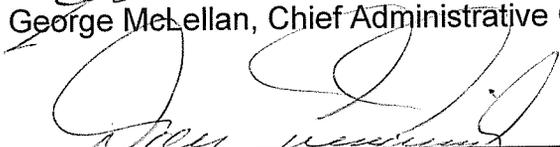

Halifax Regional Council
June 25, 2002

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:


George McLellan, Chief Administrative Officer


Dan English, Deputy Chief Administrative Officer

DATE: June 17, 2002

SUBJECT: Award of Unit Price Tender# 02-032, Aerotech Lagoon Sludge Removal and Disposal

ORIGIN

At the regular Council session on January 8, 2002, Council requested that staff make the necessary arrangements to ensure that biosolids accumulation in the Aerotech Lagoon does not in future, reach a critical point resulting in emergency action similar to that taken in July 2001.

RECOMMENDATION

It is recommended that Council Award Tender # 02-032, Aerotech Lagoon Sludge Removal and Disposal, Phase 1,2,3, and 4 to DRL Environmental Services for the removal and disposal of dewatered biosolids at the unit prices quoted for a submitted price of \$1,181,478.40 plus net HST for a total of \$ 1,257,435.00 and provisional phases 5,6, and 7, if required, at quoted unit prices with funding available from approved Aerotech Lagoon Reserve (Q117) as per the Budget implications of this report.

BACKGROUND

The Aerotech Biosolids Lagoon receives and stabilizes approximately 10 million gallons per year of HRM treatment facility biosolids and on-site residential septage. Since 1996 timelines for cleanout procedures have varied from 18 months to 2 years due to increases in loadings and process changes. Cleanout projects in 1999 and 2001 resulted in a shortfall in funding in the Aerotech Lagoon Reserve with the balance having to be accessed from the Environmental Protection Reserve with Council approval.

On January 8, 2002, HRM Council approved increases in private tipping fees and internal HRM treatment facility transfers to the Aerotech Lagoon in order to provide adequate funding for future biosolid removals.

Staff undertook an evaluation of past biosolids removal practices and concluded that a single tender/three year phased process would be beneficial to the overall operations. In the past, cleanouts were performed when the lagoon was close to or over capacity. This created process and overloading problems for the adjacent Aerotech Sewage Treatment Plant which treats overflow from the Lagoon.

There are a number of advantages using a multi phase removal approach:

- Price stability. Provides the ability to plan and ensure cost protection with quoted unit prices covering a three-year period.
- Nova Scotia Department of Environment and Labour approval. Only one approval certificate is required for the three-year period. NSDEL is in favour of this approach.
- Operational flexibility. The two (spring and fall) removals of 750 to 1000 dry tonnes per year allow staff to determine the optimum removal amounts for proper process control and for effective financial planning - ensuring that sufficient Reserve funds are available during each fiscal year.
- Sludge volumes: Since smaller amounts are removed at each phase (750 to 1000 tonnes max. compared to previous 2000 tonne removals) final disposal processes such as composting or sod farming will not require stockpiling of dewatered solids to the same extent as previous removals. This allows the general contractor to have access to a larger number of final disposal sub contractors and assists in gaining Environment approvals.

DISCUSSION

The HRM Tender document requested that contractors submit pricing on four biosolids removal phases : Spring/Fall 2002 and Spring/Fall 2003. Pricing is based on a total dewatering/removal of 1000 dry tonnes at each phase. In addition, the Tender provides for a minimum removal of 750 tonnes to a maximum of 1000 tonnes per phase. This was to allow HRM the option to determine actual amounts required to be removed provided sufficient financing was available. The remaining phases: five, six and seven were included as provisional items if an additional removal (phase 5) was required in the summer of 2003 and the third year (phases 6 &7) in the event the Aerotech Lagoon is still in operation. Please refer to Attachment (A) for a breakdown of unit and mobilization costs.

Four tender bids for phases 1,2,3 and 4-exclusive of taxes were received:

• Amber Contracting Limited	\$1,906,000.00
• R.J. MacIlsac Construction	\$1,724,000.00
• Dexter Construction Company Ltd.	\$1,252,000.00
• DRL Environmental Services	\$1,181,478.40

DRL Environmental Services was the lowest bidder and will be required to secure all NS Department of the Environment and Labour approvals under the terms of the tender contract. It is anticipated that work will commence within three to four weeks of the tender award .

This is a **Unit Price** contract consisting of Phases 1 through 4 and the remaining provisional Phases 5, 6 and 7. The cost will be dependent upon contractor mobilization/demobilization and actual quantities measured and approved by the HRM Project Manager. DRL Environmental Services also submitted the lowest unit prices for provisional phases 5, 6 and 7.

BUDGET IMPLICATIONS

Based on the lowest tendered price of \$1,181,478.40 plus net HST for a total of \$1,257,435.00 funding is available in the 2002/03 Aerotech Lagoon Reserve (Q117). The budget availability has been confirmed and approved by Financial Services.

Future Aerotech Lagoon Reserve (Q117) revenues will result from HRM transfers and septage tipping fees. On January 8, 2002, Council approved increases to HRM transfers and tipping fees which would realize a total of \$856,000 per fiscal year. 2002/03 operating expenses budgeted for 2002/03 total \$191,000. The net balance to reserve will be \$665,000. In addition, Council approved that any surplus tipping fee revenues generated be transferred to the Aerotech Reserve.

Prior to each subsequent cleanout phase HRM Finance will confirm availability of funds and Procurement will ensure that the terms of the tender are followed.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

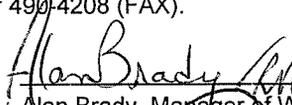
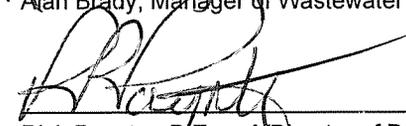
This report complies with the Municipality's Multi-Year Financial Policy, the approved operating Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

Status quo. As described above this approach has not worked well in the past due to variations in loadings, approval problems and uncertain cost impacts. Staff do not recommend this option.

ATTACHMENTS

Page 4 of Tender 02-032: Schedule of Quantities and Unit Prices (DRL Quotes)

Additional copies of this report and information on its status can be obtained by contacting the Office of the Municipal Clerk, at 490-4210 (TEL) or 490-4208 (FAX).	
Report prepared by:	 Alan Brady, Manager of Wastewater Treatment (835-9566)
Report approved by:	 Rick Paynter, P.Eng, A Director of Public Works and Transportation (490-4855)

6. SCHEDULE OF QUANTITIES AND UNIT PRICES

.1 Aerotech Lagoon Sludge Removal and Disposal

No.	Item	Unit	Est. Qty.	Unit Price	Amount
Phase 1 - Spring 2002					
1.	General Requirements, Mob./Demob.	LS	100%	\$ 29,280.00	\$29,280.00
*2.	Sludge Removal and Disposal	dry tonne	1000	\$ 263.89	\$263,890.00
Phase 2 - Fall 2002					
1.	General Requirements, Mob./Demob.	LS	100%	\$ 29,280.00	\$29,280.00
*2.	Sludge Removal and Disposal	dry tonne	1000	\$ 263.89	\$263,890.00
Phase 3 - Spring 2003					
1.	General Requirements, Mob./Demob.	LS	100%	\$ 29,719.20	\$29,719.20
*2.	Sludge Removal and Disposal	dry tonne	1000	\$ 267.85	\$267,850.00
Phase 4 - Fall 2003					
1.	General Requirements, Mob./Demob.	LS	100%	\$ 29,719.20	\$29,719.20
*2.	Sludge Removal and Disposal	dry tonne	1000	\$ 267.85	\$267,850.00

* Estimated quantity of 750-1000 dry tonne per phase.
 For pricing purposes we are using 1000 dry tonne.

SUB TOTAL	\$1,181,478.40
PLUS HST (15%)	\$ 177,221.76
(PHASE 1, 2, 3 AND 4 ONLY) TOTAL TENDER PRICE	\$1,358,700.16

PROVISIONAL ITEMS (requires written authorization by Contract Administrator)

				<u>UNIT PRICE ONLY</u>
Phase 5 - Mid Summer 2003				29,719.20
1.	General Requirements, Mob./Demob.	LS	100%	<u> </u>
2.	Sludge Removal and Disposal	dry tonne	750-1000	<u>267.85</u>
Phase 6 - Spring 2004				30,164.99
1.	General Requirements, Mob./Demob.	LS	100%	<u> </u>
2.	Sludge Removal and Disposal	dry tonne	750-1000	<u>271.87</u>
Phase 7 - Fall 2004				30,164.99
1.	General Requirements, Mob./Demob.	LS	100%	<u> </u>
2.	Sludge Removal and Disposal	dry tonne	750-1000	<u>271.87</u>

All dates will be confirmed by the Halifax Regional Municipality in consultation with the successful bidder.

Halifax Regional Municipality will supply a 400 (four hundred) amp power supply, potable water.