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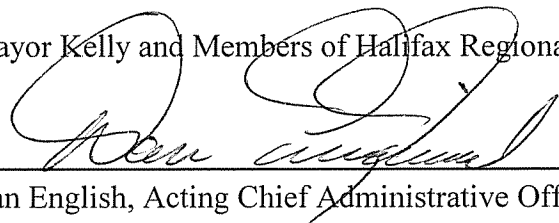


PO Box 1749
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Halifax Regional Council
June 8, 2004

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



Dan English, Acting Chief Administrative Officer

DATE: June 1, 2004

SUBJECT: **Award of Unit Price Tenders #-04-074 Aerotech Lagoon Sludge Dredging and Dewatering and #04-073R, Aerotech Lagoon Sludge Transportation and Disposal.**

ORIGIN

Staff

RECOMMENDATION

It is recommended that Regional Council:

1. Award Tender# 04-074, Aerotech Lagoon Sludge Dredging and Dewatering, Phase 1, 2, 3 and 4 to Clamex Environnement Inc. at the unit prices quoted for a submitted price of \$386,460 plus net HST for a total of \$399,711, and provisional phases 5 and 6 if required, at quoted unit prices (Attachment A) with funding available from the Sludge Tipping Fee Reserve Q117, as outlined in the Budget Implications of this report.
2. Award of Tender# 04-073R, Aerotech Lagoon Sludge Transportation and Disposal, Phase 1, 2, 3 and 4 to Amber Contracting at the unit prices quoted for a submitted price of \$1,354,000 plus net HST for a total of \$1,400,429, and provisional phases 5 and 6 if required, at quoted unit prices (Attachment B) with funding available from Reserve Q117, as outlined in the Budget Implications of this report.
3. Approve an expenditure of \$90,000 from Q117 for additional costs for site preparation, power and quality control costs related to the project.
4. Approve an Aerotech Lagoon \$.0225/gallon sludge tipping fee increase effective April 1, 2005.
5. Approve a withdrawal of up to \$109,231 from Q105 Environmental Protection Reserve to be transferred to the Wastewater Treatment Operating budget in 2005/2006.

BACKGROUND

The Aerotech Lagoon receives and further stabilizes approximately 5,000,000 gallons of septage and 5,000,000 gallons treated biosolids per year. In order to avoid an extensive buildup in the lagoon, biosolids must be removed, dewatered and disposed on a twice yearly basis.

On June 25, 2002, Halifax Regional Council approved Tender #02-032, the two-year/ four phase Aerotech Lagoon cleanout project with an option for a provisional year for phases (5) and (6). HRM decided not to exercise phases (5) and (6) due to problems experienced with the general contractor's performance and issues related to the sub contractors' final disposal locations especially related to phases (3) and (4).

Phase (3): involved sod farming of the dewatered biosolids at Maritime Sod in Cumberland County in the spring of 2003. An odour complaint coupled with compliance gaps in Maritime Sod's NSDEL permit resulted in an NSDEL Ministerial order stopping the application of biosolids at Maritime Sod. This issue became well publicized. Maritime Sod did initiate legal action against NSDEL

Phase (4): the general contractor retained Inglewood Farms in Colchester County to receive and land apply Aerotech dewatered biosolids in the fall of 2003. This is an NSDEL (Colchester Region) approved and permitted site for application of municipal and commercial produced biosolids. The Central Region (Bedford) of NSDEL was also involved in assuring all regulatory requirements were followed with respect to the Aerotech Lagoon biosolids removal/dewatering process.

Residents adjacent to Inglewood Farms raised concerns about the land application of Halifax Regional Municipality biosolids. Soon afterward this became an issue within Colchester County Council and a letter was sent to Mayor Kelly from Mayor Smith. The NSDEL subsequently issued a province wide moratorium on the land application of domestic wastewater biosolids and had since developed new "Guidelines for Application of Biosolids in Nova Scotia", May 13, 2004.

Following the decision not to proceed with phases (5) and (6) of Tender #02-032, staff proceeded with new tenders utilizing a composting approach of the Aerotech dewatered biosolids in order to ensure at least a Class A product thus avoiding or substantially reducing similar problems and perceptions as described above. The tender packages provide for a two-year (phases 1-4) cleanout program with the option for a provisional year (phases 5&6). It is expected that the Aerotech Lagoon will be replaced with Biosolids Dewatering Facility which will be commissioned and operating by June 2006 so unless there are unforeseen problems, the provisional third year will not be required.

The phases of the composting approach are:

- Phase 1 - Spring 2004
- Phase 2- Fall 2004
- Phase 3- Spring 2005
- Phase 4- Fall 2005

Phase 5 - Spring 2006

Phase 6 - Spring 2006

DISCUSSION

The new composting approach involves two separate tenders; dewatering and transportation/composting. Composting (\$70/wet tonne) is much more expensive than sod farming or agricultural application (\$15/ wet tonne).

Tender #-04-074 Aerotech Lagoon Sludge Dredging and Dewatering:

The HRM Tender document requests contractors to submit pricing based upon four removal phases: spring and fall 2004 and spring and fall 2005. Pricing is based upon a removal of 750 to 1000 tonnes dry solids per phase with an additional provisional year at quoted unit prices (Schedule A)

Five tender bids (exclusive of taxes) were received:

| | | |
|----|------------------------------|-----------|
| 1. | Clamex Environnement Inc. | \$386,460 |
| 2. | Consolidated Giroux | \$489,000 |
| 3. | Dexter Construction | \$498,000 |
| 4. | Amber Contracting | \$637,500 |
| 5. | Atlantic Industrial Cleaners | \$747,000 |

Clamex Environnement Inc. submitted the lowest price.

This is a unit price contract consisting of phases (1) through (4) and based upon a removal of 750 dry tonnes for each phase including mobilization/demobilization costs. Clamex Environnement Inc. submitted the lowest unit prices for remaining provisional phases if required.

Tender #04-073R, Aerotech Lagoon Sludge Transportation and Disposal.

The HRM Tender document requests contractors to submit unit pricing based upon four removal phases: spring and fall 2004 and spring and fall 2005. Pricing is based upon the transportation and composting of 3000 wet tonnes per phase including mobilization and demobilization costs. An additional provisional year is also included at quoted unit prices.

Two tender bids (exclusive of taxes) were received:

| | | |
|----|---------------------|-------------|
| 1. | Amber Contracting | \$1,354,000 |
| 2. | Dexter Construction | \$1,900,000 |

Amber Contracting submitted the lowest price and submitted the lowest unit prices for remaining provisional phases if required.

Additional Costs

A total of \$90,000 in additional funding is required for the cleanout project. Under the terms of the tender documents HRM is responsible for power costs which are expected to be \$10,000 for each of the four phases. An additional \$50,000 will be required for quality control such as additional biosolids testing and site preparation.

Tipping Fee/Operations Budget Increases

The new composting approach requires an additional \$218,463 (when compared to previous cleanout tenders) to fund phases (3) and (4) (05/06). In order to generate that additional revenue, staff are recommending that Council approve a \$.0225 per gallon Aerotech Lagoon tipping fee increase, effective April 1, 2005, which will realize approximately \$109,231 in 2005/2006. With Council approval the new tipping fee rate will increase from \$.08/gallon to \$.1025/gallon. The last increase of \$.0250 per gallon took place in April 2002.

The balance of \$109,231 will be funded through a transfer from the Q105 Environmental Protection Reserve to the EMS/ Wastewater Treatment Operating budget in 2005/06. It has been past practice to share the Aerotech lagoon operations and cleanout costs on a 50:50 basis between HRM treatment facilities through internal operating transfers and residential on-site septage tipping fees.

BUDGET IMPLICATIONS

Based upon the lowest tendered prices of:

- (A) \$386,460 plus net HST for a total of \$399,711 (#04-074)
- (B) \$1,354,000 plus net HST for a total of \$1,400,429 (#04-073R)
- (C) Additional funding of \$90,000

Total: \$1,890,140

Funding for the 2004/05 cleanout costs is available in the Sludge Tipping Fee Reserve Q117 and the budget availability has been confirmed and approved by Financial Services.

Funding for the 2005/2006 cleanout cost is pending Council approval of the tipping fee increase and transfer from the Q105 Environmental Protection Reserve. Based on current estimates of additional revenue to be generated from the fee increase, the reserve transfer amount is estimated at \$109,231. However, prior to the actual reserve transfer, the reserve balance will be reviewed and only the required amount, up to \$109,231, will be transferred. Staff are developing a long term funding model for stormwater and wastewater systems and infrastructure including a review of fees and assessment

of long term adequacy of reserves. The costs included here will be incorporated in that review.

Present Sludge Tipping Fees Reserve (Q117) revenues result from internal transfers from plant operations and tipping fees. The yearly balance net of operations costs transferred to reserve is \$662,800.

The yearly amount required to fund Tenders #04-074 and #04-073R plus additional costs for the two-year period will be \$1,890,140/2 or \$945,070 per year

| | | |
|-----------|--|-------------------|
| 2004/05 - | Balance in Q117 Reserve as of March 31, 2004 | \$346,077 |
| | Projected revenues | <u>\$662,800</u> |
| | Total available for 04/05 | \$1,008,877 |
| | Yearly (04/05) cleanout cost (phases 1 & 2) | <u>-\$945,070</u> |
| | Q117 Reserve carry over | \$ 63,807 |
| 2005/06 | Carry over of Q117 Reserve Balance | \$63,807 |
| | Projected revenues | <u>\$662,800</u> |
| | Total funding available | \$726,607 |
| | 05/06 cleanout cost (phases 3 & 4) | -\$945,070 |
| | Total funding available | <u>\$726,607</u> |
| | Shortfall | -\$218,463 |
| | \$.0225/gallon Tipping Fee increase (05/06) generates | \$109,231 |
| | Wastewater Treatment operations budget (05/06) (through a transfer from Q105 Environmental Protection Reserve) | \$109,231 |
| | Balance | 0 |

Prior to each subsequent cleanout phase HRM Financial Services will confirm availability of funds and Procurement and Environmental Management Services staff will ensure that the terms of the tenders are followed.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, and Capital budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation. Due to the additional cleanout costs in 2004/05, this report is recommending an increase in the 2004/2005 reserve withdrawal from the Q117 Sludge Tipping Fees Reserve and recommending withdrawals to be included in the annual reserve budget for 2005/06.

ALTERNATIVES

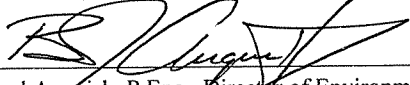
None recommended


ATTACHMENTS

- (A) (Clamex Environnement Inc) "Schedule of Quantities and Unit Prices)- Tender #04-074
- (B) (Amber Contracting) "Schedule of Quantities and Unit Prices" -Tender #04-073R

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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"A"

HALIFAX REGIONAL MUNICIPALITY
 Aerotech Lagoon Sludge Dredging Dewatering
 TENDER #04-074

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 MARCH 2004

FORM OF TENDER

4. SCHEDULE OF QUANTITIES AND UNIT PRICES

CLAMEX

.1 Aerotech Lagoon Sludge Dredging and Dewatering

| No. | Item | Unit | Est. Qty. | Unit Price |
|--------------------------------|--------------------------------|-----------|--------------|-----------------|
| Phase 1- May 2004 | | | | |
| 1 | Mobilization | LS | 100% | 15 000,00\$ |
| 2 | Sludge Dredging and Dewatering | dry tonne | 750 to 1,000 | <u>116,56\$</u> |
| Phase 2- September 2004 | | | | |
| 1 | Sludge Dredging and Dewatering | dry tonne | 750 to 1,000 | <u>116,56\$</u> |
| Phase 3- May 2005 | | | | |
| 1 | Sludge Dredging and Dewatering | dry tonne | 750 to 1,000 | <u>121,08\$</u> |
| Phase 4- September 2005 | | | | |
| 1 | Demobilization | LS | 100% | 15 000,00\$ |
| 2 | Sludge Dredging and Dewatering | dry tonne | 750 to 1,000 | <u>121,08\$</u> |

| PROVISIONAL ITEMS (requires written authorization by Contract Administrator/Engineer) | | | | |
|--|--------------------------------|-----------|--------------|-----------------|
| Phase 5- May 2006 | | | | |
| 1 | Sludge Dredging and Dewatering | dry tonne | 750 to 1,000 | <u>125,50\$</u> |
| Phase 6- September 2006 | | | | |
| 1 | Sludge Dredging and Dewatering | dry tonne | 750 to 1,000 | <u>125,50\$</u> |

"B"

HALIFAX REGIONAL MUNICIPALITY
 Aerotech Lagoon Sludge Transportation and Disposal
 TENDER # 04-073R FORM OF TENDER

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 APRIL 2004

4. SCHEDULE OF QUANTITIES AND UNIT PRICES

.1 Aerotech Lagoon Sludge Transportation and Disposal

| No. | Item | Unit | Est. Qty. | Unit Price | HST@ 15 % |
|--------------------------------|-----------------------|-----------|----------------|------------------|--------------|
| Phase 1- May 2004 | | | | | |
| 1 | Mobilization | LS | 100% | <u>30,000.00</u> | _____ |
| 2 | Sludge Disposal | wet tonne | 3,000 to 4,000 | <u>70.00</u> | _____ |
| 3 | Sludge Transportation | wet tonne | 3,000 to 4,000 | <u>39.00</u> | _____ |
| Phase 2- September 2004 | | | | | |
| 1 | Sludge Disposal | wet tonne | 3,000 to 4,000 | <u>70.00</u> | _____ |
| 2 | Sludge Transportation | wet tonne | 3,000 to 4,000 | <u>39.00</u> | _____ |
| Phase 3- May 2005 | | | | | |
| 1 | Sludge Disposal | wet tonne | 3,000 to 4,000 | <u>71.00</u> | _____ |
| 2 | Sludge Transportation | wet tonne | 3,000 to 4,000 | <u>39.00</u> | _____ |
| Phase 4- September 2005 | | | | | |
| 1 | Demobilization | LS | 100% | <u>10,000.00</u> | _____ |
| 2 | Sludge Disposal | wet tonne | 3,000 to 4,000 | <u>71.00</u> | _____ |
| 3 | Sludge Transportation | wet tonne | 3,000 to 4,000 | <u>39.00</u> | _____ |

| PROVISIONAL ITEMS (requires written authorization by Contract Administrator/Engineer) | | | | | |
|---|-----------------------|-----------|----------------|--------------|-------|
| Phase 5- May 2006 | | | | | |
| 1 | Sludge Disposal | wet tonne | 3,000 to 4,000 | <u>80.00</u> | _____ |
| 2 | Sludge Transportation | wet tonne | 3,000 to 4,000 | <u>49.00</u> | _____ |
| Phase 6- September 2006 | | | | | |
| 1 | Sludge Disposal | wet tonne | 3,000 to 4,000 | <u>80.00</u> | _____ |
| 2 | Sludge Transportation | wet tonne | 3,000 to 4,000 | <u>49.00</u> | _____ |

AMBER

ASL