

**Solid Waste Resource Advisory Committee
September 24, 2009**

TO: Bill Karsten, Chairman and Members of SWRAC

SUBMITTED BY:



Mike Labrecque, P.Eng., Director, T&PW



Jim Bauld, Manager Solid Waste Resources

DATE: August 31, 2009

SUBJECT: Cell 4B - Gas Collection System & Partial Permanent Cap Installation

ORIGIN

- March 2006 Regional Council Approval of Partial Interim Closure Methodology for Landfill Cells;
- MIRROR NS, operator of the HRM Otter Lake mixed waste processing and disposal facility

RECOMMENDATION

It is recommended that the Solid Waste Resource Advisory Committee recommend that Regional Council:

Approve spending \$204,341.92 (including net HST) for the Landfill Gas Collection System and \$523,486.13 (including net HST) for the Partial Permanent Cap Installation, a total project cost of \$727,828.05 from Capital Account CWI00966.

BACKGROUND

In the Approved 2009/10 Capital Budget, Council approved Capital Project No. CWI00966, Half Closure of Cell 4A, in the amount of \$3,367,000 to be expended in the 2009/10 fiscal year.

Also in the Approved 2009/10 Capital Budget, Council approved in principle Capital Project No. CWI00966, Half Closure of Cell 4B, in the amount of \$2,208,000 to be expended in the 2010/11 fiscal year. Since then, MIRROR NS has advised of the requirement to start some preliminary work before 2010/11, as outlined in the Discussion section of this report.

The methodology of half closure of each cell, lower half "A" - upper half "B", which was approved by Regional Council commencing with the closure of Cell 3A in March 2006, has yielded the intended and desired result - no reports of off-site odours from the Otter Lake facility. Prior to the half closure cell methodology, numerous reports of odours were received in communities adjacent to the Otter Lake facility. The approval of each cell closure in phases, lower half followed by the upper half the following year, has proven to be very effective in eliminating odours in communities adjacent to the Otter Lake facility.

DISCUSSION

MIRROR Nova Scotia has advised that to prevent off-site odours during the next twelve to eighteen months, two components of the Cell 4B Closure - Capital Project No. CWI00966 scheduled for 2010/11, are required for completion this fall.

Subject to agreement by SWRAC and approval by Regional Council, MIRROR NS will complete the following two components of project No. CWI00966 Half Closure of Cell 4B:

1. Landfill Gas Collection System at a total cost of \$204,341.92 (including net HST);
2. Partial Permanent Cap Installation (grading, geotextile, soil cover -approx. 26,000 square metres) at a total cost of \$523,486.13 (including net HST);

Total cost for the 2 components is \$727,828.05 (including net HST).

The total cost of work being completed for Half Closure of Cell 4A in 2009/10 is \$3,109,605.30, which is \$257,394.74 less than the budget estimate of \$3,367,000.

Staff and CBCL (HRM's owner engineer) have reviewed the design, quantities, unit prices and other project costs of both components for Cell 4B closure, which is recommended for completion this Fall. For cost comparison purposes, staff and CBCL referred to quantities and unit prices for the Closure of Cell 4A (which included a gas collection system and capping of the cell) which is being completed this summer.

MIRROR NS has advised that the Partial Permanent Cap Installation of Cell 4B will form the permanent cap for this portion of Cell 4B and, as such, will be a component of Cell 4B Closure costs (in 2010/11). Similarly, the installation of the nineteen (19) gas collection wells in Cell 4B this Fall will also be a component of Cell 4B Closure in 2010/11.

Based upon no reports of offsite odours since the implementation of a partial/phased cell closure methodology, staff has confirmed the requirement for advancing specific components of partial closure of landfill cells, prior to the full cell closure. Advancing partial closure of components for each cell is the recommended practise for the prevention of off-site odours and community protection.

BUDGET IMPLICATIONS

The total cost for the Landfill Gas Collection System and Partial Permanent Cap Installation is \$727,828.05 (net HST included). The budget availability has been confirmed by Financial Services.

Budget Summary: Capital Project No. CWI00966, Half Closure Cell 4 (B)

Cumulative Unspent Balance	\$2,144,108
Less : Cell 4B Gas Collection & Partial Permanent Cap	<u>\$ 727,828</u>
Balance of Account	\$1,416,280

Previously approved funding for this project (2008/09 and 2009/10) is confirmed, no impact to projected March 31, 2010 reserve balance. (Q120 Otter Lake Landfill Closure Reserve).

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

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

ALTERNATIVES

One alternative, not recommended, is not to release the \$727,828.08 from the Q120 Reserve in 09/10 and leave as part of the project for anticipated budget in 2010/11.

The completion of the Landfill Gas System and the Partial Permanent Cap for Cell 4B in the fall of 2009, will ensure a continuation of enhanced landfill gas collection and odour control at the Otter Lake facility, in the intervening period prior to the full closure of Cell 4B in 2010/11.

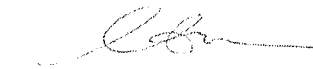
ATTACHMENTS

N/A

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Jim Bauld, Manager, Solid Waste Resources, T&PW, 490-6606

Financial Approval by:



Catherine Sanderson, Senior Manager, Financial Services, 490-1562