

DATE: April 9, 2015 **FILE:** 5360-20/CV

TO: Chair and Directors
Comox Valley Regional District (Comox Strathcona Waste Management) Board

FROM: Debra Oakman, CMA
Chief Administrative Officer

RE: Comox Valley Waste Management Centre - Phase 1 Closure
Construction contract award

Purpose

To request approval for the award of the contract for Phase 1 Closure of the Comox Valley Waste Management Centre (CVWMC).

Policy analysis

The 2012 Solid Waste Management Plan (SWMP), approved by the Ministry of Environment (MoE) on May 23 2013, and the Comox Strathcona Waste Management (CSWM) strategic plan and objectives support the design and closure work covered in the award of this contract.

Bylaw No. 284, being the “Comox Valley Regional District Delegation of Purchasing Authority, Bylaw No. 284, 2013” delegates authority for all regional district purchases and requires that the board approve all contracts in excess of \$100,000.

At the November 6, 2014 CSWM board meeting the following recommendation was approved:

THAT a contract for tender assistance and construction contract oversight of the phase 1 Comox Valley Waste Management Centre closure project be direct awarded to Tetra Tech EBA at a cost of \$669,681.87 excluding GST;

At the February 15, 2015 CSWM board meeting the following recommendation was approved:

THAT as a result of a competitive process, a contract be awarded to Perennial Energy for the supply of a landfill gas flare system as part of the Phase 1 closure project at the Comox Valley waste management centre in an amount US\$ 255,158 excluding applicable taxes and customs brokerage.

Executive summary

The CVWMC closure project is included in the SWMP capital project listing and has been a part of the CSWM strategic plan since 2012.

Under the requirements set by the Ministry of Environment (MoE) in the *Landfill Criteria for Municipal Solid Waste*, the *Landfill Gas Management Regulation* and *Environmental Protection Act*, the CVWMC is required to implement landfill gas capture and close landfill areas that are at their final grade in 2015.

The CVWMC Phase 1 closure project is a large, complex and multidiscipline capital project with a tight construction schedule. The project is essentially an earthworks project consisting of the

excavation and construction of two large storm water management/infiltration ponds, the re-contouring of the landfill to achieve final slope and elevation, the installation of geomembrane liner system to control storm water and leachate generation, the installation of 19 vertical and two horizontal landfill gas collection wells, a gas collection header system and flare station and all of the mechanical, electrical and control systems required to support the project. The project includes the final closure of 70 per cent of the existing landfill.

Tetra Tech EBA had previously been competitively selected as the successful consultant for the complex design project and awarded the closure design contract by the CSWM board in 2012. The updated landfill closure plan and operational updates, as well as phase 1 closure design documents prepared by EBA and under review by MoE.

The CVWMC phase 1 closure project is required in 2015 in order to gain and maintain compliance with various environmental regulations and the SWMP. Benefits from the project include greenhouse gas reduction from landfill gas capture and flaring, leachate reduction with expected improvement to groundwater and surface water, compliance with provincial regulations and significant local economic impact.

An invitation to tender was issued for the phase 1 closure works and at the closing date, nine tenders were received. All tender submissions were thoroughly reviewed by EBA to confirm that they included project experience, sub-contractors and suppliers, supervisory personnel, statement of equipment, statement of manufacturers and suppliers and statement of proposed alternate materials to demonstrate a clear understanding of the contract objectives and requirements for successful completion in accordance with the timelines identified in the specifications.

Wacor Holdings Ltd provided the lowest price, and met all the qualifications as reviewed by EBA in the amount of \$5,615,468.43 excluding GST.

Recommendation from the chief administrative officer:

THAT as a result of a competitive process, the contract for the Phase 1 Closure of the Comox Valley Waste Management Centre be awarded to Wacor Holdings Ltd in the amount of \$5,615,468.43 excluding GST;

AND FURTHER THAT the corporate legislative officer and chair be authorized to sign the contract.

Respectfully:

D. Oakman

Debra Oakman, CMA
Chief Administrative Officer

History/background factors

The Solid Waste Management Plan (SWMP) was updated in 2012 after undergoing a three stage process including:

- reviewing the current system and reporting on the 2003 SWMP
- reviewing options for the region's future requirements and selection of preferred options
- consulting with the community on the proposed SWMP

Throughout this process the Comox Strathcona Waste Management (CSWM) Board and Solid Waste Management Plan Advisory Committee (consisting of staff from municipalities,

representatives from the waste management industry, a local environmental group, a high school, MoE, and members of the CSWM board) provided input and feedback on the plans development.

Tetra Tech EBA was selected through a competitive process for conceptual design, detailed design and tendering for the closure project. EBA was also awarded the contract for contract administration, construction inspections, and quality assurance throughout the project.

A complex tender was issued in February 2015 and at the closing date, nine compliant tenders were received for the project. Wacor Holdings Ltd provided the lowest price and met all the qualifications as reviewed by EBA. The summary of the review by EBA can be seen in Appendix A.

Options

Recommendations:

1. Award CVWMC Phase 1 Closure contract to Wacor Holdings Ltd in the amount of \$5,615,468.43 (excluding taxes)
2. Do not award the contract and seek further board direction.

Staff recommend option 1 in that project proceed in alignment with the CVRD's SWMP and ensures the CVWMC is in compliance with governing regulations.

Financial factors

The CVWMC Phase 1 closure project is included in the 2015-2019 recommended financial plan and has been budgeted at \$8,050,000 which includes the construction costs, flaring system, engineering services and other project costs. The project is budgeted to be fully funded by new debt.

There were nine tenders received at the closing of the tender period. All tenders were reviewed by EBA to ensure compliance with the tender requirements. Wacor Holdings Ltd provided the lowest bid and met all the qualifications as reviewed by EBA. Tender prices can be seen below in table#1.

Table #1: CVWMC Phase 1 Tender Summary

Name of Firm	Total (Excluding GST)
Wacor Holdings Ltd	\$5,615,468.43
Jacob Brothers Construction Ltd	\$6,358,820.00
Windley Contracting Ltd	\$6,719,684.00
Upland Contracting Ltd	\$6,756,225.00
JJM Construction Ltd	\$7,096,575.00
King Hoe Excavating Ltd	\$7,339,113.00
Tervita	\$7,993,979.68
Copcan Civil Ltd	\$8,097,495.50
Secure Energy	\$10,019,113.64

Legal factors

The following governing regulations apply to the CVWMC. Included within these regulations are the legal requirements for compliance and the penalties associated for non-compliance.

- Landfill Criteria for Municipal Solid Waste 1993, MoE
- Landfill Criteria for Municipal Solid Waste, Draft Interim Second Edition 2013, MoE
- Environmental Management Act 2003,
- Landfill Gas Management Regulation 2008, MoE

Sustainability implications

Improvements of environmental conditions will include reduction of groundwater and surface water impacts by implementation a final landfill cover, and reduction of GHG emissions through capture and destruction of landfill gas.

In order to mitigate the harmful effects of water passing through the landfill and continuing to create leachate, there are requirements for closing finished areas of landfills once they reach final capacity, as set out by the MoE in the Landfill Criteria for Municipal Solid Waste and enforceable under the Environmental Protection Act.

The capture and destruction of methane is required under the Landfill Gas Management Regulation. The methane produced is accepted as a greenhouse gas (GHG) contributing to global warming and is “approximately 25 times more heat absorptive than carbon dioxide on a mass basis.”¹ Landfill gas accounts for “20 percent of the nation’s total methane emissions in 2007,”¹ and accounts for nearly 5 percent of BC’s GHG emissions.

Intergovernmental factors

The landfill site is located within the Village of Cumberland and as such an application for a development permit was submitted on March 11th to the Village for the Phase 1 closure project.

The phased closure and landfill gas management system of the CVWMC aide with the compliance of the following provincial regulations:

- Landfill Criteria for Municipal Solid Waste, Draft Interim Second Edition 2013, MoE
- Environmental Management Act (EMA) 2003,
- Landfill Gas Management Regulation 2008, MoE

Interdepartmental involvement

The CVWMC Phase 1 closure project is being led by the engineering services branch with support from financial services for project tendering and contract review and also by public affairs for the communication plan of the projects progress.

Citizen/public relations

In the following months a communication strategy will be developed to inform the public on the scope of the project, legal requirements, and environmental benefits. This will include information pamphlets onsite, and updates to the Comox Strathcona Waste Management website.

Prepared by:

C. Makinson

Cole Makinson, EIT
Engineering Analyst

Concurrence:

G. Bau Baiges

Gabriel Bau Baiges, PM
Manager of CSWM Disposal
Facility Operation

Concurrence:

Marc Rutten, P.Eng.
Senior Manager of
Engineering Services

Attachment: Appendix ‘A’ – EBA Tender Evaluation – Comox Valley Waste Management Centre – Landfill Closure Phase 1 - dated April 8, 2015

¹ **Conestoga-Rovers & Associates.** *Landfill Gas Management Facilities Design Guidelines.* Richmond: British Columbia Ministry of Environment, 2010

April 8, 2015

ISSUED FOR USE
FILE: ENVSWM03295-01Comox Valley Regional District
600 Comox Road
Courtenay, BC V9N 3P6

Attention: Mr. Gabriel Bau Baiges, PM
Manager of Projects CSWM Services, Comox Valley Regional District

Subject: Tender Evaluation - Comox Valley Waste Management Centre - Landfill Closure Phase 1

1.0 INTRODUCTION

This letter has been prepared by Tetra Tech EBA Inc. (TT EBA) to provide a recommendation for the Comox Valley Regional District (CVRD) to accept the tender of Wacor Holdings Ltd. (Wacor) to complete the works, as outlined in the tender Comox Valley Waste Management Centre (CVWMC) – Landfill Closure Phase 1 Tender, for a total amount of \$ 5,896,241.85 including all applicable taxes. TT EBA is the consultant who prepared the conceptual design, detailed design, tender documents and who will also be carrying out the Contract Administration, Construction Inspection and Quality Assurance for the project.

The works outlined in the tender documents generally include the following.

- Mobilization and set up of contractor and general works.
- Clearing and grubbing of treed area in preparation for establishment of storm water retention ponds.
- Soil stripping and stockpiling in various areas of the site.
- Construction of storm water retention ponds and flow conveyance swales and culverts.
- Interior road construction in various areas of the site.
- Installation of perimeter chain link fencing.
- Preparation and grading of landfill slope.
- Installation of perimeter leachate toe drain collection system.
- Installation of engineered landfill cap including geosynthetic liner system.
- Installation of landfill gas collection and monitoring system.
- Installation of owner supplied landfill gas flaring system.
- Construction of landfill gas flaring system compound including buildings and structures.
- General electrical, mechanical and instrumentation requirements.
- Start-up and commissioning of landfill gas collection and flaring system.

The CVWMC – Landfill Closure Phase 1 tender package was advertised on February 18, 2015 and closed on March 26, 2015 3 pm Pacific Time. A mandatory pre-tender meeting was held on March 4, 2015 at 2:00 pm Pacific Time. Approximately 40 contractors, subcontractors, and vendors attended the pre-tender meeting. Of the general contractors who attended the pre-tender meeting nine (9) submitted a tender package.

The following nine (9) general contractors submitted tender packages:

1. Wacor Holdings Ltd.
2. Jacob Bros. Construction Inc.
3. Windley Contracting (2010) Ltd.
4. Upland Contracting Ltd.
5. JJM Construction Ltd.
6. King Hoe Excavating Ltd.
7. Tervita Corporation
8. Copcan Civil Ltd.
9. Secure Energy (Onsite Services) Inc.

All tender submissions were thoroughly reviewed to confirm that they included project experience, sub-contractors and suppliers, supervisory personnel, statement of equipment, statement of manufacturers and suppliers and statement of proposed alternate materials to demonstrate a clear understanding of the contract objectives and requirements for successful completion in accordance with the timelines identified in the specifications.

In order to confirm that pricing submitted by all tenderers was in accordance with the tender specifications, the Schedule of Prices for each of the submitted tender packages was checked for mathematical correctness. There was one small mathematical error that did not have a bearing on the prices submitted. Other than the small mathematical error noted, all of the tenderers pricing met the tender specification requirements.

An evaluation was completed to confirm that addendum, bonding and sub-contractors submitted by all tenderers was in accordance with the tender specifications. All of the tender packages submitted acknowledged the receipt of seven (7) Addendums and submitted bonding and sub-contractor information that met the tender specification requirements.

In order to confirm that project experience, equipment and personnel submitted by all tenderers was in accordance with the tender specifications, related information for each of the submitted tender packages was evaluated. Generally all tenderers met the requirements of the tender specification requirements. There was no follow up for clarification with any other tenderers other than the lowest tenderer.

Three (3) references were contacted and asked a number of questions related to Wacor's performance on contracts within their jurisdiction and under their management. The general consensus from all three (3) references was that Wacor always demonstrated knowledge of the project requirements and that their equipment and manpower forces provided successfully performed the works on contracts completed under their management. All three (3) references indicated that they would certainly work with Wacor again.

Based on our review of the tender pricing, contractual requirements, and reference checks TT EBA is satisfied that the project experience demonstrated in Wacor's tender submission and the equipment/personnel available to be working on the construction project meet the performance requirements and general intent of the tender documents.

TT EBA is recommending that the CVRD award the CVWMC – Landfill Closure Phase 1 tender to Wacor Holdings Ltd. at the tendered amount of \$ 5,896,241.85 including all applicable taxes.

We trust this letter meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech EBA Inc.



Prepared by:
Guy L. Treadwell, C.E.T
Design Lead – Waste Management
Environment Practice
Direct Line: 403.723.6887
Guy.Treadwell@tetrattech.com



Reviewed by:
Jim Stacey, P.Eng
Project Manager – Waste Management
Environment Practice
Direct Line: 780.451.2130 x514
Jim.Stacey@tetrattech.com

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