

REGIONAL DISTRICT OF NANAIMO  
SOLID WASTE MANAGEMENT SELECT COMMITTEE  
AGENDA

Thursday, May 9, 2019

1:30 P.M.

Board Chambers

Pages

1. CALL TO ORDER
2. APPROVAL OF THE AGENDA
3. ADOPTION OF MINUTES
  - 3.1 Solid Waste Management Select Committee Meeting - March 5, 2019 3

That the minutes of the Solid Waste Management Select Committee meeting held March 5, 2019, be adopted.
4. INVITED PRESENTATIONS
  - 4.1 RDN Involvement in FCM Solid Waste Project in Vietnam  
*Staff to present.*
  - 4.2 Sustane Technology Video  
*Staff to present.*
5. DELEGATIONS
6. CORRESPONDENCE
7. UNFINISHED BUSINESS
8. REPORTS
  - 8.1 Award of Contract for Crawler Excavator 6

That the Regional District of Nanaimo Board:

    - a. approve the award of a contract in an amount up to \$317,000 (exclusive of taxes) for the purchase of a Volvo EC250EL Crawler Excavator from Great West Equipment; and
    - b. approve the purchase of a 6 year Maintenance Package for the Crawler Excavator for \$36,810 (exclusive of taxes).

Total value of the contract award request is \$353,810 (exclusive of taxes).

**8.2 Landfill Leachate Sampling Request from Environment and Climate Change Canada 9**

That the Board approve Regional District of Nanaimo involvement in the *Monitoring of Specific Contaminants of Concern to Three Species of Whales in Canada in Landfill Leachate Project* with Environment and Climate Change Canada - Waste Reduction and Management Division.

**8.3 Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw 1784.01, 2019 15**

1. That the “Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019” be introduced and read three times.

2. That the “Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019” be adopted.

**8.4 AVICC Special Committee on Solid Waste Management Vision and Goals 20**

That the Board receive this report for information.

**8.5 RDN Application for Continued Participation in Vietnam Solid Waste Management Project 23**

1. That the Board endorse continued participation in the Federation of Canadian Municipalities’ Vietnam Municipal Solid Waste Management Project from June 2019 to March 2021; and,

2. That the Board approve of Larry Gardner, Solid Waste Manager, to participate as part of the Canadian Technical Advisor team.

**9. BUSINESS ARISING FROM DELEGATIONS**

**10. NEW BUSINESS**

**11. ADJOURNMENT**

**REGIONAL DISTRICT OF NANAIMO  
MINUTES OF THE SOLID WASTE MANAGEMENT SELECT COMMITTEE MEETING**

**Tuesday, March 5, 2019  
1:30 P.M.  
Board Chambers**

In Attendance:	Director B. Geselbracht	City of Nanaimo
	Director K. Wilson	Electoral Area A
	Director L. Krog	City of Nanaimo
	Director D. Bonner	City of Nanaimo
	Director E. Hemmens	City of Nanaimo
	Director M. Swain	District of Lantzville
	Director T. Westbroek	Town of Qualicum Beach

Also in Attendance:	Director M. Young	Electoral Area C
	Director B. Rogers	Electoral Area E
	Director I. Thorpe	City of Nanaimo

R. Alexander	Gen. Mgr. Regional & Community Utilities
G. Garbutt	A/Chief Administrative Officer
M. Larson	Solid Waste Planner
R. Graves	Recording Secretary

**CALL TO ORDER**

The Chair called the meeting to order and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

**APPROVAL OF THE AGENDA**

It was moved and seconded that the agenda be approved as presented.

CARRIED UNANIMOUSLY

**ADOPTION OF MINUTES**

**Solid Waste Management Select Committee Meeting - January 10, 2019**

It was moved and seconded that the minutes of the Solid Waste Management Select Committee meeting held January 10, 2019, be adopted.

CARRIED UNANIMOUSLY

**INVITED PRESENTATIONS**

**Love Food, Hate Waste**

M. Ebueza presented to the Board.

## **CORRESPONDENCE**

### **Russell Dyson, CAO, Comox Valley Regional District, re Monitoring Sustane Facility - Chester, NS**

A brief discussion occurred on the correspondence.

## **REPORTS**

### **Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 1784**

It was moved and seconded that the "Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 1784, 2019" be introduced and read three times.

CARRIED UNANIMOUSLY

It was moved and seconded that the "Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 1784, 2019" be adopted.

CARRIED UNANIMOUSLY

It was moved and seconded that when approval is received from the Ministry of Environment of the Solid Waste Management Plan, that staff prepare a financial plan to coincide with the Plan to reduce solid waste.

CARRIED UNANIMOUSLY

### **Association of Vancouver Island and Coastal Communities Solid Waste Committee Update**

It was moved and seconded that the Solid Waste Management Select Committee receives this report for information.

CARRIED UNANIMOUSLY

### **Out of Region Waste Disposal Request from qathet Regional District**

It was moved and seconded that the Board approve the request from the qathet Regional District to accept municipal solid waste from residents of Lasqueti Island at Regional District of Nanaimo Solid Waste Management Facilities with the following conditions:

1. municipal solid waste from Lasqueti Island will be charged the prevailing Regional District of Nanaimo municipal solid waste tipping fee rate plus a 20% premium;
2. acceptance will be approved until March 1, 2026; and
3. the Board direct staff to amend Regional District of Nanaimo Solid Waste Management Bylaw No. 1531, 2007, Schedule 'D' to include these conditions.

CARRIED UNANIMOUSLY

**ADJOURNMENT**

It was moved and seconded that the meeting be adjourned.

CARRIED UNANIMOUSLY

TIME: 2:26 PM

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CHAIR

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**TO:** Solid Waste Management Select **MEETING:** May 9, 2019  
Committee

**FROM:** Jane Hamilton **FILE:** 1240-20-SW  
Superintendent, Disposal Operations

**Subject:** Award of Contract resulting from Request for Proposal No. 19-002: One (1) New  
Landfill Crawler Excavator

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**RECOMMENDATION**

That the Regional District of Nanaimo Board:

- a) approve the award of a contract in an amount up to \$317,000 (exclusive of taxes) for the purchase of a Volvo EC250EL Crawler Excavator from Great West Equipment; and
- b) approve the purchase of a 6 year Maintenance Package for the Crawler Excavator for \$36,810 (exclusive of taxes).

Total value of the contract award request is \$353,810 (exclusive of taxes).

**SUMMARY**

This report is to advise the Regional District of Nanaimo (RDN) Board of the results of Request for Proposal (RFP) No. 19-002: One (1) New Landfill Crawler Excavator, and to recommend award of a contract in an amount of up to \$353,810 (exclusive of taxes) to Great West Equipment.

**BACKGROUND**

Pursuant to the RDN Delegation of Authority Bylaw No. 1661 and the Authorization to Purchase and Pay Accounts Policy No. A2.9, procurement contracts which exceed a value of \$150,000 (exclusive of taxes) require the approval of the Board of Directors.

This report is being brought forward to the Solid Waste Management Select Committee to consider a recommendation to the RDN Board to authorize the award of a contract to purchase One (1) New Landfill Crawler Excavator.

Heavy equipment is typically considered to have a service life of about 10,000 hours. Solid Waste Services currently owns and operates a 2007 Crawler Excavator with approximately 11,500 hours of usage, which is scheduled and budgeted for replacement in 2019 in accordance with the asset management plan and 2019 capital budget. The Excavator is versatile performing work including

roadbuilding, trenching, loading of trucks, burying of controlled waste and application and grooming of soil.

A RFP was issued on January 24, 2019 and was publicly advertised on the RDN and BC Bid websites. The RFP closed on February 13, 2019 and four submissions were received. The four submissions met all of the technical specifications and three of them were within the published budget:

Ranking	Company	Pricing (exclusive of taxes)
1	Great West Equipment	\$317,000
2	Brandt Tractor	\$359,500
3	Inland Kenworth	\$371,978
4	Finning	\$373,000

Great West Equipment’s submission was the highest ranked proposal as well as the lowest cost proposal. The RFP specified requirements including minimum operating weight, track-width and a guard system that allows efficient work in solid waste. The Great West proposal offers:

- a lifetime warranty on boom stick and frame included;
- heaviest operating weight and most horsepower;
- no minimum charge or fees for calls to the RDN Landfill; and
- the lowest capital cost.

The 2007 excavator has a low residual value estimated at about \$45,000 due to its condition and high operating hours. The solid waste department plans to retain this unit have it assigned to the area designated to receive controlled waste. The excavator will receive low use for this purpose and should operate for a few more years. This has the operational advantage of reducing travel time and track wear on the new excavator.

**ALTERNATIVES**

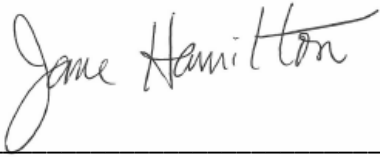
1. That the RDN Board approve the award of RFP No. 19-002: One (1) New Landfill Crawler Excavator in an amount up to \$353,810 (exclusive of taxes) for the purchase of a Volvo EC250EL Crawler Excavator and Maintenance Package from Great West Equipment.
2. Provide alternate direction to staff.

**FINANCIAL IMPLICATIONS**

The current financial plan has scheduled replacement of the Crawler Excavator in 2019. The cost of the proposed Crawler Excavator and Maintenance Package is within the approved budget amount of \$372,000.

**STRATEGIC PLAN IMPLICATIONS**

The purchase of a Landfill Crawler Excavator from Great West Equipment is consistent with the Strategic Plans focus on funding infrastructure in support of our core services employing an asset management focus.



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Jane Hamilton, Superintendent, Disposal Operations  
jhamilton@rdn.bc.ca  
April 2, 2019

Reviewed by:

- L. Gardner, Manager, Solid Waste
- K. Felker, Purchasing Manager, Finance
- R. Alexander, General Manager, Regional & Community Utilities
- J. Beauchamp, Director of Finance
- P. Carlyle, Chief Administrative Officer



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**TO:** Solid Waste Management Select Committee      **MEETING:** May 9, 2019

**FROM:** Kirsten Gellein, Special Projects Assistant      **FILE:** 5360-01

**Subject:** Landfill Leachate Sampling Request from Environment and Climate Change Canada

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**RECOMMENDATION**

That the Board approve Regional District of Nanaimo involvement in the *Monitoring of Specific Contaminants of Concern to Three Species of Whales in Canada in Landfill Leachate Project* with Environment and Climate Change Canada - Waste Reduction and Management Division.

**SUMMARY**

Environment and Climate Change Canada - Waste Reduction and Management Division has asked the Regional District of Nanaimo (RDN) to participate in the *Monitoring of Specific Contaminants of Concern to Three Species of Whales in Canada in Landfill Leachate Project* (Project). The RDN Regional Landfill would be one of ten sampling locations for the Project, all of which are in habitat proximity to the Southern Resident Killer Whales, St. Lawrence Beluga or the Northern Atlantic Right Whales. Requirements of involvement from the RDN are minimal. SNC-Lavalin will be conducting the sampling and data management for the Project on behalf of Environment and Climate Change Canada.

Environment Canada and SCN Lavalin are aware that the Cedar Landfill has a leachate collection system. Collected leachate is conveyed through the sanitary sewage treatment system and treated at the Greater Nanaimo Pollution Control Centre which ultimately discharges treated effluent to the Salish Sea.

**BACKGROUND**

SNC-Lavalin would like to conduct leachate sampling and analysis from the RDN Regional Landfill as part of the Government of Canada, Environment and Climate Change Canada *Monitoring of Specific Contaminants of Concern to Three Species of Whales in Canada in Landfill Leachate Project*.

Environment and Climate Change Canada is interested in evaluating the contribution of land-based sources of pollution to water pollution, including from landfills, in order to assess the potential impacts of contaminants on to Southern Resident Killer Whales (SRKW), St. Lawrence Beluga and North Atlantic Right Whales. Ten landfills located in proximity to the habitats of these three whale species will be participating in the Project. To aid the recovery of the SRKW,

the Government of Canada has a current consultation project<sup>1</sup> which includes public engagement through surveys and community meetings; it appears monitoring landfill leachate will provide supplementary data to a small sub-study within the contaminant context of the SRKW recovery project.

The Government of Canada will bear all costs of the study, and has contracted SNC-Lavalin for sampling and data management.

Attachment 1 is a Letter of Agreement between Environment and Climate Change Canada and the RDN.

The schedule of sampling events and a list of the substances that are to be sampled for is listed in Attachment 2. All results will be protected by SNC-Lavalin and Environment and Climate Change Canada and treated in accordance with the *Privacy Act* and the *Access to Information Act*.

## ALTERNATIVES

1. That the Board approve RDN involvement in the *Monitoring of Specific Contaminants of Concern to Three Species of Whales in Canada in Landfill Leachate Project* with Environment and Climate Change Canada - Waste Reduction and Management Division.
2. That the Board not approve RDN involvement in the *Monitoring of Specific Contaminants of Concern to Three Species of Whales in Canada in Landfill Leachate Project* with Environment and Climate Change Canada - Waste Reduction and Management Division.
3. The Board provide alternate direction to staff.

## FINANCIAL IMPLICATIONS

All costs for the Project are born by the Government of Canada. There will be very minimal staff time for coordinating with the contractor to partake in sampling, and providing data on waste tonnage, leachate flow, and site operational data.

## STRATEGIC PLAN IMPLICATIONS

Focus on the Environment – This Project will contribute to the understanding of how land based pollution may effect water pollution and the impact that may have on whales.

Focus On Relationships – This Project gives the RDN an opportunity to partner with Environment and Climate Change Canada.



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Kirsten Gellein

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<sup>1</sup> <http://www.pac.dfo-mpo.gc.ca/consultation/fm-gp/srkw-eprs/potential-meas-mes-poss-eng.html>

kgellein@rdn.bc.ca  
April 10, 2019

Reviewed by:

- L. Gardner, Manager, Solid Waste Services
- R. Alexander, General Manager, Regional and Community Utilities
- P. Carlyle, Chief Administrative Officer

Attachments

1. Letter of Agreement
2. Annex 1



## Letter of Agreement for Monitoring of Specific Contaminants of Concern to Three Species of Whales in Canada in Landfill Leachate between Environment and Climate Change Canada (Waste Reduction and Management Division) and \_\_\_\_\_

### Background

Whales are vital to healthy marine ecosystems, and an important part of eco-tourism in Canada's Pacific and Atlantic coastal regions, and in the St. Lawrence Estuary. A complex mix of threats—such as the availability of prey, increased noise levels from passing ships and pollution in the water—are endangering many whale populations, notably the Southern Resident Killer Whale, the North Atlantic Right Whale and the St. Lawrence Estuary Beluga. The degradation of water quality due to environmental contaminants poses a particularly serious threat to whales, their prey and their habitat.

In order to assess the potential impacts of contaminants on whales, Environment and Climate Change Canada is interested in evaluating the contribution of land-based sources of pollution to water pollution, including from landfills. Certain substances of concern, including *Canadian Environmental Protection Act's* toxic and Chemical Management Plan substances have been detected or are expected to be found in landfill leachate. Contaminants may be leaching from consumer products or manufactured items disposed in landfills at end of life. This study aims to verify if any of the contaminants identified (refer to Annex 1) may be released from landfills (via leachate) in concentrations and loadings that would be of concern in the receiving environment and to endangered whales species.

### Declaration of Intent

This letter expresses the intent of Environment and Climate Change Canada and \_\_\_\_\_ to enter into an agreement for a confidential landfill leachate monitoring program at the \_\_\_\_\_ landfill in \_\_\_\_\_. \_\_\_\_\_ hereby grants access to Environment and Climate Change Canada staff and contractors they will hire in order for them to collect samples of landfill leachate at the \_\_\_\_\_ Landfill. SNC-Lavalin Inc. has been contracted to conduct landfill leachate sampling on behalf of Environment and Climate Change Canada. This consent is being given subject to the following conditions:

- All analytical results from sampling at the \_\_\_\_\_ Landfill will be kept confidential by Environment and Climate Change Canada and its contractors and will be provided to \_\_\_\_\_.
- The final report prepared by Environment and Climate Change Canada will not identify the \_\_\_\_\_ Landfill or any others facilities where sampling was done and no reader will be able to, by deduction, guess at the results of the testing at the \_\_\_\_\_ Landfill;
- \_\_\_\_\_ will receive a copy of the final report at least one month in advance of it becoming public. During this time, \_\_\_\_\_ will keep the report confidential;
- \_\_\_\_\_ also hereby agrees to provide data on waste tonnage, leachate flow, and other pertinent site operational data to assist in the interpretation of the sampling results. Any such information provided will be kept strictly confidential by Environment and Climate Change Canada and its contractors and in addition subject to the conditions noted above.



It is understood that on-going participation in this undertaking is voluntary, and the information obtained during the sampling events is to be used to further Environment and Climate Change Canada's understanding of the presence of target substances. It is also understood that the list of target substances may change over time. Depending on previous results and future Environment and Climate Change Canada risk assessment and monitoring needs, some substances may be added while others may be removed from list. Before any additional testing can be done, consent will need to be sought from the \_\_\_\_\_ landfill.

As noted above, for the purposes of reporting data, no reference or information possibly leading to the site identification will be made and sampling results from any samples collected at the site will be provided to \_\_\_\_\_.

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Nathalie Perron  
Director, Waste Reduction and Management Division  
Industrial Sectors, Chemicals and Waste Directorate  
Environment and Climate Change Canada

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Landfill



## ANNEX 1

### Sampling events and substances to be sampled in landfill leachate

#### Sampling events

Fiscal Year	# of sampling events
2018-2019	1
2019-2020	2
2020-2021	2

#### Substances to be sampled in landfill leachate

##### **Substances of concern for three species of whales**

*Dichlorodiphenyltrichloroethane (DDT)*  
*Polychlorinated Biphenyls (PCBs)*  
*Polybrominated Biphenyls (PBBs)*  
*PBDEs (Total and congeners)*  
*Perflurinated Compounds (PFCs)*  
*Tributyltin (TBT) and Dibutyltin (DBT)*  
*Polychlorinated paraffins (chlorinated alkanes)*  
*Polychlorinated naphthalenes (PCNs)*  
*Alkyl-phenol ethoxylates -Nonylphenols (NPs) and Octylphenol (OP)*  
*Polychlorinated terphenyls (PCTs)*  
*Total and Dissolved Metals*  
*Mercury*

##### **Emerging Contaminants**

*Phthalates:*  
*1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (DEHP)*  
*Flame retardants:*  
 Decabromodiphenyl ethane (DBDPE) and Dechlorane Plus (DP)

##### **Other Substances of Concern**

Bisphenol A (BPA)  
 1,2-bis(2,4,6 tribromophenoxy)ethane (BTBPE)  
 Cyanide

##### **Pharmaceuticals and Personal Care Products (PPCPs)**

##### **General Chemistry**

General Chemistry (BOD(1), COD, NH<sub>3</sub>, pH)  
 General Chemistry (Alkalinity, TSS, TKN, Total Phosphorus, TOC, nitrate/nitrite)

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**TO:** Solid Waste Management Select Committee      **MEETING:** May 9, 2019

**FROM:** Meghan Ebueza  
Solid Waste Planner      **FILE:** 5365-02

**Subject:** Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01 – Schedule E

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**RECOMMENDATIONS**

1. That the “Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019” be introduced and read three times.
2. That the “Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019” be adopted.

**SUMMARY**

In March 2019, the Regional Board approved the request from the qathet Regional District to accept municipal solid waste (MSW) from residents of Lasqueti Island at Regional District of Nanaimo (RDN) Solid Waste Management Facilities with the following conditions:

1. MSW from Lasqueti Island will be charged the prevailing RDN MSW tipping fee rate plus a 20% premium; and
2. Acceptance will be approved until March 1, 2026.

The RDN Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019 establishes acceptance of Lasqueti Island MSW at a tipping fee rate of \$150/tonne increasing to \$156/tonne starting July 1, 2019.

**BACKGROUND**

The Chair of the qathet Regional District (qRD) requested, on behalf of the Lasqueti Island Sub-Plan, that the RDN consider establishing an agreement whereby MSW from Lasqueti Island be accepted for disposal at RDN Solid Waste Management Facilities.

Approval of the request is largely based on:

1. The minor amount of waste generated on Lasqueti Island;
2. The logistical challenges and lack of alternatives for managing the waste;
3. RDN tipping fee revenues cover disposal costs, and therefore, would not result in an additional burden placed on RDN taxpayers; and,

4. Authorization until March 1, 2026 provides a sufficient length of time for qRD to set up and invest in a transportation system and still provides for reconsideration of the arrangement by a future RDN Board.

The Bylaw amendment, as attached, implements the Board’s previous decision from the March 26, 2019 meeting to accept the waste and establish the tipping rate, as per the following motion:

*It was moved and seconded that the Board approve the request from the qathet Regional District to accept municipal solid waste from residents of Lasqueti Island at Regional District of Nanaimo Solid Waste Management Facilities with the following conditions:*

1. *municipal solid waste from Lasqueti Island will be charged the prevailing Regional District of Nanaimo municipal solid waste tipping fee rate plus a 20% premium;*
2. *acceptance will be approved until March 1, 2026; and*
3. *the Board direct staff to amend Regional District of Nanaimo Solid Waste Management Bylaw No. 1531, 2007, Schedule ‘D’ to include these conditions.*

**ALTERNATIVES**

1. That “Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019” be introduced and read three times; and,
2. That “Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019” be adopted.
3. That staff be provided with alternate direction.

**FINANCIAL IMPLICATIONS**

Tipping Fee Rate for MSW from Lasqueti Island will be charged as follows in the table below, based on the In-Region MSW tipping fee rate plus a 20% surcharge.

	<b>Current Rate</b>	<b>Starting July 1, 2019</b>
<i>In-Region</i>	\$125 per tonne	\$130 per tonne
<i>20% Surcharge</i>	\$25 per tonne	\$26 per tonne
<b><i>Lasqueti Island</i></b>	<b>\$150 per tonne</b>	<b>\$156 per tonne</b>

Based on the current MSW tipping fee rate plus a 20% surcharge, and anticipated residual waste of 100 tonnes annually, revenue generated by accepting municipal solid waste from Lasqueti Island would be approximately \$15,000 per year.

**STRATEGIC PLAN IMPLICATIONS**

Focus On Relationships- We Look For Opportunities To Partner With Other Branches Of Government/Community Groups To Advance Our Region



The Bylaw amendment will support a collaborative approach between qRD and the RDN to manage residual solid waste from a geographic area hard to access by the qRD. This collaborative approach is in keeping with the Association of Vancouver Island and Coastal Communities goal of working towards a cooperative long-term sustainable strategy for solid waste management on Vancouver Island.



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Meghan Ebueza  
mebueza@rdn.bc.ca  
April 10, 2019

Reviewed by:

- L. Gardner, Manager, Solid Waste Services
- R. Alexander, General Manager, RCU
- P. Carlyle, Chief Administrative Officer

Attachments

1. Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019

**REGIONAL DISTRICT OF NANAIMO**  
**BYLAW NO. 1784.01**  
**A BYLAW TO AMEND REGIONAL DISTRICT OF NANAIMO TIPPING FEE**  
**AND SOLID WASTE DISPOSAL REGULATION**

WHEREAS the “Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 1784, 2019” established a scale of fees payable for depositing solid waste at Solid Waste Management Facilities within the Regional District of Nanaimo;

AND WHEREAS the Board of the Regional District of Nanaimo wishes to amend schedule ‘E’ established by Bylaw No. 1784;

THEREFORE BE IT RESOLVED that the Board of the Regional District of Nanaimo in open meeting assembled enacts as follows:

**1. Citation**

This bylaw may be cited for all purposes as the “Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019”

**2. Amendment**

“Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784, 2019” is amended as follows:

- a) By repealing Schedule ‘E’ and replacing it with Schedule ‘E’ attached to and forming part of this bylaw.

Introduced and read three times this \_\_\_ day of \_\_\_\_\_, 2019.

Adopted this \_\_\_ day of \_\_\_\_\_, 2019.

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CHAIR

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CORPORATE OFFICER

Schedule 'E' to accompany "Regional District of Nanaimo Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 1784.01, 2019"

\_\_\_\_\_  
Chair

\_\_\_\_\_  
Corporate Officer

### Schedule 'E'

Fees and procedures for use of the **Regional District** Landfill for disposing of **Municipal Solid Waste** and **Controlled Waste** which originates from the Cowichan Valley Regional District, are:

1.	<b>Controlled Waste originating from the Cowichan Valley Regional District</b>	<b>Flat rate 0-50kg</b>	<b>51 kg or greater</b>
a.	<b>Asbestos</b>	\$30.00	\$600.00/tonne
b.	<b>Dead Animals</b>	\$20.00	\$300.00/tonne
c.	<b>Invasive Plant Species</b>	\$20.00	\$300.00/tonne

2.	<b>Solid waste under the direct control of the Cowichan Valley Regional District*</b>	<b>Tonne Rate</b>
a.	<b>Municipal Solid Waste</b>	Tonne rate includes a 20% <b>Surcharge</b> over the current Schedule 'A' rate

\*Solid waste acceptance is contingent upon:

1. Prior written notice from Cowichan Valley Regional District to the **General Manager** explaining the reasons for, and the anticipated duration, of contingency landfilling;
2. The **General Manager's** acknowledgement of acceptance; and,
3. Any conditions the **General Manager** may specify with respect to the duration, requirements regarding acceptance or reporting.

3.	<b>Solid waste under the direct control of the qRD from Lasqueti Island**</b>	<b>Tonne Rate</b>
a.	<b>Municipal Solid Waste</b>	Tonne rate includes a 20% <b>Surcharge</b> over the current Schedule 'A' rate

\*\* Municipal solid waste acceptance is approved until March 1, 2026.

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**TO:** Solid Waste Management Select **MEETING:** May 9, 2019  
Committee

**FROM:** Meghan Ebueza **FILE:** 5365-02  
Solid Waste Planner

**Subject:** AVICC Special Committee on Solid Waste Management

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### **RECOMMENDATION**

The Board receive this report for information.

### **SUMMARY**

The Association of Vancouver Island and Coastal Communities (AVICC) Special Committee on Solid Waste Management requires yearly endorsement from the AVICC membership and support on the Special Committee's vision and goals. At the last Special Committee meeting the committee members supported the revised vision and goals which were presented at the AVICC Convention April 12-14<sup>th</sup>, 2019 as executive resolution ER1 – AVICC Special Committee on Solid Waste Management. The Executive Resolution was endorsed on April 13<sup>th</sup>, 2019 at the AVICC Convention.

### **BACKGROUND**

The AVICC Special Committee on Solid Waste Management supported the following executive resolution at the recent regional district representatives meeting held on March 25<sup>th</sup>, 2019:

WHEREAS the Association of Vancouver Island and Coastal Communities' (AVICC) Special Committee on Solid Waste Management, with representatives from nine regional districts, was formed in 2015 to research, prepare and present the findings and recommendations to the 2016 convention on this mandated service;

AND WHEREAS the Special Committee reported out to the AVICC membership at the 2016, 2017 and 2018 conventions, the membership endorsed the action plans and further directed the Special Committee to report back to the 2019 convention with outcomes;

THEREFORE BE IT RESOLVED THAT the AVICC endorses and supports the Special Committee's vision and goals as:

Vision:

That local governments on Vancouver Island, qathet and the Sunshine Coast are working together to address the opportunities and challenges of managing solid waste

and our residents are aware of; support the need to reduce and manage our waste in a sustainable manner; and to work toward achieving zero-waste in our communities.

Goals:

1. Ensure information is shared between AVICC local governments to encourage best practices and common solutions in solid waste management and consistent messaging to our residents.
2. Collect and maintain appropriate and consistent data associated with solid waste management within the AVICC.
3. Support an informed and unified voice to assist efforts with the Province, NGOs and other partners in developing effective waste management solutions and policies.

AND BE IT FURTHER RESOLVED THAT the AVICC endorses and supports the continuation of the Special Committee on Solid Waste Management with areas of work focused on: Organics Management, Long-Term Disposal Options, and Single-Use Plastics;

AND FINALLY THAT regional district staff continue to discuss opportunities for collaboration and alignment related to those areas of work in the following areas:

1. Communication and Outreach
2. Mandatory Source Separation
3. Solid Waste Comparative Data
4. Disposal Bans
5. Varying Tipping Fees, and
6. Extended Producer Responsibility (EPR)

*Resolutions Committee recommendation: Endorse*

*Resolutions Committee comments:*

The AVICC Executive Committee supports the work of the Special Committee on Solid Waste Management and the continuation of the Special Committee for another term.

The Executive Resolution was endorsed by the AVICC Executive Board. RDN Director Craig, who serves as the elected official on the AVICC Executive Board, suggested the following change to the final statement prior to being brought forward to the AVICC Convention:

AND FINALLY THAT AVICC endorses and supports the committee's recommendation that regional district staff continue to discuss opportunities for collaboration and alignment related to those areas of work in the following areas: [...]

The Executive Resolution was endorsed on April 13<sup>th</sup>, 2019 at the AVICC Convention. The AVICC Special Committee on Solid Waste can continue to work collaboratively on the priorities outlined in the resolution with guidance from the ongoing tasks of the technical working group and communications group which include:

- Communication and Outreach;
- Solid Waste Comparative Data;
- Mandatory Source Separation;
- Landfill Disposal Bans;
- Varying Tipping Fees;
- Extended Producer Responsibility (EPR); and
- Solid Waste Advanced Technologies<sup>1</sup>.

## ALTERNATIVES

1. The Board receive this report for information
2. That staff be provided with alternate direction.

## FINANCIAL IMPLICATIONS

The AVICC Special Committee on Solid Waste Management has a budget of \$20,000 funded by the membership to provide funding of research, technical expertise and other shared costs. Based on the fair cost allocation formula for regional members, the RDN has committed to contribute \$2,942; this contribution was anticipated in the approved 2019 Solid Waste Services budget.

## STRATEGIC PLAN IMPLICATIONS

Focus On Relationships- We Look For Opportunities To Partner With Other Branches Of Government/Community Groups To Advance Our Region

The RDN partnership with AVICC provides an opportunity to actively engage with other regional districts to advocate for common solid waste management concerns; align solid waste management regulations, bylaws, and tipping fees; and identify shared service and cooperative effort opportunities.



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Meghan Ebueza  
mebueza@rdn.bc.ca  
April 23, 2019

Reviewed by:

- L. Gardner, Manager, Solid Waste Services
- R. Alexander, General Manager, Regional & Community Utilities
- P. Carlyle, Chief Administrative Officer

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<sup>1</sup> The Resolution was endorsed with the addition of Solid Waste Advanced Technologies to be included in the ongoing.

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**TO:** Solid Waste Management Select **MEETING:** May 9, 2019  
Committee

**FROM:** Larry Gardner **FILE:** 5365-03  
Manager, Solid Waste Services

**Subject:** Regional District of Nanaimo Application for Continued Participation in Vietnam  
Solid Waste Management Project Sponsored by the Federation of Canadian  
Municipalities

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## RECOMMENDATIONS

1. That the Board endorse continued participation in the Federation of Canadian Municipalities' Vietnam Municipal Solid Waste Management Project from June 2019 to March 2021; and,
2. Than the Board approve of Larry Gardner, Solid Waste Manager, to participate as part of the Canadian Technical Advisor team.

## SUMMARY

The Federation of Canadian Municipalities (FCM) initiated the *Improved Municipal Solid Waste Practices to Reduce Short-Lived Climate Pollutants in Vietnam Project*, a three-year, \$1,000,000 project funded by Environment and Climate Change Canada. The purpose of the Project is to assist Vietnamese cities in building capacity to better manage their municipal solid waste.

For Step 1 of the Project, Larry Gardner, Manager of Solid Waste Services at the Regional District of Nanaimo (RDN), was selected as one of three Canadian Technical Advisors for the Project. With approval from the RDN Board, Larry Gardner spent three weeks in March 2019 assisting two Vietnamese cities in assessing their municipal solid waste management practices, identifying opportunities for improvement, and developing a workplan. Detailed in Attachment 1, the project included meetings with national ministries, including the Ministry of Natural Resources and Environment, to advance Extended Producer Responsibility, make improvements to plastics management, and develop the circular economy.

FCM has just released a *Call for Expressions of Interest* (Attachment 2) recruiting two Canadian municipalities to participate in continuation of the project between June 2019 and March 2021. The specific contributions being requested of the municipalities are to:

- a) Provide technical staff qualified in municipal solid waste management as volunteers to participate in up to two missions of approximately two weeks in Vietnam to advance the projects developed in Step 1; and,
- b) Host a study program in the spring of 2020 for a delegation from Vietnam.

## **BACKGROUND**

The *Improved Municipal Solid Waste Practices to Reduce Short-Lived Climate Pollutants in Vietnam Project* is implemented by FCM and the Association of Cities in Vietnam (ACVN). The Project is financed by a \$1,000,000 (Canadian dollars) contribution by Environment and Climate Change Canada (Global Affairs Canada) as a partial fulfillment of the Government of Canada's commitment to assist countries to reduce green house gas emissions in accordance with the Paris Agreement. The Project term is between April 1, 2018 and March 31, 2021.

The project supports two medium-size cities in Vietnam – Bắc Giang in northern Vietnam, and Hội An in central Vietnam. By collaborating with Canadian local government staff, the Project's goal is to implement innovative pilot initiatives that contribute to the reduction of short-lived climate pollutants by improving practices in municipal solid waste management.

The project is being completed in two steps summarized below, and explained in additional detail in the following sections of the report:

- *Step 1:* Conduct discussions with national level agencies to advance waste management initiatives, provincial level government to reach agreement on the objectives of the activities of the project, and establish work plans with two Vietnam cities.
- *Step 2:* Provide technical staff qualified in municipal solid waste management as volunteers to participate in up to two missions of approximately two weeks in Vietnam to advance the projects developed in Step 1; and, host a study program in the spring of 2020 for a delegation from Vietnam.

### **Step 1: Project Involvement to Date**

Representing the RDN and the FCM, Larry Gardner participated as one of three Canadian Technical Advisors to the project. The other two advisors were:

- *Doug Hickman, Mission Team Leader* – Principal of PHA Consulting Associates located in Cannin, Nova Scotia. Doug has 35 years of experience in the solid waste sector, and has over 25 years of experience doing international work in more than 45 countries.
- *Ben Van Nostrand* – Team Leader, Environment Health Services, with the Columbia Shuswap Regional District. Ben has over 20 years of experience in waste management planning, managing solid waste facilities, as well as specialize knowledge in emergency response. Columbia Shuswap Regional District is proceeding with an application to continue with the project.

From March 5 to 24, 2019, the Canadian Technical Advisors offered expertise through the following list of tasks. Attachment 1 provides a table giving further details of the mission agenda, activities, results and follow up actions.

### ***National Level***

The Canadian Technical Advisors team met with the following national level agencies:

- *Ministry of Natural Resources and Environment:* Discussed Extended Producer Responsibility, improvements to plastics management, and development of the circular economy.
- *Ministry of Science and Technology:* Learned about their role in setting and monitoring waste sector standards, and evaluated and recommended waste sector technology.



- *Ministry of Agriculture and Rural Development:* Learned about their role in regulating compost and organic fertilizers.

### **Provincial Level**

The Canadian Technical Advisors team met with representatives of the Province of Quảng Nam, and the Province of Bắc Giang, to discuss the project and seek agreement of the project's objectives and activities. Provincial governments receive technological proposals related to waste which propose public-private partnerships, and there is confusion around how to determine which technologies are more appropriate and the cost-revenue structures. The project is assisting in this area through the development of a technology manual.

### **City of Hội An (Province of Quảng Nam)**

The Canadian Technical Advisors team met with AVCN representatives and conducted site visits to develop the following work plans:

- *Landfill Rehabilitation and Gas Control:* Stakeholders stated a preference for the landfill be turned into a city forest. Accordingly, plans are made to dredge a river, and using the dredged material to rehabilitate the landfill with a biocover to establish a forest. Designs should be completed by October 2019, with construction starting in 2020. A landfill survey will be completed to determine gas generation.
- *Enhanced Composting:* Development of a pilot project to educate and assist residents to source separate, with door to door collection of carts to allow for better control over the quality of material collected. The pilot project will be slowly expanded over time to allow for adaptations and adjustments.
- *Municipal Solid Waste Strategy:* Development of a strategy for the management of waste in Hội An. The strategy will link to the intention of the Province of Quảng Nam to establish a regional waste disposal facility to serve the Province.

### **City of Bắc Giang (Province of Bắc Giang)**

The Canadian Technical Advisors team met with AVCN representatives and conducted site visits to develop the following work plans:

- *Gas Control and Landfill Rehabilitation:* Establish final grades and a phase development plan, and establish concept level designs for a passive collection system using a biofilter and a biofilter cap.
- *Composting Demonstration:* Integrate source separation of the existing waste collection system in the Dong Son commune, and establish a demonstration compost facility.
- *Municipal Solid Waste Strategy:* Review the existing Provincial strategy from the perspective of green house gases in the waste sector. Develop a waste strategy for the city on the basis that the existing waste disposal site will continue to function.

### **Step 2: Project Continuation**

FCM is currently recruiting two Canadian municipalities, to join a Canadian Technical Advisors team, as part of the Vietnam Municipal Solid Waste Management Project (VnSWM). The *Call for Expressions of Interest* is appended as Attachment 2. The Canadian Technical Advisors team will assist Vietnamese counterparts over a period of 18 months to implement innovative pilot initiatives.

As a participate in Step 1, the RDN is already tentatively included in the application process and is subject to a Board decision for continuation with the project.

The objectives of Step 2 are described in more detail below.

### ***Technical Exchange Missions to Vietnam***

The cities of Bắc Giang and Hội An will be undertaking a series of activities in Vietnam with VnSWM support. The Canadian Technical Advisor will work with local Vietnamese experts and city staff to plan and deliver technical assistance.

Canadian Technical Advisors are expected to participate in up to two missions between May 2019 and March 2021. Each mission to Vietnam will consist of approximately two weeks in-country, and entail preparation and follow-up reporting. Missions will include tasks such as the following:

- Provide technical assistance to Vietnamese counterparts to carry out landfill rehabilitation and gas control, organic waste separation and composting and/or municipal solid waste management strategic planning;
- Conduct workshops/seminars on topics of relevance to Bắc Giang and Hội An; and
- Participate in a final mission (Feb/March 2021), including the final knowledge sharing event and assist with project evaluation.

### ***Host a Study Program for a Vietnamese Delegation***

VnSWM has planned a visit to Canada for municipal solid waste management practitioners from Bắc Giang, Hội An and ACVN in spring 2020. The objective of this study visit is for Vietnamese delegates (approximately six), along with one FCM staff, to visit the Canadian host municipality for one to three days. Vietnamese delegates will learn Canadian best practices in municipal solid waste management strategic planning, landfill rehabilitation and gas control, waste separation and composting. The responsibilities in hosting the study program include:

- Develop a study program and itinerary based on the objectives provided by FCM;
- Coordinate site visits with opportunity to discuss programs and issues with elected officials, technical staff, contractors and other stakeholders;
- Assist FCM with logistic arrangements;
- Assist FCM to recruit a local English-Vietnamese interpreter if available; and
- Have staff welcome, brief and accompany the delegation during the study program.

## **ALTERNATIVES**

1. Endorse continued participation in the Federation of Canadian Municipalities' Vietnam Municipal Solid Waste Management Project from June 2019 to March 2021; and,
2. Approve of Larry Gardner, Solid Waste Manager, to participate as part of the Canadian Technical Advisor team; or
3. Do not endorse continued participation in the Federation of Canadian Municipalities' Vietnam Municipal Solid Waste Management Project.

## **FINANCIAL IMPLICATIONS**

FCM covers participant travel, accommodation, meals and other project-related expenses through funding from Environment and Climate Change Canada. Time is donated by the individual volunteer expert and the respective organization, and is estimated at approximately 26 working days for project completion between June 2019 to March 2021. Sundry costs of \$1500 are projected associated with RDN hosting activities with the Vietnam delegation.

## **STRATEGIC PLAN IMPLICATIONS**

Focus On The Environment- We Will Have A Strong Focus On Protecting And Enhancing Our Environment In All Decisions

Focus On Relationships- We Look For Opportunities To Partner With Other Branches Of Government/Community Groups To Advance Our Region



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Larry Gardner, Manager Solid Waste Services  
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April 25, 2019

Reviewed by:

- R. Alexander, General Manager, Regional and Community Utilities
- P. Carlyle, Chief Administrative Officer

Attachments

1. Draft Step 1 Activities and Work Plan
2. FCM Call for Expressions of Interest for the Vietnam Municipal Solid Waste Management Project

## VIETNAM SOLID WASTE MANAGEMENT PROJECT

### Draft Step 1 Activities and Work Plan

Date	Location	Event	Objective	Output/Result	Follow-Up Actions		
					Action	Responsibility	
March	6	Mission team meeting with ACVN	Finalize Agenda	Mission Agenda adjusted/finalized	None	ACVN	
			Review VTA ToRs	VTA ToRs agreed	None		
			Agree VTA Experts for design of compost pilot projects	VTA experts agreed for design of compost pilot projects	Contractual arrangements to be completed		
	7	Hanoi	Meeting with Ministry of Science and Technology	Learn about Ministry role in setting/monitoring waste sector standards and evaluating/ recommending waste sector technology	Mission team gained understanding of Ministry role in setting waste sector standards	Further information on Ministry actions to evaluate sector technology	ACVN
			Meeting with Ministry of Agriculture and Rural Development	Learn about Ministry role in regulating compost and organic fertilizers	Mission team gained understanding of Ministry role in regulating organic fertilizers (Circular 41/2014 / TT-BNNPTNT guiding Decree 202/2013 / ND-CP on fertilizer management under the State management responsibility of the Ministry of Agriculture and Rural Development)	None	
	8	Hoi An	City of Hoi An Department of Natural Resources and Environment (DONRE)	Review of Agenda for activities in Hoi An	Agreed agenda for activities	None	
	9		Site visit to Cam Ha landfill and treatment facility	Familiarize the mission team with current operational status and activities at the landfill and the treatment facility	Mission team familiarity with landfill and treatment facility achieved	None	
	10						
	11	Tam Ky Hoi An	Meet with Province of Quang Nam Team meeting with City	Obtain agreement (verbal) of Province with VnSWM objectives and activities	Province of Quang Nam (Vice-Chairman of Peoples Committee) signalled agreement for discussions	Formal agreements between FCM, ACVN and participants to be completed	FCM and ACVN
				Finalize arrangements for technical discussions	Arrangements finalized		
	12	Hoi An	Technical discussion on landfill gas control and rehabilitation Meet with City and DONRE	Project to receive direction on the future use of Cam Ha landfill to inform gas control/rehabilitation actions Agree workplan to September 2019 to control landfill gas/rehabilitate	Future use of Cam Ha landfill recommended by meeting participants to be "city forest" Workplan agreed	Recommendation of meeting to be formalized by city/provincial stakeholders Updated workplan to be forwarded to City of Hoi An	City of Hoi An; ACVN to monitor Mission team/ ACVN

## VIETNAM SOLID WASTE MANAGEMENT PROJECT

### Draft Step 1 Activities and Work Plan

Date	Location	Event	Objective	Output/Result	Follow-Up Actions	
					Action	Responsibility
			landfill			
13	Hoi An	Technical discussion on compost pilot project  Meet with City and DONRE	Project to receive stakeholder input to inform the design of pilot project to collect, transport and compost organic waste Agree workplan to September 2019 to plan/implement pilot composting project	Inputs received  Workplan agreed	VTA to include stakeholder inputs, as appropriate, in design of pilot project Updated workplan to be forwarded to City of Hoi An	VTA; ACVN to monitor/ review output Mission team/ ACVN
14	Hoi An Danang	Meet with City  Meet with VTA applicant Meet with VTA applicant	Review MSWM strategy and workplan  Determine qualification of survey VTA applicant Determine qualification of landfill gas VTA applicant	Strategy objective and workplan agreed  Qualification of survey VTA applicant confirmed Qualification of landfill gas VTA applicant confirmed	Updated workplan to be forwarded to City of Hoi An Applicant to submit proposal Applicant to submit proposal	Mission team/ ACVN Applicant, ACVN Applicant, ACVN
15	Hanoi	Meet with Ministry of Natural Resources and Environment (MONRE)	Share information and perspectives on Extended Producer Responsibility, circular economy and plastics management	Information shared; basis established for effective relationship with MONRE	Maintain dialogue, as appropriate, with MONRE	ACVN/FCM
16		Meet with ACVN	Debrief on activities and results achieved during the mission	ACVN advised of activities and results	None	
17	Bac Giang	Site visit to landfill and Dong Son commune	Familiarize the mission team with current operational status and activities at the landfill and context of the commune	Mission team familiarity with landfill and commune achieved	None	
18	Bac Giang	Meet with City of Bac Giang Meet with Province of Bac Giang	Finalize arrangements for technical discussions  Obtain agreement (verbal) of Province with VnSWM objectives and activities	Arrangements finalized  Province of Bac Giang (Vice-Chairman of Peoples Committee) signalled agreement for discussions	Formal agreements between FCM, ACVN and participants to be completed	FCM and ACVN
19		Meet with PMU2	Finalize arrangements for technical discussions	Objectives of technical discussions confirmed, agenda finalized and logistical arrangements established	None	
20		Technical discussion on landfill gas control and municipal waste strategy Meet with city stakeholders	Agree approach to landfill gas (including methane) control/management and related landfill rehabilitation Agree approach for development of municipal solid waste management	Agreement that VnSWM will assume optimization of the area/airspace at the existing landfill  The provincial Department	Develop concept drawings to optimize the landfill, including gas management and related operations	FCM Municipal volunteers  CTA

## VIETNAM SOLID WASTE MANAGEMENT PROJECT

### Draft Step 1 Activities and Work Plan

Date	Location	Event	Objective	Output/Result	Follow-Up Actions	
					Action	Responsibility
			strategy	of Construction has developed a municipal waste management strategy in 2013 and this is updated every 5 years.	With provincial agreement, review/comment on municipal solid waste strategy from the perspective of GHG' Develop city waste strategy based on (among other items) optimization of current landfill	CTA
21	Bac Giang Hanoi	Technical discussion on compost demonstration project Debrief with ACVN	Confirm location for the demonstration project; agree the components of the project and the items to be clarified in project design Provide mission feedback and agree next steps with ACVN	Location confirmed (Commune of Dong Son); project components identified and work of VTA to design project confirmed Feedback provided, next steps agreed	Develop detailed project plan  Actions to be implemented in accordance with responsibilities and timing in this document	VTA; ACVN to monitor/review output FCM, ACVM, VTA, CTA, FCM Volunteers
22	Hanoi	Follow-Up with ACVN Coordinator	Ensure clarity of next steps by ACVN and CTA	Agreement on next steps	Actions to be implemented in accordance with responsibilities and timing in this document	FCM, ACVM, VTA, CTA, FCM Volunteers

## CALL FOR EXPRESSIONS OF INTEREST

<b>Position:</b>	<b>2 municipal partnerships</b>
<b>Program:</b>	<b>Vietnam Municipal Solid Waste Management Project (VnSWM)</b>
<b>Location:</b>	<b>Vietnam and Canada</b>
<b>Date:</b>	<b>June 2019 – March 2021</b>
<b>Application Deadline:</b>	<b>April 30<sup>th</sup>, 2019</b>

### **OVERVIEW**

FCM is currently recruiting two Canadian municipalities to support two medium-sized cities in Vietnam (Bac Giang in the north, and Hoi An in central Vietnam) as part of the *Vietnam Municipal Solid Waste Management Project (VnSWM)*. The Canadian municipalities will assist their Vietnamese counterparts over a period of 18 months to implement innovative pilot initiatives that contribute to the reduction of short-lived climate pollutants (SLCPs) by improving practices in municipal solid waste management.

The overall objective of VnSWM is to create a demonstrable model of reduction of methane/GHGs from municipal solid waste in Vietnam by focusing on:

- Introducing technology to capture methane and rehabilitate existing landfill sites;
- Introducing initiatives to increase and/or improve the treatment of organic waste, including separation and processing into viable compost materials; and
- Increased capacity within participating cities for municipal solid waste planning and management.

#### **Capacity Building Approach**

VnSWM will employ a municipal team approach for the delivery of Canadian technical assistance to Vietnamese projects: Two Canadian municipalities will source technical assistance from their staff and networks to join the VnSWM team led by FCM, including practitioners from other FCM member municipalities, solid waste management technical experts/consultants and FCM staff. This team will work together with local Vietnamese experts and city staff to plan and deliver technical assistance to meet the objectives of the project.

### **EXPERTISE REQUIRED**

VnSWM requires two Canadian municipalities to participate in the program as providers of technical expertise in municipal solid waste practices. The selected candidates will have strong expertise related to landfill rehabilitation and gas control, organic waste separation and composting and/or strategic planning for municipal solid waste management.

One issue that will be important relates to contracting: Privatization of waste services delivery is being undertaken in Vietnam; in some cases, it has been completed, in others hardly started. However, already it is clear that cities lack capacity in contracting the private sector, and may not understand the terms or implications of the contracts that they have signed. This is the case in VnSWM project cities, where organics collection and treatment (composting) is contracted to the private sector, and where it is possible that landfill rehabilitation/gas control and treatment might also be contracted to the private sector. Therefore, expertise in contracting the private sector for waste management services is a requirement for the selected candidates.

### **TERMS OF PARTICIPATION**

The specific contributions made by the municipality include (but are not limited to):

#### **A. Host a study program in spring for a delegation from Vietnam.**

VnSWM has planned a visit to Canada for municipal solid waste management practitioners from Bac Giang, Hoi An and ACVN in Spring 2020. The objective of this study visit is for Vietnamese delegates (approx. 6, plus 1 FCM staff) to visit the Canadian host municipality for 1-3 days to learn Canadian good practices in municipal solid waste management strategic planning, landfill rehabilitation and gas control, waste separation and composting. The responsibilities in planning and hosting this study program would be to:

- Develop a study program and itinerary based on the objectives provided by FCM;

- Ensure the program includes site visits (coordinated by the partner municipality) and ample opportunity to discuss programs and issues with elected officials, technical staff, contractors and other stakeholders;
- Assist FCM with logistic arrangements such as recommending local hotels, transport options etc.;
- Assist FCM to recruit a local English-Vietnamese interpreter if available;
- Provide appropriate staff to welcome, brief and accompany the delegation during the study program.

**B. Provide technical staff qualified in municipal solid waste management as volunteers in missions to Vietnam to help partner cities develop capacity, undertake activities and achieve project objectives and outputs.**

The cities of Bac Giang and Hoi An will be undertaking a series of activities in Vietnam with VnSWM support. The two selected Canadian municipalities will provide technical assistance as part of a team of solid waste management technical experts/consultants and FCM staff. The team will work together with local Vietnamese experts and city staff to plan and deliver technical assistance.

Each Canadian municipality is expected to participate in up to two missions between May 2019 and March 2021. Each mission to Vietnam will consist of approximately two weeks in-country; entails both preparation and follow-up reporting; arrival and departure briefings with FCM's partner municipal association in Hanoi, and working visits to both Bac Giang and Hoi An.

Detailed Terms of Reference will be prepared for each mission by the FCM project manager based on activities included in the Annual Work Plan and progress made by the cities. Missions will include tasks such as the following:

- Provide technical assistance (assisting and coaching) to Vietnamese counterparts to carry out their planned tasks related to landfill rehabilitation and gas control, organic waste separation and composting and/or municipal solid waste management strategic planning;
- Plan and conduct short workshops or seminars on topics of relevance to the cities if requested and included in the work plan;
- Assess progress since the previous mission, and define activities to be carried out prior to the next mission (may include skype calls with Vietnamese counterparts to assess progress, determine next steps etc.);
- Prepare a brief mission report (following each mission) in the format provided by FCM;
- Provide input to FCM for the 2020-2021 Annual Workplan; and
- Participate in a final mission (Feb/March 2021), including the final knowledge sharing event and assist with project evaluation.

FCM covers participant travel, accommodation, meals and other project-related expenses through funding from Global Affairs Canada.

## **HOW TO APPLY**

Municipalities interested in supporting the engagement of staff and individuals should complete the [application form](#) by **Tuesday, April 30<sup>th</sup> 2019**, and demonstrate adequate official approval to participate (for example, a council resolution or willingness to sign a Memorandum of Understanding with FCM).

Please note that only short-listed candidates will be contacted.

For additional information on FCM programs, please send an email to Carilynn Siemens at [csiemens@fcm.ca](mailto:csiemens@fcm.ca). For updates and notification of future opportunities, sign up for our [mailing list](#).