



ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE

WEDNESDAY, JANUARY 26, 2010 - 3:30 P.M.

CVRD Boardroom, 175 Ingram Street

AGENDA

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2. <u>ADOPTION OF MINUTES:</u>	
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6. <u>NEW BUSINESS:</u>	

7. CLOSED SESSION No items

8. ADJOURNMENT:

The next regular meeting of the Engineering & Environmental Services Committee will be held on February 23, 2011 at 3:30 p.m.

Distribution:

Director Cossey, Chair
Director Kuhn, Vice-Chair
Director Dorey
Director Duncan
Director Giles
Director Harrison
Director Haywood
Director Iannidinardo
Director Kent
Director Marcotte
Director Morrison

As Well As:

Warren Jones, CAO
Brian Dennison, General Manager, Engineering & Environmental Services
Bob McDonald, Manager, Recycling & Waste Diversion
Dave Leitch, ASCT., Manager, Water Management
Kate Miller, Manager, Regional Environmental Policy
Mark Kueber, Manager, Corporate Services

Agenda Cover Only:

Directors Hutchins, McGonigle, Seymour, Walker
Tom Anderson, General Manager, Planning & Development
Joe Barry, Corporate Secretary

The Full Agenda Package is available on-line at: <http://cvrd.bc.ca/Archive.asp?AMID=50>

Minutes of the regular meeting of the Engineering & Environmental Services Committee held in the CVRD Boardroom, 175 Ingram Street, Duncan, on November 24, 2010 at 3:30 p.m.

PRESENT: Director Cossey, Chair
Director Kuhn, Vice-Chair
Directors Dorey Giles, Harrison, Haywood, Iannidinardo,
Kent (4:15 p.m.) Marcotte, Morrison

ABSENT: Director Duncan

ALSO W. Jones, CAO, CVRD

PRESENT: B. Dennison, P. Eng., General Manager, E & E
D. Leitch, ASCT., Manager, Water Management
B. McDonald, Manager, Recycling & Waste Management
J. Bath, Recording Secretary

**APPROVAL
OF AGENDA**

New Business Items:

NB1 – Cloth Bags

NB2 – Fisher Road

NB3 – Study Distribution

NB4 – Penelakut Tribe agreement

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

MOTION CARRIED

**ADOPTION
OF MINUTES**

It was moved and seconded that the minutes of the October 27, 2010 regular Engineering & Environmental Services Committee meeting be adopted.

MOTION CARRIED

**BUSINESS ARISING
OUT OF MINUTES**

No business arising

DELEGATIONS

No delegations

REPORTS

R1

A staff report was reviewed regarding creation of an amendment bylaw for the Douglas Hill Water System Service Area to include 4 additional properties.

It was moved and seconded that it be recommended to the Board:

1. That the *Certificates of Sufficiency*, confirming that sufficient petitions requesting inclusion into the Douglas Hill Water System Service Areas be received.

2. That the boundaries of the Douglas Hill Water System service area be extended to include:
 "PID 004-065-549, Lot 1, Section 2, Range 6, Cowichan Land District, Plan 16800";
 "PID 002-657-121, Lot 3, Sections 18&19, Range 6, Cowichan Land District, Plan 25720"
 "PID 002-249-839, Lot 1, Sections 18&19, Range 6, Cowichan Land District, Plan 25720"
 "PID000-044-156, Lot 1, Section 20, Range 6, Cowichan Land District, Plan 39846"
3. That "CVRD Bylaw No. 3382 – Douglas Hill Water System Service Establishment Bylaw, 2010", be amended to include:
 "PID 004-065-549, Lot 1, Section 2, Range 6, Cowichan Land District, Plan 16800"; "PID 002-657-121, Lot 3, Sections 18&19, Range 6, Cowichan Land District, Plan 25720"; "PID 002-249-839, Lot 1, Sections 18&19, Range 6, Cowichan Land District, Plan 25720"; and "PID000-044-156, Lot 1, Section 20, Range 6, Cowichan Land District, Plan 39846",
 and that the amendment bylaw be forwarded to the CVRD Board for three readings and adoption.

MOTION CARRIED

R2

A staff report was considered regarding provision of funding for an Engineering Assessment for the Sylvania Improvement District Water System.

It was moved and seconded that the CVRD Board approve 100% funding to carry out an engineering assessment of the Sylvania Improvement District Water System, to a maximum cost of \$15,000, with the funding coming from the CVRD Electoral Feasibility Studies Function, and further that, if a new CVRD water service area function is created, these funds be paid back to the study function by the newly created service area.

MOTION CARRIED

R3

A staff report was considered requesting transfer of Community Works funding for the Satellite Park Water System upgrade project.

It was moved and seconded that the Board approve a 3% Community Works contribution increase of \$39,000 for the upgrades to the Satellite Park Water System, bringing the total Community Works contribution to \$469,000.

MOTION CARRIED

R4

A staff report was considered regarding Recycling Depot Contract Extensions to April 2012.

It was moved and seconded that the Cowichan Valley Regional District enter into Recycling Service Contract extensions with the following service providers.

Contract No.	Service	Supplier
ES-004-05	Bulk Plastic Transport	Active Industrial Waste Mgmt.
ES-005-05	Gypsum Transport	Active Industrial Waste Mgmt.
ES-006-05	Yard and Garden Transport	Active Industrial Waste Mgmt.
ES-007-05	Asphalt Roofing Transport	Active Industrial Waste Mgmt.
ES-009-05	Scrap Lumber Transport	Active Industrial Waste Mgmt.
ES-010-05	MPNRB Transport	Active Industrial Waste Mgmt.
ES-013-05	Scrap Metal Recovery	Steel Pacific Recycling
ES-016-05	Oil Products and Antifreeze Recovery	Newalta Corporation
ES-017-05	Asphalt Roofing Processing	Johel Bros.
ES-018-05	Scrap Lumber and Wood Products Processing	Steel Pacific Recycling
ES-019-05	Bulk Plastic Processing	BFI Canada.
ES-020-05	MPNRB Program Processing	BFI Canada
ES-022-05	Yard and Garden Processing	Central Landscape Supplies Ltd.
ES-027-05	CFC Removal	Electra Appliance Ltd.

for the period of January 1, 2011 to April 30, 2012; and that the Chair and Corporate Secretary be authorized to sign the extension agreements.

MOTION CARRIED

R5

A staff report was considered regarding an new Critical Streetlight Location – Electoral Area F at the entrance to the Cowichan Lake Education Centre.

It was moved and seconded that it be recommended to the Board that, as requested by the Town of Lake Cowichan, a *critical location* streetlight be installed at the corner of South Shore Road and the entrance road to the Lakeview Campground and Cowichan Lake Education Centre in Electoral Area F – Cowichan Lake South/Skutz Falls. All capital costs to be borne by the Town of Lake Cowichan.

MOTION CARRIED

R6 A staff report was provided requesting submission of a Provincial Infrastructure Planning Grant application for "Arbutus Ridge Sewer Effluent Reuse for Irrigation Purposes".

It was moved and seconded that it be recommended to the Board that the CVRD support application of a provincial infrastructure planning grant for an Arbutus Ridge Sewer Effluent Reuse Study, to be funded to a maximum cost of \$15,000, with \$5,000 from the Arbutus Ridge Sewer System and \$10,000 through a Provincial Planning Grant application.

MOTION CARRIED

R7 A staff reported was considered regarding submission of a Provincial Infrastructure Planning Grant application for and Engineering Assessment of the Mill Springs Sewer System.

It was moved and seconded that it be recommended to the Board that the CVRD support application of an infrastructure planning grant to carry out an engineering assessment on the Mill Springs Sewer System, to be funded to a maximum cost of \$15,000, with \$5,000 from the CVRD Electoral Feasibility Studies Function and \$10,000 through the Provincial Infrastructure Planning Grant Program.

MOTION CARRIED

NEW BUSINESS

NB1 Cloth Bags
Discussion took place regarding a CVRD Board resolution to distribute cloth bags at events. Staff will check where this is at and report back..

NB2 Fisher Road Recycling Facility Public Meeting
Staff provided an update on the Waste Stream Licensing amendment for this facility, including compliance issues and public consultation. An Environmental Review and Traffic Assessment Study have just been made available to public. A local advisory group was struck in regard to the license amendment. Study recommendations will be presented at public meeting on November 25, 2010, where staff will also be requesting feedback from public..

NB3 Study Distribution
The Director for Electoral Area F requested clarification regarding distribution of studies to the Board prior to them being publicized.

The CAO advised that it would depend on the nature of the study, if it has been created due to direction from the Board, then a draft would be brought forward to the Board. However, in such cases as the Eco Depot,

the Advisory Group guided the Terms of Reference for that study, so the study went before that group before being publicized.

The General Manager, Engineering & Environmental Services advised that staff are planning to provide the Board with an update regarding the Eco Depot in the near future.

NB4

Draft Agreement with Penelakut Tribe

An error was identified in Item 6 (b) – Term, change "*fifteen*" to "*five*"

That it be recommended to the Board that the Chair and Corporate Secretary be authorized to sign an agreement with the Penelakut Tribe for the disposal of solid waste from the Penelakut Tribe at the CVRD's Bings Creek Solid Waste Management Complex.

MOTION CARRIED

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

MOTION CARRIED

The meeting adjourned at 4:42 p.m.

Chair

Recording Secretary

Dated: _____



C.V.R.D

STAFF REPORT

R1

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING
OF JANUARY 26, 2011

DATE: January 10, 2011

FILE NO: 5600-30-DHW/01

FROM: Gord Bonekamp, Senior Engineering Technologist

SUBJECT: Douglas Hill Water Service Establishment Amendment Bylaw, Electoral Area C & D.

Recommendation:

That it be recommended to the Board that "CVRD Bylaw No. 3382 – Douglas Hill Water System Service Establishment Bylaw, 2010", be amended to exclude "PID 001-624-784, Part of Section 2, Range 5, Cowichan District, Except part of Plans 24340 & 24750 and 16041", and that the amendment bylaw be forwarded to the CVRD Board for three readings and adoption.

Purpose: To obtain approval to proceed with the amendment to the boundaries of the Douglas Hill Water System Service Areas to exclude one property.

Financial Implications: As this property was mistakenly included in the original Douglas Hill Water Service Area, any Parcel Tax Roll charges paid by the owner in 2011 will be refunded by the CVRD.

Interdepartmental/Agency Implications: Bylaw preparation – Corporate Services

Background:

The Douglas Hill Water System Service Area boundaries were initially established, based on the previous owner's knowledge and recollection. After adoption of the Douglas Hill Water Service Establishment Bylaw, the property owner informed CVRD staff that a well is located on his property and no connection to the water utility exists. The owner has requested exclusion from the service area. As inclusion to the service area was in error, the service area boundary needs to be amended to exclude this property.

Submitted by

Gordon Bonekamp, ASCT.
Senior Engineering Technologist
Engineering & Environmental Services



GB:jlb

Bath:\Z\ES\Memos\2011\DHW Service Area Amd Jan 10-11.doc

Approved by:

Brian Dennison, General Manager,
Engineering and Environmental Services

Proposed Exclusion From Douglas Hill Water System

 Douglas Hill Proposed Exclusion
 Douglas Hill Water System

This map is compiled from various sources for internal use and is designed for reference purposes only.

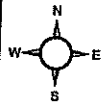
The Regional District does not warrant the accuracy.

All persons making use of this compilation are advised that amendments have been consolidated for convenience purposes only and that boundaries are representational.

The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

Printed: January 10, 2011

Scale: 1:5,500



26.5 A.C.

Douglas Hill
Water System

Pumphouse
and
Reservoir Site

Well Sites

To Duncan


Dougan
Lake

EST-PATROLAS
I.R. No. 4

TRANS CANADIAN
VALLEYVIEW
CENTRE

FREEMAN ROAD

FREEMAN ROAD

18

R. 6

76778

NELSON ROAD

SEARS ROAD

SHEARING ROAD

ROBSON LAKE

CONWAY BAY ROAD

TELEGRAPH RD

NEOL RD

CHERRY PT RD

CHERRY PT RD

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STAFF REPORT

R2

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JANUARY 26, 2011

DATE: December 15, 2010 **FILE NO:** 2380-01/F-350
FROM: Dave Leitch, ASCT., Manager, Water Management Division
SUBJECT: Expenditures prior to adoption of 2011 Budget.

Recommendation:

1. That the Board authorize short-term borrowing of \$26,000.00 to buy-out the lease on the Water Management Division's 2008 Ford 4x4 F-350 truck, to be paid back within 5-years under the Liabilities Agreement, Section 175 of the Community Charter, and further that the Board waive the CVRD Purchasing Policy and approve this expenditure prior to approval of the 2011 budget.
2. That the Board waive the CVRD Purchasing Policy and, prior to approval of the 2011 budget, authorize purchase of three generator sets and electrical components for the Arbutus Ridge Sewer System, in the amount of \$80,00.00.
3. That the Board waive the CVRD Purchasing Policy and, prior to approval of the 2011 budget, authorize undertaking capital works for the Douglas Hill Water System in the amount of \$20,000.

Purpose: To consider waiving the CVRD Purchasing Policy and approve expenditures prior to approval of the 2011 budget.

Financial Implications:

1. 2008 Ford 4x4 F-350 Truck: Total amount borrowed will be \$26,000.00 with an estimated annual debt retirement cost of \$ 9,600. The debt will be paid back through the Water Management Control Budget 576.
2. Emergency Generators for the Arbutus Ridge Sewer System – This \$80,000 expenditure is part of a budgeted \$250,000 Capital Works Project, of which \$125,000 is funded by MFA Long Term Borrowing.
3. Douglas Hill Water System Capital Works – This \$20,000 expenditure is part of a budgeted Capital Works Project, of which \$150,000 is funded by MFA Long Term Borrowing.

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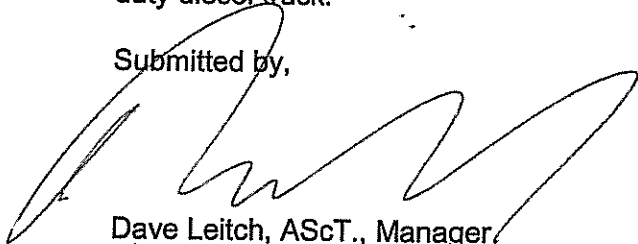
Interdepartmental/Agency Implications: not applicable

Background:

Staff would like to proceed with capital upgrade works, including purchase and installation of three emergency generators for the sewage pump stations in Arbutus Ridge Sewer System and preliminary design work for a water treatment building for Douglas Hill Water System prior to approval of the 2011 budget.

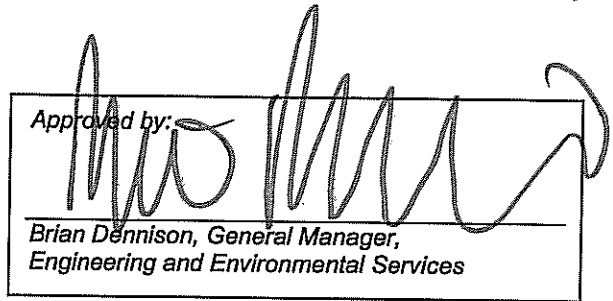
The pickup truck is a current vehicle used in the Water Management Division. This particular truck was originally leased because of the high initial capital cost to purchase the vehicle, with the intention that we would buy out the truck at the end of the lease period. The vehicle is a diesel powered truck that is equipped with a pump crane and is the only vehicle in our fleet that is able to tow our excavator to various job sites. If we do not take the option of buying out the vehicle, we will forgo our current investment in the truck and have to re-lease another heavy duty diesel truck.

Submitted by,



Dave Leitch, AScT., Manager,
Water Management Division

Approved by:



Brian Dennison, General Manager,
Engineering and Environmental Services

:jlb

Bath:\Z:\ESMemos2011\F-350LeaseBuy-out-Jan-2011.docx



STAFF REPORT

R3

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JANUARY 26, 2011

DATE: January 5, 2011 **FILE NO:** 2320-20-Act
FROM: Harmony Huffman, Environmental Technologist
SUBJECT: Service Contract Extension – Local Garbage Transfer

Recommendation: That the Cowichan Valley Regional District extend Contract ES-011-05 for Local Garbage Transfer with Active Industrial Waste Management Ltd. for the period of January 1, 2011 to April 30, 2012; and that the Chair and Corporate Secretary be authorized to sign the extension agreement.

Purpose: To extend the local garbage hauling contract.

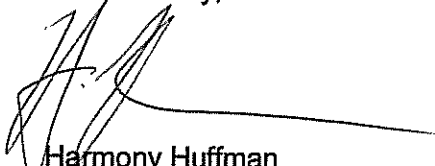
Financial Implications: No significant changes in contract unit costs are expected. Charges under the existing contract are not expected to change significantly for this extension period.

Interdepartmental/Agency Implications: None.

Background: The local garbage hauling contract for CVRD Recycling Depots expired on December 31, 2010. This service is critical to the operation of CVRD depots; however, the CVRD's purchase of a roll-off truck and bins for the implementation of an 'in-house' hauling system in early 2011 will significantly reduce the need to rely on a contractor for local garbage hauling. As service is charged on a per use basis, the development of an in-house system will reduce the CVRD's costs under this contract.

Discussion: Although an in-house hauling system will be implemented in early 2011, back-up services provided by a contractor may still be needed from time to time. An extension of this contract from January 1, 2011 to April 30, 2012 will ensure that backup service is available when needed. This extension will also match extensions provided to other recycling service contracts (approved at the Board meeting of December 8, 2010), and will allow the cost savings from the new in-house system, as well as the impacts from the proposed new South Cowichan ECO Depot, to be better understood before tendering a new multi-year contract.

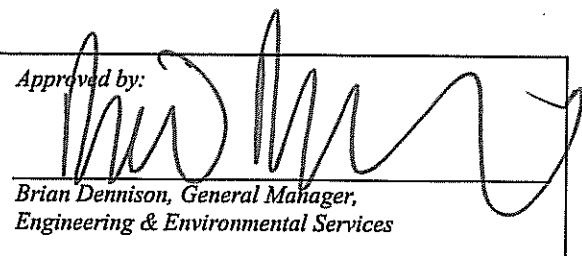
Submitted by,



Harmony Huffman
Environmental Technologist III
Recycling & Waste Management Division

:HH:jlb

Approved by:



Brian Dennison, General Manager,
Engineering & Environmental Services



STAFF REPORT

R4

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JANUARY 26, 2011

DATE: January 17, 2011
FROM: Rob Williams, Environmental Technologist
SUBJECT: CVRD Compost Facilities

Recommendation:

That staff pursue the following activities to improve composting in the CVRD:

1. Recommend amendments to the Provincial Organic Matter Recycling Regulation.
2. Amend "CVRD Bylaw No. 2570 – Waste Stream Management Licensing Bylaw, 2004" to allow more prescriptive terms and conditions.
3. Amend "CVRD Bylaw No. 3209 - Ticket Information Authorization Bylaw, 2008", to allow greater enforcement options.
4. Review adoption of a bylaw similar to the Capital Regional District's composting bylaw.
4. Investigate the possibility of developing a CVRD regional compost facility.
5. Work with Municipal partners on zoning bylaws to restrict composting operations.

Purpose: To present a series of options to ensure local composting is better managed.

Financial Implications: None.

Interdepartmental/Agency Implications: None.

Background: In 2005, the CVRD adopted Bylaw 2570 – Waste Stream Management Licensing to regulate and help reduce the social and environmental impacts associated with private municipal solid waste and recycling facilities. Further, the bylaw is meant to help enforce and reduce illegal dumping incidents across the region and provide a level playing field for licensed facilities. There are currently 8 businesses licensed under Bylaw 2570 throughout the CVRD. These businesses include automobile and metal salvage operations, multi-material drop-off transfer stations, and composting facilities.

There is a trend across municipalities and regional districts toward zero waste, including the CVRD, it is inevitable that more businesses will enter the marketplace. This is the case with composting facilities that closely follow the trend with curbside organics programs.

Discussion: While CVRD Bylaw 2570 continues to be a viable option for regulating private waste and recycle operations and illegal dumping. The bylaw is currently limited when it comes to regulating composting facilities. This is primarily due to the subjective nature of most composting operations.

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Several key community issues are common with the siting of compost facilities, including facilities licensed within the CVRD. Nuisance odours are a main issue often associated with these facilities. The CVRD has logged frequent odour complaints with all three compost facilities in the CVRD. All of these facilities are located within close proximity to residences or businesses. Compost odours are very subjective and difficult to enforce.

Another main concern with compost facilities is risk of discharge into the environment, particularly run-off (leachate) from processed and stored materials. This is the case with all facilities and a particular facility in Cobble Hill, as the well onsite has tested above the drinking water quality guidelines for organic contaminants including Nitrate and Total Nitrogen. Although the main source of contamination has not been identified, it is suggested that the outdoor storage of Class A compost is likely contributing in some form. This is obviously a concern for local residents as many draw their drinking water from the same aquifer.

There are several options to consider in order to better manage CVRD composting facilities and reduce potential impacts. The following describes various options, not necessarily in order of priority:

1. Provide written recommendations to the Ministry of Environment (MoE) requesting amendments be made to the Organic Matter Recycling Regulation. Recommendations would include more strict requirements and regulation of finished Class A compost, an area with which the CVRD has limited authority. Further, it is recommended that MoE consider adopting the proposed California standards (Rule 1133.3 Emission Reductions from Greenwaste Composting Operations) that are intended to reduce emissions from outdoor windrow composting operations, and provide an improved system for determining compost quality for operators.
2. Amend CVRD Bylaw 2570 and Schedule 20 of CVRD Bylaw 3209 (Ticketing Information Authorization) to allow greater ticketing options for non-compliance pertinent to composting operations. Amendments to Bylaw 2570 would include more prescriptive Terms and Conditions for Facility Licenses. Amendments to Bylaw 3209 would also allow to ticket for non-compliance of these new terms and conditions.
3. That the CVRD consider a similar bylaw to the Capital Regional District's (CRD) Compost Facilities Regulation Bylaw (Bylaw 2736). This bylaw is specific to composting facilities and is based on a licensing model similar to CVRD Bylaw 2570. However, the CRD bylaw is very explicit with requirements for material processing and storage, as well as the management of leachate, odours, dust, litter, mud, etc. There are also direct fines associated with the bylaw requirements including odours that leave the property boundary.
4. Investigate the possibility of siting and operating a CVRD compost facility. This could be a regional or multi-regional financed facility. Siting such a facility would help ensure best management practices are being adhered to and help with regional resource recovery of materials such as food waste, sewage sludge (biosolids), and clean wood waste. This could also reduce CVRD costs associated with disposing of these materials. Determining a proper location would be the biggest challenge with this project. Significant setbacks from residential areas would be essential.

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January 19, 2011

Staff Report to the Engineering & Environmental Services Committee

Page 3

5. Work with our municipal partners to amend all Municipal and CVRD zoning bylaws to remove and restrict commercial/industrial composting land-use activities. This would help prevent other private composting operations from starting up in locations not favourable for this type of land-use and potentially causing further environmental and social impacts.

Submitted by,



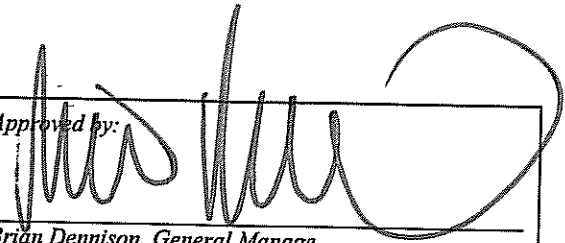
FOR:

Rob Williams
Environmental Technologist II
Engineering & Environmental Services

RW:jlb

Bath\Z:\ESMemos2011\CVRDCompostingOptions-Jan26-2011.docx

Approved by:



Brian Dennison, General Manager
Engineering & Environmental Services



C.V.R.D

STAFF REPORT

R5

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING
OF JANUARY 26, 2011

DATE: January 18, 2011

FILE NO: 5600-30

FROM: Louise Knodel-Joy, Senior Engineering Technologist

SUBJECT: Toilet Replacement Rebate Program Amendment

Recommendation:

That it be recommended to the Board that the CVRD Toilet Replacement Rebate Program be amended to offer rebates for 4.8 Litre/flush or "Dual Flush" toilets - 6/3 Litre/flush or less, for homes connected to a CVRD water and sewer system.

Purpose: To obtain approval to proceed with the changes to the CVRD Toilet Replacement Rebate Program.

Financial Implications: not applicable

Interdepartmental/Agency Implications: not applicable

Background:

The CVRD currently provides a \$75 Toilet Replacement Rebate for its customers connected to CVRD water and sewer systems, who replace a 13 Litre/flush toilet with a 6 Litre/flush or lower flush toilet. Since the program's inception on April 1, 2007, 442 rebates have been provided to CVRD customers under the Program guidelines.

6 Litre toilets have been required under the BC Building Code since 2005, and effective October 2011, 4.8 litre High Efficiency Toilets (HET) will be required under the BC Building Code in all new residential buildings or when major renovations occur. Most retailers now only carry toilets with a flush volume of 6 litres or less.

Staff are proposing to change the maximum qualifying flush volume for the existing rebate program for 6 Litre/flush to 4.8 Litre/flush to encourage further water conservation. "Dual flush" toilets (ones that have two flush choices – one with a higher flow 6 Litre or 4.5 Litre for solids and one with a lower flow, usually 3 Litre would also qualify because the average flush is less than 4.8 Litres. To ensure that only high performance efficient toilets are eligible, staff are also proposing that only toilets that carry the "WaterSense" label qualify. This has been informally adopted by industry across the country.

The timing of the change would take place April 1, 2011. The \$75 rebate program will continue to be provided, subject to budget availability, with the following restrictions.

- Live in a home within that is connected to a CVRD water or sewer system.
- Replace an existing 13 Litre/flush toilet or greater.

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January 26, 2011

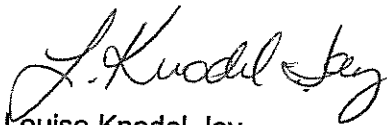
Staff Report to the Engineering & Environmental Services Committee

Page 2

- The toilet must have a flush capacity of 4.8 Litre/flush or 6/3 Litre/flush or less "dual flush" and carry a "WaterSense" label.
- The toilet must be installed by the resident or a licensed plumber.
- The home must be built before April 1, 2007.
- Each household qualifies for up to two rebates in a lifetime.

Toilet disposal guidelines will remain unchanged.

Submitted by

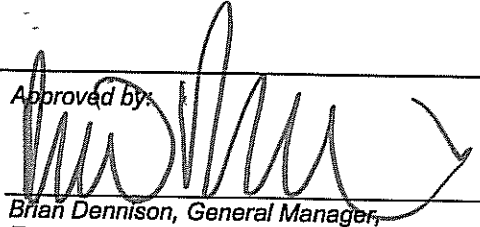


Louise Knodel-Joy
Senior Engineering Technologist
Engineering & Environmental Services

LKJ:jlb

Bath\Z:\ES\Memos2011\Toilet\RebateProgramAmendmentJan 26-11.doc

Approved by:



Brian Dennison, General Manager,
Engineering and Environmental Services



C.V.R.D

STAFF REPORT

R6

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING
OF WEDNESDAY, JANUARY 26, 2011

DATE: January, 18, 2011

FILE NO: Bylaw No. 3455

FROM: Gord Bonekamp, Senior Engineering Technologist

SUBJECT: Douglas Hill Water System Management Amendment Bylaw

Recommendation:

That it be recommended that "CVRD Bylaw No. 3459 – Douglas Hill Water System Management Amendment Bylaw, 2011" be forwarded to the Board for three readings and adoption.

Purpose: To revise Bylaw No. 3406 – Douglas Hill Water System Management Bylaw, 2010, to amend Schedule H – 2010 Flat Rate Charge to include a one-time user fee equivalent charge for 2011.

Financial Implications: User fee equivalent to meet 2011 budget.

Interdepartmental/Agency Implications: not applicable

Background:

Schedule H – 2010 Flat Rate Charges for the Douglas Hill Water System reflects a pro-rated flat rate charge for 2010. As the CVRD takeover date for this system did not occur until January 2011, the bylaw needs to be amended to allow for a one time user fee equivalent charge of \$125 per home, which will make up the 2011 budget shortfall due to the timing of the billing cycle.

Through this one time "make up charge", the fall user fee invoice and the parcel tax, the cost of water service to the customers of the Douglas Hill Water System for 2011 will be \$550. This is the same amount identified in the petition process used to receive assent of the electorate for CVRD takeover of the water system.

Submitted by

Gord Bonekamp, AScT
Senior Engineering Technologist

Approved by:

Brian Dennison, General Manager,
Engineering and Environmental Services

GB:jljb

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COWICHAN VALLEY REGIONAL DISTRICT

BYLAW NO. 3455

**A Bylaw to Amend the Douglas Hill Water System
Management Bylaw No. 3406**

WHEREAS the Board of the Cowichan Valley Regional District established the management of the *Douglas Hill Water System* pursuant to Bylaw No. 3406, cited as "CVRD Bylaw No. 3406 – Douglas Hill Water System Management Bylaw, 2010";

AND WHEREAS the Board of the Cowichan Valley Regional District deems it desirable to amend Schedule H;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 3455 – Douglas Hill Water System Management Amendment Bylaw, 2011**".

2. AMENDMENTS

- a) That Schedule H of Bylaw No. 3406 be deleted in its entirety and replaced with Schedule H attached to and forming part of this Bylaw.

READ A FIRST TIME this _____ day of _____, 2011.

READ A SECOND TIME this _____ day of _____, 2011.

READ A THIRD TIME this _____ day of _____, 2011.

ADOPTED this _____ day of _____, 2011.

Chairperson

Secretary



SCHEDULE H
TO CVRD BYLAW NO. 3406
2011 INITIAL USER FEE CHARGE

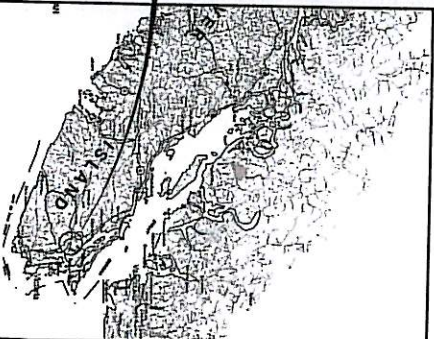
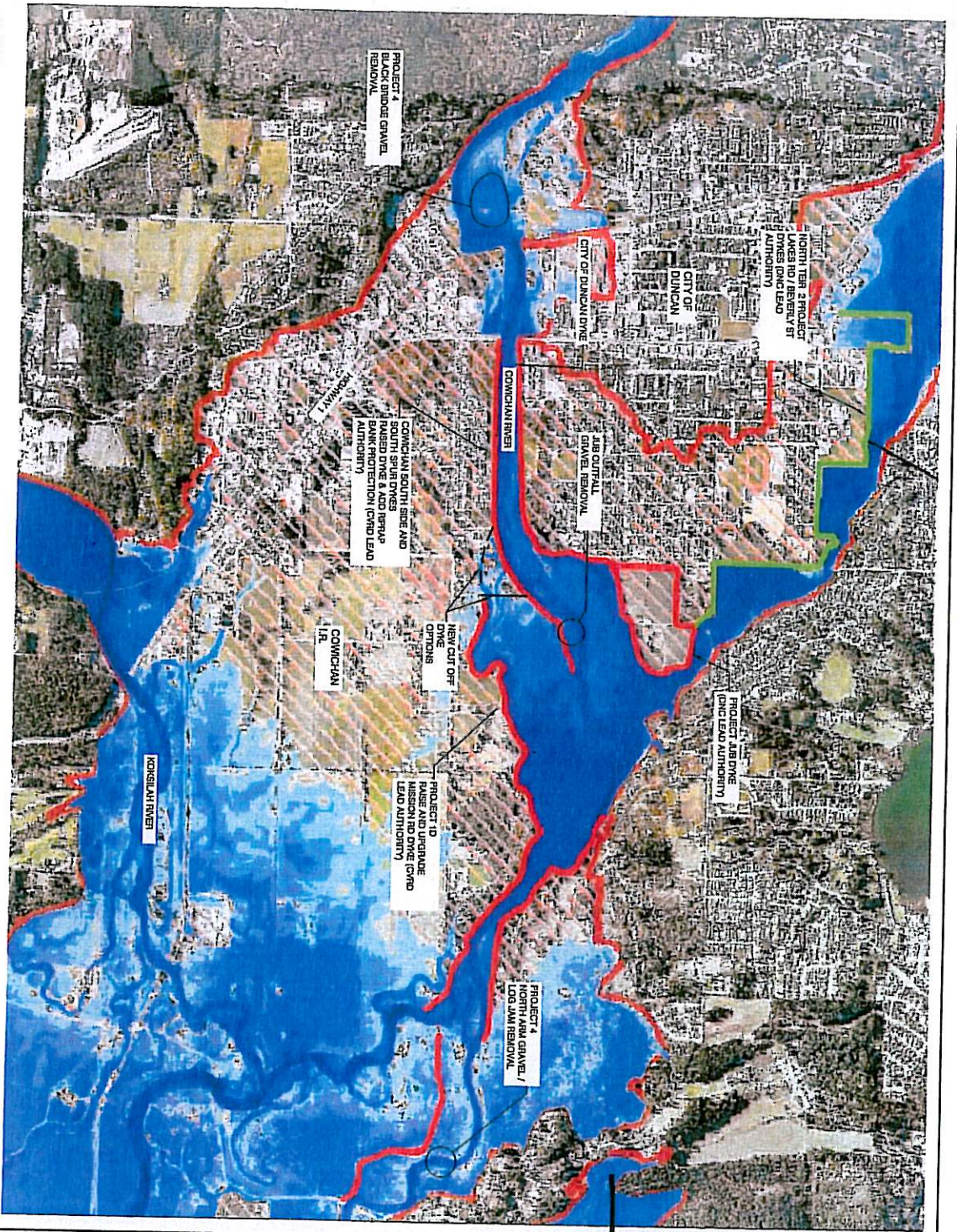
An initial user flat fee charge in the amount of \$125.00 will be invoiced in **2011** to each of the properties within the service area boundary of the Douglas Hill Water System, for the period December 1, 2010 to March 31, 2011. The initial user flat fee charge supersedes Schedule B of this Bylaw on a "one-time" basis only.

R7

**UPDATE ON FEDERAL INFRASTRUCTURE
PROPOSAL FOR FLOOD WORKS**

HAND-OUT

Source: INTEGRATED FLOOD MANAGEMENT PLAN 2009, IMFC



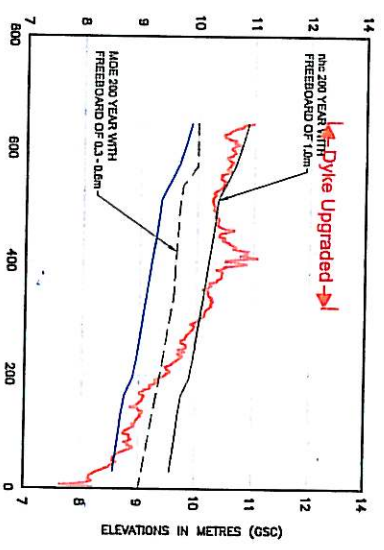
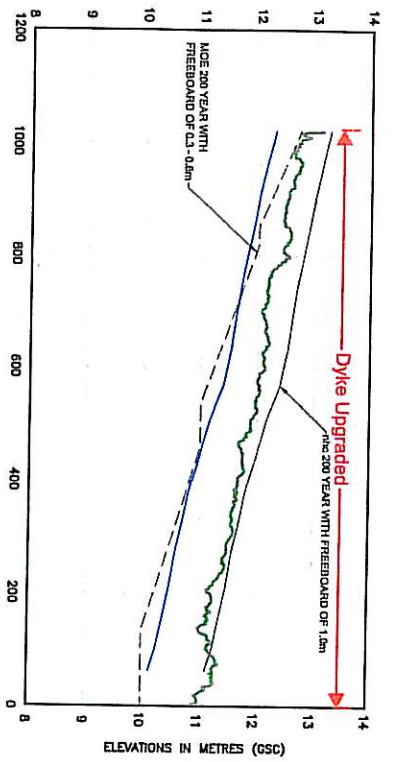
CVRD
COWICHAN RIVER SOUTH SIDE PROJECTS
EMBC APPLICATION

NOTE:
DNC - DISTRICT OF NORTH COWICHAN

kwl KERR WOOD LEIDAL
CONSULTING ENGINEERS

Project No.	Date
2212.034	SEPT. 21, 2010

LOCATION PLAN FIGURE 1



NOTES:

1. DIKE CHANGES ESTIMATED BY H.C.
2. WATER SURFACE PROFILES TO DESIGN FLOOD.
3. THE FLOOD EVENT.
4. A FREEBOARD OF AT LEAST 1.0m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
5. A FREEBOARD OF AT LEAST 0.3m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
6. A FREEBOARD OF AT LEAST 0.6m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
7. A FREEBOARD OF AT LEAST 0.9m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
8. A FREEBOARD OF AT LEAST 1.2m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
9. A FREEBOARD OF AT LEAST 1.5m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
10. A FREEBOARD OF AT LEAST 1.8m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
11. A FREEBOARD OF AT LEAST 2.1m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
12. A FREEBOARD OF AT LEAST 2.4m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
13. A FREEBOARD OF AT LEAST 2.7m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.
14. A FREEBOARD OF AT LEAST 3.0m SHALL BE ASSIGNED TO THE WATER SURFACE PROFILES.

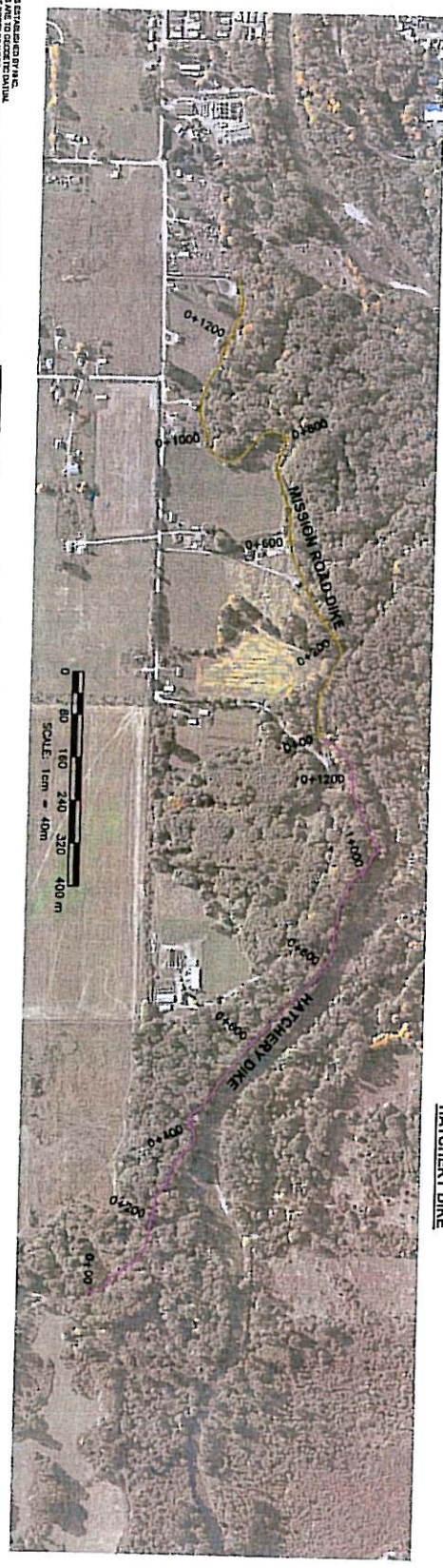
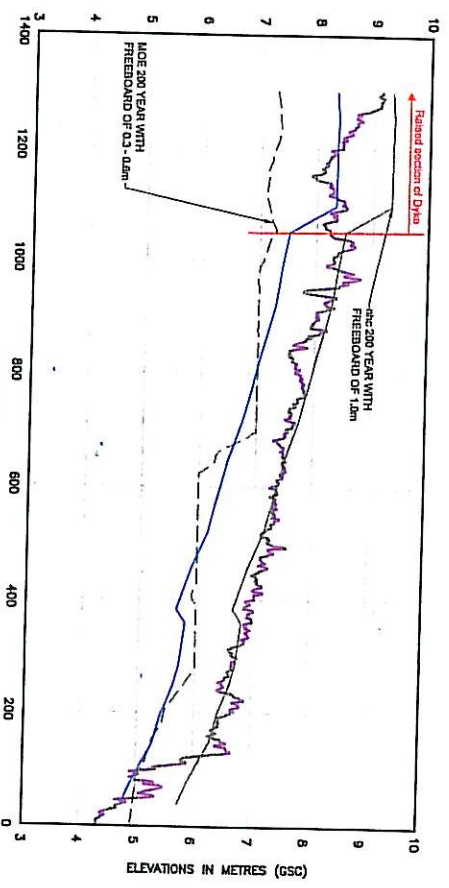
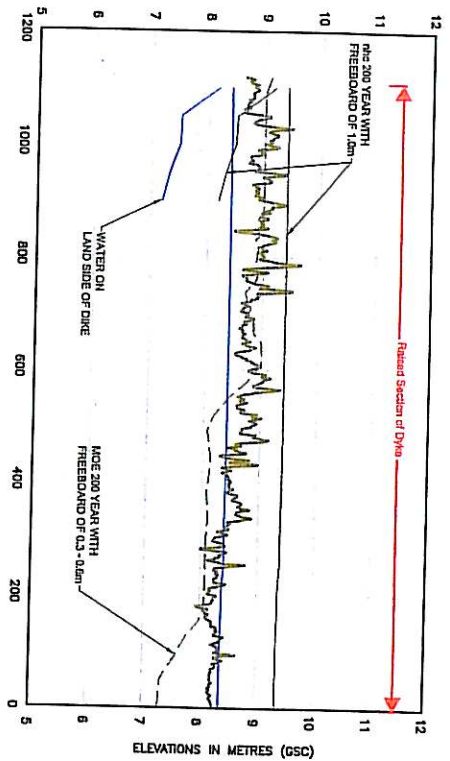
RETURN PERIOD	COWICHAN RIVER AT COWICHAN	COWICHAN RIVER AT COWICHAN
100	11.5	11.5
200	12.0	12.0
500	12.5	12.5
1000	13.0	13.0
2000	13.5	13.5
5000	14.0	14.0
10000	14.5	14.5

LEGEND

- COWICHAN RIVER SOUTH SIDE DIKE
- 200 YEAR WITH FREEBOARD
- MADE 200 YEAR WITH FREEBOARD

Modeling Results - Confined Flow
Cowichan River South Side and South Side Spur Dikes
and Road Profiles

FIGURE 4



- NOTES:
1. ALL CHANGES ESTIMATED BY N.H.C.
 2. ALL CHANGES ESTIMATED BY N.H.C.
 3. ALL CHANGES ESTIMATED BY N.H.C.
 4. WATER DRAINAGE PROFILES WERE COMPUTED USING ANTIPODE TIES WITH THE SAME REFERENCE POINTS AS THE ORIGINAL PROFILES.
 5. WATER DRAINAGE PROFILES WERE COMPUTED USING ANTIPODE TIES WITH THE SAME REFERENCE POINTS AS THE ORIGINAL PROFILES.
 6. PROFILES OF AT LEAST 250 YEARS WERE USED TO DETERMINE THE WATER ELEVATIONS.
 7. PROFILES OF AT LEAST 250 YEARS WERE USED TO DETERMINE THE WATER ELEVATIONS.
 8. PROFILES OF AT LEAST 250 YEARS WERE USED TO DETERMINE THE WATER ELEVATIONS.
 9. PROFILES OF AT LEAST 250 YEARS WERE USED TO DETERMINE THE WATER ELEVATIONS.
 10. PROFILES OF AT LEAST 250 YEARS WERE USED TO DETERMINE THE WATER ELEVATIONS.
 11. PROFILES OF AT LEAST 250 YEARS WERE USED TO DETERMINE THE WATER ELEVATIONS.
 12. PROFILES OF AT LEAST 250 YEARS WERE USED TO DETERMINE THE WATER ELEVATIONS.

RETURN PERIOD	CONCHUKAN RIVER AT CONCHUKAN (FAR LEFT)	CONCHUKAN RIVER AT CONCHUKAN (FAR RIGHT)
250	4.75	4.75
500	4.75	4.75
1000	4.75	4.75
2500	4.75	4.75
5000	4.75	4.75
10000	4.75	4.75

nhc
 National Hydrologic Consultants Ltd.
 2000 Lakeshore Blvd., Suite 1000
 North York, Ontario M2N 6L1
 Tel: (416) 491-1111 Fax: (416) 491-1112

Modeling Results - Confined Flow
 Mission Road and Hatchery Dikes
 and Flood Profiles

FIGURE 5

