



LIQUID WASTE MANAGEMENT PLAN MONITORING COMMITTEE

Tuesday, June 21, 2016; 12:30 pm – 3:00 pm
6300 Hammond Bay Road – RDN Committee Room

AGENDA

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CALL TO ORDER

ADOPT AGENDA

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10-17 Biosolids Update

- VIU Woodlot
- Organic Matter Recycling Regulation Amendment

Update on the Septic Maintenance Rebate Program and upcoming SepticSmart workshops (S. Norum – verbal)

18-20 May 17 Joint media release and May 19 News Bulletin article (S. Norum)

21-26 Minutes of the W3C Meeting held on March 4, 2016 (S. Norum)

Update on the Bowser Village and Cedar Village Sewer Servicing Studies (J. Jackson – verbal)

Draft LWMP 2015 Annual Report (S. Norum – verbal)

Next LWMP MC Meetings (S. Norum – Verbal)

- October 18, 2016 – Review Final Receiving Environment Monitoring program and review of 2016 LWMP Implementation

ADDENDUM

BUSINESS ARISING FROM COMMUNICATIONS / CORRESPONDENCE

NEW BUSINESS

ADJOURNMENT

Distribution:

- | | |
|--|---|
| Alec McPherson.....Director Electoral Area ‘A’ | Glenn Gibson.....Island Health |
| Ian Thorpe.....Director (Nanaimo) | Doug Muir.....Snuneymuxw First Nation |
| Bob Rogers.....Director Electoral Area ‘E’ | Juanita Rogers.....Fisheries and Oceans Canada |
| Marc Lefebvre.....Director (Parksville) | Daniel Hooper.....Public (District 68) |
| Vaughn Figueira.....City of Parksville | Vacant.....Public (District 69) |
| Bob Weir.....Town of Qualicum Beach | Blake Medlar.....Business Community (District 68) |
| Fred Spears.....District of Lantzville | Ted Malyk.....Business Community (District 69) |
| John Elliot.....City of Nanaimo | |

- Randy Alexander, General Manager, Regional and Community Utilities, RDN
- Sean De Pol, Manager, Wastewater Services, RDN
- Shelley Norum, Wastewater Program Coordinator, RDN
- Jolene Jackson, Special Projects Coordinator, RDN
- Rebecca Graves, Recording Secretary, RDN
- Matt O’Halloran, Legislative Coordinator, RDN

For Information Only: Chief & Council (Qualicum First Nation); Chief & Council (Nanoose First Nation); Kirsten White (Ministry of Environment); James Arnott (Environment Canada); Janelle Erwin (Ministry of Transportation and Infrastructure)

**REGIONAL DISTRICT OF NANAIMO
LIQUID WASTE MANAGEMENT PLAN MONITORING COMMITTEE MEETING
HELD ON MONDAY, MARCH 29, 2016
COMMITTEE ROOM**

MINUTES

Present:

Ian Thorpe	Chair, Director (Nanaimo)	Fred Spears	District of Lantzville
Bob Rogers	Director Electoral Area E	Glenn Gibson	Island Health
Alec McPherson	Director Electoral Area A	Blake Medlar	Business Community (District 68)
Bob Weir	Town of Qualicum Beach	Ted Malyk	Business Community (District 69)
Vaughn Figueira	City of Parksville	Daniel Hooper	Public (District 68)
John Elliot	City of Nanaimo		

Also in Attendance:

Jason Clarke	Director, GreatPacific Engineering and Environment		
Brenda Burd	Salish Sea Ambient Monitoring Exchange (SSAMEX) Program , Vancouver Aquarium		
Randy Alexander	GM, Regional and Community Utilities, RDN		
Sean De Pol	Manager Wastewater Services, RDN		
Shelley Norum	Wastewater Program Coordinator, RDN		
Ryan Powell	Laboratory Technician, RDN		

Regrets:

Doug Muir	Snuneymuxw First Nation	Juanita Rogers	Fisheries and Oceans Canada
Marc Lefebvre	City of Parksville		

CALL TO ORDER

Chairperson I. Thorpe called the meeting to order at 12:30 PM.

ADOPT AGENDA

MOVED G. Gibson, SECONDED A. McPherson, that the agenda be adopted.

CARRIED

PRESENTATIONS

J. Clarke gave a presentation on the draft Greater Nanaimo Pollution Control Centre Receiving Environment Monitoring Program Scoping Report. An outline of the presentation is attached.

A discussion of the presentation followed and the main topics are discussed below:

- The REM program is designed to understand and to track the effects of the disposal of effluent into the marine environment and to give confidence in the treatment levels provided at the plant.
- The operators collect regular effluent quality data. REM is paired with effluent quality monitoring to detect the potential effect on human health and the environment at the IDZ. It also shows long-term trends through sediment sampling and bioaccumulation sampling (e.g. bivalve tissue).
- The proposed program is a 3-year cycle. After one to three cycles, the program can be modified or reduced.
- Year 3 of the water quality sampling is higher (\$80,000) than Year 1 and 2 (\$65,000 per year) because Year 3 includes metals analysis whereas the other years do not.

- The RDN is considering participating in the SSAMEx program. Participation in the program would involve adopting standard methodology and sharing background results (from stations outside the IDZ) with the participating members in program. Participation would gain us access to background data and could potentially minimize the number sample sites in our program.
- Pharmacological parameters are not recommended for analysis because the tests are very expensive and don't tend to provide meaningful results. Metro Vancouver and CRD are doing some testing and almost all samples come back with non-detect results. It may be possible to include in the future if analysis techniques become more advanced.
- Careful sample site selection can help differentiate between the effects on bivalves from the sanitary outfall versus storm sewer outfalls. For example, rocky islets can be sampled to measure the effect of the sanitary outfall in intertidal areas since they are not affected by stormwater pollutants.
- It may be possible to install a monitoring station so you don't have to go out to collect regular samples. This works for some parameters. Other parameters (e.g. fecals) can't be measured *in situ*. Moorings don't work in all situations and don't last long in high traffic areas.
- D. Hooper commented that expenditures in water quality monitoring of the receiving environment should be minimized relative to those on analyses of sediments and tissue samples. This suggestion was made recognizing that the effluent quality monitoring is more extensive than receiving water sampling and thus provides a more accurate reflection of plant discharge. Obtaining accurate samples on the IDZ boundary is very challenging because receiving environment variables and discharge characteristics dictate movement and location of the effluent plume. At the time of sampling, precise information of this nature will not typically be available to those taking the samples. Costs of receiving water sampling are high and provide little value. Sediment and tissue samples and analyses are more cost effective and meaningful than water samples. Water samples may be used to determine IDZ boundary compliance but they a very course means of doing so. Accurate mass discharges are readily determined from the effluent quality and flow data. Receiving water samples cannot provide comparable accuracy.

DELEGATIONS

MINUTES

MOVED B. Rogers, SECONDED G. Gibson, that the minutes from the Liquid Waste Management Plan Monitoring Committee meeting held on February 3, 2016, be adopted.

CARRIED

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

GNPCC Outfall Update (S. De Pol)

S. De Pol gave an update on the GNPCC outfall project. Work in the winter fisheries window is complete. The contractor performed an eelgrass transplant and some dredging and blasting. Some of the removed eelgrass will be transplanted back to the outfall site after construction. The outfall

pipe is being assembled locally in Nanoose Bay in cooperation with the Nanoose First Nations. The pipe will be installed in the summer fisheries window (June 1 to September 1).

A Notice to Residents was distributed and reviewed (attached). The Notice gives residents advance notice of the marine pipeline assembly.

GNPCC Secondary Treatment Update (S. De Pol)

S. De Pol provided an update on the secondary treatment upgrade project. Geotechnical investigations, some site preparation works, and 60% engineering design are complete for the GNPCC Secondary Treatment Project. Sean reviewed the revised schedule and cost estimate.

The revised schedule anticipates project completion in 2019. The schedule change is largely a result of the geotechnical investigations that identified liquefiable soils in the secondary treatment project area. As a result, up to six months of ground improvements (pile driving) are necessary.

Our engineers' revised cost estimate is greater than the \$62 million estimated in the 2014 LWMP Amendment. The increase is due to several factors including inflation, a decrease in value of the Canadian dollar, costs of the additional ground improvements, and scope refinements.

In February, the RDN wrote a letter (distributed) to the MOE asking if an LWMP amendment would be necessary to address the revised schedule and cost estimate. To date we have not received a formal response to our letter.

Future Meetings of the LWMPMC (S. Norum)

Future LWMPMC meetings are tentatively scheduled for:

- May 10, 2016 [this is now changed to June 21, 2016]
- September 9, 2016 (tentative)
- November/December, 2016.

ADDENDUM

NEW BUSINESS

ADJOURNMENT

MOVED B. Rogers, SECONDED B. Medlar that this meeting be adjourned.

TIME: 2:13 PM

CHAIRPERSON

NOTICE TO RESIDENTS

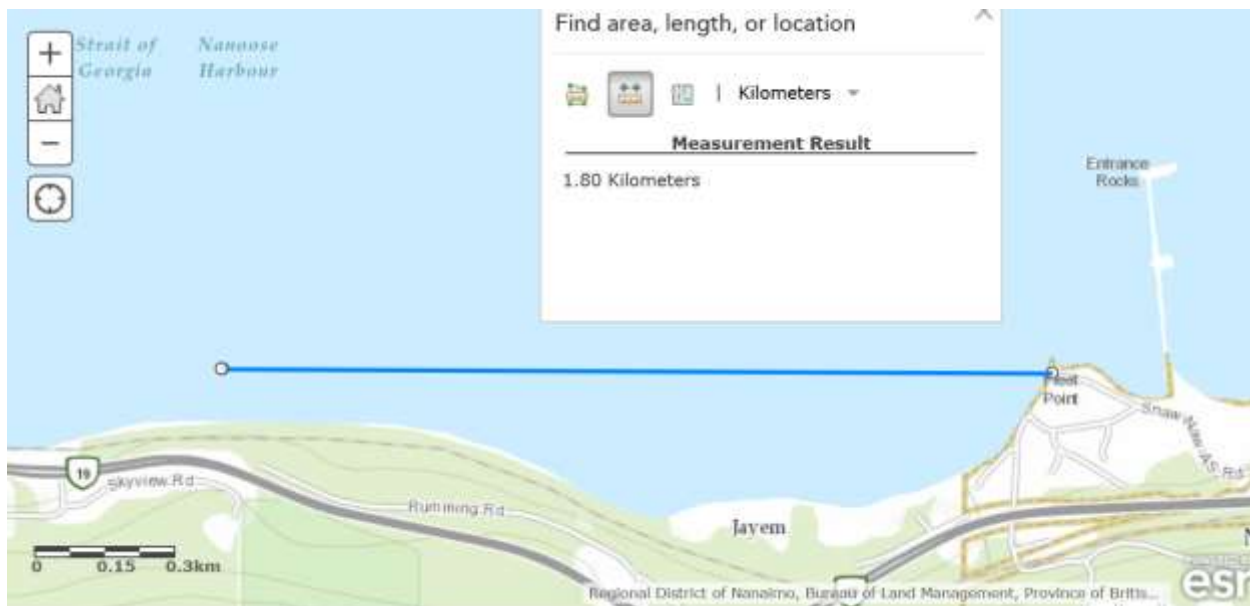
MARINE PIPELINE ASSEMBLY

Between April and July 2016, the McNally/JJM joint venture will be assembling a 54” diameter HDPE (high density polyethylene) pipe in Nanoose Bay with the cooperation of the Nanoose First Nations. Two sections of pipe will be assembled from land at the Nanoose Reserve, eased into the bay, and floated on the water surface in a westerly direction from the assembly area. The pipe will be lined and lit-up with markers to make it easily visible to boaters both day and night. There is one 1800 meter section and one 200 meter section to be assembled. Once the pipes are assembled, the sections will be joined together and towed to Morningside Park in Nanaimo, BC for installation.

During the assembly period the pipelines will be moored to a spread of anchors. The anchors will hold the pipeline in a straight line orientation. The moorings will be well marked with surface buoys and positioning of the floating sections of pipe will be staged to minimize the impacts to recreational boating.

We understand this may be an inconvenience for a short period of time and as such have sequenced our work to minimize the impact. Our crews will be out on the water during the assembly process and are instructed to aid pleasure crafts in maneuvering around our temporary moorings if required.

Diagram for work taking place in Nanoose Bay.



Please see www.rdn.bc.ca for more information on the Marine Outfall Replacement Project.

If you have any further questions or concerns please contact:

Steve Deveau – Project Manager, McNally/JJM

Cameron McIntosh – Assistant Project Manager, McNally/JJM

Phone: (250)585-8577

May 18, 2016



Notice to Residents

Project Updates: Greater Nanaimo Pollution Control Centre Outfall Replacement and Secondary Treatment Upgrade

Open House: Saturday, June 11, 2016 at 4600 Hammond Bay Road from 10 am to 2 pm

The Greater Nanaimo Pollution Control Centre (GNPCC) treats wastewater from the City of Nanaimo, Snuneymuxw First Nation, and parts of the District of Lantzville. Treated effluent is discharged through a buried outfall that runs from the treatment plant to Morningside Park, and continues for approximately 2 km out into the Strait of Georgia along the sea floor.

Outfall Replacement - Final Phase June 1, 2016 to September 1, 2016

The following activities will occur in the summer fisheries work window:

- > Dredging, rock removal
- > Excavation in the intertidal area
- > Installation of the 2 km outfall

These activities should not cause traffic delays. The Morningside Park beach access will remain closed until the project is complete and the site is restored.

The RDN has worked with Fisheries and Oceans Canada, Environment Canada, Transport Canada, the Ministry of Environment, and the Land Titles Office to obtain necessary permits and licenses for this work.

Completion of the summer construction work will conclude the outfall replacement project.

Secondary Treatment and GNPCC Upgrade

Geotechnical investigations, preliminary site preparation works and 60% engineering design for secondary treatment at GNPCC are complete. At this milestone, we have an updated schedule and cost estimate. The updated schedule anticipates project completion in 2019. The schedule change is largely a result of the geotechnical investigations that identified liquefiable soils in the project area. As a result, up to six months of ground improvements (pile driving) are necessary.

The current cost estimate for the secondary treatment scope of work identified in the 2014 Liquid Waste Management Plan (LWMP) is \$67.5 million (the LWMP estimate in 2012 dollars was \$62 million). The change is primarily due to inflation, the decrease in value of the Canadian dollar, and the costs of additional ground improvements. Overall, the RDN has budgeted approximately \$80 million in capital projects at GNPCC over the next four years.

continued over >



www.rdn.bc.ca
(250) 390-6560
(250) 954-3792
1-877-607-4111
rcu@rdn.bc.ca

www.rdn.bc.ca

Open House

You are invited to attend an open house for more information on the outfall replacement and secondary treatment upgrade projects. As well, you are welcome to join us for a tour of the treatment plant.

Plant tours will run every hour from 10:30 am until 1:30 pm.

Date: Saturday, June 11, 2016

Time: 10:00 am – 2:00 pm

Location: 4600 Hammond Bay Road (entrance is located off of McGuffie Road)

For more information, please visit www.rdn.bc.ca/gnpcc, contact Sean De Pol at 250-390-6560 or email sdepol@rdn.bc.ca.



Sean De Pol
Manager of Wastewater Services



Photo: Outfall Construction Barge in Hammond Bay, January 2016.

Work will begin again on June 1, 2016. Completion of the summer construction work will conclude the outfall replacement project.



June 6, 2016

File: 76780-30 RDN

Randy Alexander
General Manager, Regional and Community Utilities
Regional District of Nanaimo
6300 Hammond Bay Road
Nanaimo BC V9T 6N2

Dear Mr. Alexander:

Re: Update to the Regional District of Nanaimo Liquid Waste Management Plan

Thank you for your letter of February 17, 2016, notifying the Ministry of Environment (MoE) of the Regional District of Nanaimo's (RDN) intention to update its Liquid Waste Management Plan (Plan). I understand that due to recent geotechnical findings during the design phase of the Greater Nanaimo Pollution Control Centre (GNPCC) Secondary Treatment Project, the RDN will need to update the cost estimates for the Plan.

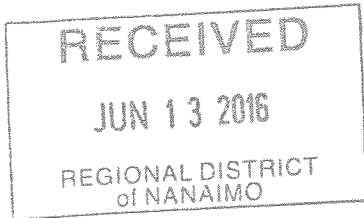
By way of this letter, the MoE acknowledges the revised cost estimates. Please ensure that the public and First Nations are made aware of the Plan revisions and that their consultation needs are met in accordance with the Interim Guidelines for Preparing Liquid Waste Management Plans (July 2011).

As per the amended RDN Plan approved by the Minister on October 30, 2014, the current deadline for completion of the GNPCC upgrade project is 2018. This timeline was based on public preference identified through the Plan's consultation process. I understand that the work required to stabilize the soils is expected to add an additional 6 months to the project timeline. However, it is expected that the RDN will continue to make all efforts to meet the upgrade completion deadline as closely as possible. Any significant proposed changes to what is detailed in the Plan, including substantive delays to the approved timelines, will require a plan amendment as well as public and First Nations consultation as appropriate to the nature of the amendment.

Yours truly,

A handwritten signature in cursive script that reads "Kirsten White".

Kirsten White
A/Section Head
Municipal Liquid Waste
Authorizations – South
Environmental Protection Division



June 10, 2016

File: 50100-03/OMRR

SEAN DE POL
REGIONAL DISTRICT OF NANAIMO
6300 HAMMOND BAY ROAD
NANAIMO BC V9T 6N2

000088

Re: Notification of Amendment to the Organic Matter Recycling Regulation regarding Composting Facilities

On June 9, 2016, government amended the Organic Matter Recycling Regulation (OMRR) with respect to large composting facilities. The amendments provide site specific oversight and address concerns regarding public notification.

In addition to meeting the requirements of the OMRR, composting facilities that meet the following criteria will now also require a permit issued pursuant to the *Environmental Management Act* (EMA):

- process food waste or biosolids, and
- have the design capacity to produce 5,000 tonnes or greater of compost per year.

Composting facilities with a total design capacity less than 5,000 tonnes per year, or those that are not processing any food wastes or biosolids will remain under the regulation and are required to comply with the OMRR, and do not require a permit. In addition, a compost facility which holds or obtains an approval or operation certificate does not require a permit.

These amendments are in force as of June 9, 2016. If your facility meets the criteria above, please be advised that you have 60 days to apply for a permit. The deadline to apply for a permit is **August 8, 2016**. It is important to apply for a permit within this 60 day period; failure to do so will be considered non-compliance with the OMRR and may result in enforcement action under EMA. Please note that your facility will continue to be authorized under EMA while your permit application is being adjudicated.

A permit application package is included for your convenience. Information on the permit application process can be found on our website at: www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization. If you have any questions regarding the application process, please contact Liz Freyman at Liz.Freyman@gov.bc.ca, as soon as possible.

.../2

Ministry of Environment	Office of the Executive Director	Mailing Address:	Telephone: (250) 387-9990
	Regional Operations	PO Box 9334 Stn Prov Govt	Facsimile: (250) 356-5496
	Environmental Protection Division	Victoria BC V8W 9M1	Website: www.gov.bc.ca/env

Please note that facilities requiring a permit will be compelled to comply with the requirements of the Public Notification Regulation (PNR) under the *Environmental Management Act*. As such, a director may require the applicant to provide information within specified timelines.

For more information on the OMRR or on this amendment, please visit our website at www2.gov.bc.ca/gov/content/environment/waste-management/recycling/organics/regulations-guidelines.

Yours truly,

A handwritten signature in black ink, appearing to read "Jennifer McGuire". The signature is fluid and cursive, with a large initial "J" and "M".

Jennifer McGuire
Executive Director
Regional Operations Branch

Attachment



Ministry of
Environment

**Procedure to apply for a Permit under the
Environmental Management Act
for the composting of biosolids and food waste**

June 2016

Environmental Protection Division
Regional Operations Branch

In addition to a Permit Application, the Ministry of Environment requires the following support documents to be submitted in order to apply for a Permit under the *Environmental Management Act* for the composting of biosolids and food waste:

- An Environmental Impact Study
- An Operating Plan
- An Odour Management Plan
- A Leachate Management Plan

The above noted support documents are to be signed and sealed by a qualified professional¹ with appropriate expertise and experience, and shall consider all of the information presented below as a minimum. In the event that some of the below information requirements do not pertain to the subject facility, sufficient justification must be provided.

The operation is expected to follow best management practices to prevent impacts to human health and the environment.

Permit Application:

A standard Permit Application form is to be used. A copy of the standard application form can be found at the following website:

<http://www2.gov.bc.ca/assets/gov/environment/waste-management/waste-discharge-authorization/formstemp/approvalapplication.pdf>

Additional guidance for the Permit Application process can be found at the following website:

<http://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/permit-or-approval-application-process/application-forms-and-guidance>

Public Notification:

Public Notification, as per the Public Notification Regulation is required for all Permits under the *Environmental Management Act*. Where the proposed facility is on Agricultural Land Reserve the Agricultural Land Commission shall also be notified. Additional guidance on the public notification requirements can be found here:

<http://www2.gov.bc.ca/assets/gov/environment/waste-management/waste-discharge-authorization/consultation.pdf>

¹ "Qualified Professional" refers to an applied scientist or technologist specializing in a particular applied science including, but not necessarily limited to, agronomy, biology, chemistry, engineering, geology, or hydrogeology and: who is registered in British Columbia with their appropriate professional organization, acting under that association's Code of Ethics and subject to disciplinary action by that association; and who, through suitable education, experience, accreditation and knowledge, may be reasonably relied on to provide advice within their area of expertise.

Reference materials:

The following reference material shall be used as a guide in creating the Permit Application support documents:

Compost Facility Requirements Guideline: How to Comply with Part 5 of the Organic Matter Recycling Regulation, dated March 2004. <http://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/compost.pdf>

Land Application Guidelines for the Organic Matter Recycling Regulation and the Soil Amendment Code of Practice, dated March 2008. <http://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/landappguidelines.pdf>

Support Documents to be submitted with Permit Application:

The Ministry requires the following support documents to be submitted along with a Permit Application:

Environmental Impact Study (required for all facilities regardless of size)

The Environmental Impact Study (EIS) details the nature and scale of the composting facility, how this project will impact the physical, chemical and biological environment and its inhabitants, and the measures that can be taken to reduce, alleviate, mitigate and monitor for impacts. The EIS is required to be conducted by a qualified professional with expertise and experience in conducting environmental impact studies and assessments.

The intent of the EIS is to determine whether the operation of the facility and the production of compost will substantially alter or impair the usefulness of the environment or adversely affect human or ecological health in the area. The EIS must, in general, do the following:

- Establish pre-facility conditions in the receiving environment;
- Establish monitoring activities to occur before and after construction and/or operations commence;
- Assess existing and potential uses of the receiving environment, including in the airshed, surface waters and groundwater;
- Determine whether environmental quality guidelines will be met in the receiving environments;
- Assess if the proposed operation will adversely affect human health or the environment; and
- Provide recommendations to ensure the proposed facility will not impact human health or the environment.

Key information requirements for the EIS include:

- *Facility Information:*
 - *General*
 - Location of facility (civic address, long/lat and legal description).
 - Property owner.
 - Existing zoning and land use.

- *Facility Design*
 - Method of composting including:
 - Time/Temperature.
 - Mixing procedure.
 - Description of the process from start to finish.
 - Class of compost to be created.
 - Storage/curing.
 - Proposed use/destination of created compost.
 - Maximum amount of compost to be created per year.
 - Maximum amount of compostable material to be imported.
 - Types/amounts of additional materials to be added such as bulking agents.
 - Odor control technology employed.
 - Utilities available at the site (water, power, phone and sewer).

- *Design Drawings and Site Plans*
 - Clearly show all works at the site including:
 - Receiving area.
 - Compost area.
 - Curing area.
 - Leachate tanks (if applicable).
 - Closest water body.
 - Closest drinking water well.
 - Closest neighbor.

- *Characterization of Local Environment and Nearby Receptors:*
 - Inventory of existing and potential uses of the receiving air shed, surface waters and groundwater by humans, plants and animals (the receptors).
 - First Nations use of surrounding land and resources.
 - Soil type/topography.
 - Site weather conditions (rainfall, snowfall, temperatures, typical wind direction).
 - Summary of surrounding property uses/types/buffer areas.
 - Location/proximity of closest resident, commercial establishment and institution such as schools or hospitals.
 - Location/proximity and characterization of closest water body.
 - Location/proximity of closest wells (well records search).
 - Groundwater information/depth/flooding potential.
 - First Nations land claims and/or entitlements.

- *Assessment of Potential Impacts*
 - Characterization of the source materials to be composted (type/source/volume).
 - Composting method and equipment (additional detail to be provided in the facility design and design drawings section).
 - Identify the various receptors most likely to be impacted.
 - Determine whether environmental quality guidelines will be met or exceeded.

- Predict if the proposed operation will adversely affect human health or the environment.
- Identify potential odour impacts during facility operation .
- Identify potential noise impacts during facility operation.

- *Proposed Mitigation Measures*
 - May include reference to measures included in other documents: Operating Plan, Odour Management Plan and Leachate Management Plan.

- *Ongoing Monitoring*
 - Proposed monitoring plan.
 - Monitoring objectives.
 - Monitoring locations.
 - Sampling frequency.
 - Proposed analysis.
 - Sampling and analytical lab methodology.
 - Rationale for proposed sampling program.
 - Proposed assessment techniques.
 - Proposed data quality assurance and quality control (QA/QC) programs.
 - Reporting schedule.

Operating Plan

The Operating Plan shall detail the operation of the composting facility. It is intended to detail day to day operation of the facility such that it will be operated in a safe and environmentally friendly manner. The Operating Plan is to contain mitigation measures the Operator is to undertake in the event of an upset or event that has a potential alter or impair the usefulness of the environment or adversely affect human or ecological health in the area. Key information requirements for the Operating Plan include:

- Contact Person(s).
- Source material(s) receiving procedure.
- Proposed initial processing (blending/bulking):
 - Carbon/nitrogen ratio and nutrient balance.
 - Moisture content.
- Active composting:
 - Time/temperature recording procedure.
 - Moisture/temperature content monitoring and adjustment.
 - Aeration method/proposed frequency.
- Sampling/analysis plan.
- Residual management (foreign material).
- Animal attractant/vector control.
- Contingency plan (fires/spills/complaints/dust).
- Screening/maturation procedure.
- Intended distribution/use.

- Composting Personnel Training Plan ².
- Closure plan.

More information is available in Chapter 9 of the Compost Facility Requirements Guideline.

Odour Management Plan ³

The Odour Management Plan shall detail the various sources of odour from the facility and the potential impacts to neighbouring land uses. This would include types of odours, conditions that may lead to odour releases and the various practices to mitigate and reduce the odour potential. Key information requirements for the Odour Management Plan include:

- Odor predictions for various activities in the process.
- Procedures to minimize odors at each stage of the process.
- Aeration process.
- Mitigation methods.
- Odour complaint procedures.
- Contingency procedures in the event of ongoing odor issues.

More information is available in Chapter 5 of the Compost Facility Requirements Guideline.

Leachate Management Plan ⁴

The Leachate Management Plan shall detail leachate control and treatment. This would also include the prevention of various forms of precipitation from generating excess leachate. Leachate is to be minimized and should be reused when possible to minimize or eliminate effluent disposal. Key information requirements for the Leachate Management Plan include details relating to:

- Roof/cover.
- Impermeable surfaces.
- Leachate collection/reuse.
- Storm water management.
- Leachate storage.
- Leachate disposal/treatment/overflow prevention options.
 - Note: Subsurface disposal will likely require additional information to be provided.
- Groundwater protection.

More information is available in Chapter 6 of the Compost Facility Requirements Guideline.

² An example of a Composting Personnel Training Plan can be found in Appendix B of *Compost Facility Requirements Guideline: How to Comply with Part 5 of the Organic Matter Recycling Regulation*

³ An example of an odour management plan can be found in Appendix C of *Compost Facility Requirements Guideline: How to Comply with Part 5 of the Organic Matter Recycling Regulation*

⁴ An example of a leachate management plan can be found in Appendix D of *Compost Facility Requirements Guideline: How to Comply with Part 5 of the Organic Matter Recycling Regulation*

Media Release

Drop-off your drugs safely and help combat the epidemic of opioid abuse

May 17, 2016 – Nanaimo residents are encouraged to safely dispose of their medications to ensure they don't get into the wrong hands or pollute the environment.

Given the recent news that BC will likely have a record number of drug overdoses this year, the safe disposal of medication is especially critical. Prescription drugs can be effective in helping people to manage pain and other conditions, but if used inappropriately they can have deadly consequences.

Nanaimo residents can return unused or expired medications to community pharmacies at any time of the year at no charge. This Saturday, May 21 also marks National Prescription Drug Drop-Off Day, a Canada-wide initiative led by the Canadian Association of Chiefs of Police.

The BC Medications Return Program ensures medications aren't thrown in the garbage, where they could be found by young people or pets, or flushed down the toilet, where they can harm the marine environment.

In 2015, Nanaimo residents returned more than 4,500 kilograms of expired or unused medications to community pharmacies for safe disposal. This is a 127 per cent increase in the number of medications returned in 2009, in the early days of the awareness campaign.

"There are 43 community pharmacies in the Nanaimo area that will accept medication returns at any time," says Geraldine Vance, CEO of the BC Pharmacy Association. "Your pharmacist is the best person to help you dispose of unwanted drugs."

To encourage the public to heed this message, the BCPhA and Health Products Stewardship Association have produced a new video on the theme of Fish Can't Say No to Drugs, which can be viewed at <https://youtu.be/Qakaycalh1U>.

Medication should be stored out of reach of children or in a locked cabinet. According to the 2010–11 Youth Smoking Survey, 8.2% of Canadian youth in grades 6–12 reported using prescription and over-the-counter drugs in a 12-month period to get high.

"Improper disposal of medications can have devastating impacts on our local marine environment," says Bill Veenhof, chair of the Regional District of Nanaimo. "RDN residents can help protect the environment by dropping off unused and expired medications at any of the 43 locations across the region."

The Medications Return Program covers all prescription drugs, over-the-counter medications, including topical antibiotic and antifungal creams, and natural health products that are orally ingested such as vitamins, minerals, traditional Chinese medicines, herbal products, probiotics, and homeopathic medicines. More than 95 per cent of community pharmacies in BC participate in the program, which is free for all British Columbians.

Any liquid or cream medications should be kept in their original container with any personal information removed or blacked out, and solid medications like pills should be combined into a small bag. For more information, visit www.healthsteward.ca.

- 30 -

The BCPhA is a not-for-profit, voluntary association, representing more 3,000 pharmacists and more than 850 pharmacies throughout British Columbia.

Media contacts:

Matilda Meyers
Communications Manager, BC Pharmacy Association
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Nanaimo residents can return drugs to pharmacies free of charge

By Nanaimo News Bulletin

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The Regional District of Nanaimo and the B.C. Pharmacy Association is encouraging Nanaimo residents to dispose of drugs safely.

Residents can return unused or expired medication to community pharmacies at any time and at no charge as part of a B.C. Medications Return Program.

The program is meant to ensure medications are not thrown in the garbage where they could be found by young people or pets, or flushed down the toilet where they can harm the marine environment. Given the recent news that B.C. will likely have a record number of drug overdoses this year, the safe disposal of medication is especially critical, a press release says.

Last year more than 4,500 kilograms of expired or unused medications were returned to pharmacies by people in Nanaimo for safe disposal.

"There are 43 community pharmacies in the Nanaimo area that will accept medication returns at any time," says Geraldine Vance, CEO of the B.C. Pharmacy Association. "Your pharmacist is the best person to help you dispose of unwanted drugs."

The return program covers all prescription drugs, over-the-counter medications, including topical antibiotic and anti fungal creams and natural health products that are orally ingested like vitamins, probiotics and homeopathic medicines.

Saturday (May 21) also marks National Prescription Drug Drop-off Day, a Canada-wide initiative led by the Canadian Association of Chiefs of Police.

For more information about the program, please visit www.healthsteward.ca.

Find this article at:

<http://www.nanaimobulletin.com/news/380036321.html>



W3C: WASTEWATER AND WATER COLLABORATIVE MEETING

Friday, March 4, 2016; 9:00 am – 1:00 pm
6300 Hammond Bay Road – RDN Committee Room

MINUTES

ATTENDEES:

Adrian Limpus – RDN	Julie Pisani – RDN	Sean De Pol – RDN
Bob Weir – Town of Qualicum Beach	Lorena Mueller – RDN	Shelley Norum – RDN
Doris Fournier – City of Nanaimo	Randy Alexander – RDN	Vaughn Figueira – City of Parksville
John Elliot – City of Nanaimo		

ADOPT MINUTES

Minutes from the March 12, 2015 and September 25, 2015 W3C meetings were adopted.

LWMP MONITORING COMMITTEE MINUTES REQUEST

The W3C Terms of Reference states that staff will report on W3C Progress at LWMP Monitoring Committee (LWMP MC) meetings. The first progress report was vetted at the September 25, 2016 W3C meeting and presented to the October 16, 2015 LWMP MC meeting. The LWMP MC asked to receive copies of future W3C minutes instead of the summary.

W3C members agreed to share meeting minutes going forward with the LWMP MC. W3C members will have at least two weeks to review draft minutes and make comments before the minutes are distributed.

ROUNDTABLE UPDATE

(1) RDN Wastewater Services:

Shelley Norum updated the group on the SepticSmart program:

- Over the past two years, the RDN issued more than \$50,000 in Septic Maintenance rebates and homeowners participating in the rebate program spent an additional \$250,000 to maintain their septic systems. Anecdotally, much of this work would not have been done without a rebate. The RDN is offering Septic Maintenance Rebates for the third year. The rebate is available to all property owners, including those in the municipalities, with a septic system in the RDN. Rebates are available for three categories of work: 1) a Maintenance Assessment, 2) Effluent Filter Installation, and 3) Riser Installation. Municipalities may promote the rebate by linking to www.SepticSmart.ca or www.RDNrebates.ca.

The RDN offers four SepticSmart workshops each year. Two workshops are scheduled for March 2016. A workshop was held in Parksville on March 2 and had 51 participants. The crowd was very engaged and feedback was very positive. The second workshop is scheduled for March 7 in Cedar. Two more workshops will be scheduled for the fall.

Sean De Pol reported on RDN capital projects:

- **GNPCC Outfall:** Construction of the marine outfall is underway. The contractor used the winter fisheries window (December 15 to February 15) to perform an eelgrass salvage, dredging and blasting. The outfall pipe is being assembled in Nanoose and will be installed in the summer fisheries window (June 1 to September 1).



Photo: Dredging/blasting for the marine outfall during the winter fisheries window

Overall, the public responded well to the winter construction works. John mentioned that the signage in Neck Point park is working well and he has seen many people reading it.



Photo: Signage for the Outfall Replacement Project in Neck Point Park

- **Secondary Treatment:** Geotechnical investigations, some site preparation works, and 60% engineering design are complete. At this milestone, our engineers have provided an updated project schedule and cost estimate.

The revised schedule anticipates project completion in 2019. The schedule change is largely a result of the geotechnical investigations that identified liquefiable soils in the secondary treatment project area. As a result, up to six months of ground improvements (pile driving) are necessary.

Our engineers' revised cost estimate is greater than the \$62 million (Class C cost estimate) estimated in the 2014 LWMP Amendment. The increase is due to several factors including inflation, a decrease in value of the Canadian dollar, costs of the additional ground improvements, and scope refinements.

- LWMP: The RDN recently met with the MOE to ask if an LWMP amendment would be necessary to address the revised schedule and cost estimate. In follow-up, the RDN has sent a letter to the MOE providing updated cost and schedule information and requesting a determination as to whether or not a minor amendment is required. The MOE further advised that a minor amendment, if recommended, would require notification of the public and First Nations. The RDN is waiting for a response from the MOE.

(2) City of Parksville:

Vaughn Figueira provided an update on the City of Parksville activities:

- Parksville will soon have approval of their final budget.
- The Stormwater Master Plan will be posted to the web soon.
- Julie Pisani presented on the options for a rainwater harvesting program to the Parksville Council. Council opted to offer a [Rain Barrel Rebate Program](#) for 50 gallon rain barrels.

(3) City of Nanaimo

Doris Fournier provided an update on City of Nanaimo's activities:

- The City has installed three new flow monitoring stations. There was a discussion on how flow monitoring is managed. Action item: Adrian will follow up with Doris to discuss potential flow monitoring efficiencies.
- Cedar Pump station is now operational.
- The City is completing a routing study for CoN's Chase River Pump Station. There are four potential pump station locations.
- The City has hired consultants to review the storm and water sections of the Engineering Standards. They hope to adopt the revisions in the fall of 2016. The next revision will include the street and sewer sections.

John Elliot provided an update on City of Nanaimo's activities:

- The City has hired a Roads and Traffic Manager, three operators-in-training and ten summer labourers.
- [Core Services Review](#) information is on the internet. A progress report will be posted mid-March.
- The Millstone trunk upgrade is scheduled for this year at a cost of \$4 million.

(4) Town of Qualicum Beach:

Bob provided an update from the Town of Qualicum Beach.

- Qualicum Beach is focussing on filling asset management data gaps (i.e. drainage). The Town is rerunning stormwater modelling with results from rainfall monitoring. Modelling is showing a big variation through Qualicum Beach.
- Capital projects will focus on drainage this year. One rain garden is going in. Not a lot is targeted for the sanitary sewer.

(5) District of Lantzville:

Fred was absent but did not have any updates from the District of Lantzville.

(6) RDN Water Services:

Julie provided an update on the Drinking Water and Watershed Protection Plan as it relates to the LWMP.

- RDN has a new academic research partnership with VIU & the Mt Arrowsmith Biosphere Region Research Institute to improve wetland mapping and monitoring.
- A new region-wide watering restriction framework is in the process of adoption by all major water purveyors in the region. A website with all the information will be live March 23 on www.TeamWaterSmart.ca.
- Two Water Day events are coming up: March 20 at Nanaimo (Bowen Park) and April 3 in Qualicum Beach (Qualicum Commons). Events are hosted by Team WaterSmart and run from 10am- 5pm. There will be free workshops, speakers, info display booths, activities for kids, live music and food vendors.
- Residential irrigation checkups will start earlier this year (mid-April).
- DWWP recently sponsored certified irrigation technician training in Nanaimo, facilitated by the Irrigation Industry Association of BC.
- Two new volunteer monitoring wells will be added to our network this spring.

FLOW MONITORING

Adrian Limpus provided a flow monitoring billing update from September 2015 to February 2016. He noted that there would still be one more month of meter readings and account information to incorporate in the final results. Action item: Adrian will send flow monitoring updates to all municipalities.

WORKING GROUP 1: Source Control / Sanitary Sewer Use Bylaw

At the last W3C, Jolene Jackson reviewed the old Sewer Use Bylaw 1225 and the revised Bylaw 1730. The RDN recommends that the municipalities update their bylaws with text similar to wording in the City of Victoria's bylaw (attached).

The first Source Control Working Group meeting will be scheduled in the near future and will address best practices, contaminants that pose an operational concern, the permitting/application process, education and communication and enforcement.

WORKING GROUP 2: Inflow and Infiltration

The I&I working group met on November 10, 2015, February 2, 2016 and February 29, 2016.

I&I Working Group resources are stored on the City of Nanaimo's OwnCloud site. Please contact Doris if you are interesting in reviewing these documents and she will forward you the username and password.

The working group reviewed the York Region Inflow and Infiltration Reduction Strategy and created a 10-page summary of sections that are applicable in the RDN. The whole report is available online at http://sectrunksewer.ca/images/uploads/Inflow_and_Infiltration_Reduction_Strategy_web1.pdf.

Action Item: Shelley will distribute the summary report. One representative from each municipality plus RDN Water Services will review the summary and provide comments to Doris by the end of March. Doris will compile the comments, revise the summary, and redistribute the document. Each jurisdiction will document where they are at, in comparison to the summary, for the next W3C. The summary can be brought forward to Board/Councils with the goal that it will form the basis of our I&I reduction strategy.

WORKING GROUP 3: Rainwater Working Group

The rainwater working group met on November 26, 2015 and February 15, 2016. Discussion topics included the regional context for rainwater management; existing policies, bylaws, and DPAs from each jurisdiction; and a review of successes and challenges. Topics for follow-up included:

- A case study review of sediment and erosion controls and enforcement tools for the development of single-family residences
- Developing partnerships with building inspectors
- Looking into the potential to align stormwater bylaws and engineering standards.

The next meeting will be scheduled in or around June 2016.

RDN DEVELOPMENT COST CHARGE REVIEW

The RDN has initiated a sewer DCC review for Northern and Southern Communities.

ACTION ITEMS

The following action items are identified:

1. Adrian will follow up with Doris to discuss potential flow monitoring efficiencies.
2. Adrian will send flow monitoring updates to all municipalities – DONE
3. Lorena will send Bob a copy of the Qualicum Beach interceptor video (second run) – DONE.
4. Municipalities will consider amending their source control bylaws to reference RDN bylaw 1730 with text similar to wording in the City of Victoria's bylaw (attached).
5.
 - a. Shelley will distribute the summary of York's I&I strategy – DONE.
 - b. One representative from each municipality plus RDN Water Services will review the summary and provide comments to Doris by the end of March.
 - c. Doris will revise the summary with comments from Action 5b.
 - d. Each jurisdiction will document where they are at in comparison to the summary by the next W3C.
 - e. The summary can be brought forward to Board/Councils with the goal that it will form the basis of our I&I reduction strategy.
6. Jolene will send out meeting invitations for the Source Control working group – DONE.

CLOSE AND PROPOSE NEXT MEETING

The next W3C meeting is scheduled for September 30, 2016.

ATTACHMENTS

1. Potential wording to reference Bylaw 1730.

"Trucked Liquid Waste" means any waste that is collected and transported from the site where the waste originated by means other than discharge to a sewer including, but not limited to, holding tank waste, septic tank waste, chemical toilet contents, catch basin waste, oil and grease from interceptors or traps, and other sludges of organic or inorganic origin.

"Uncontaminated Water" means any water excluding stormwater but including cooling water, condensed water and water from municipal waterworks or a private water supply to which no contaminant has been added.

"Water Quality Parameter" means any parameter used to describe the quality of water, stormwater or wastewater.

21. Prohibited Discharge to Sanitary Building Sewer

- (1) A person must not discharge or allow or cause to be discharged to a sanitary building sewer any waste of a kind or quality that contravenes the Capital Regional District Sewer Use Bylaw No. 5, 2001, as amended from time to time.

22. Nuisance or Damage to Municipal Sewer System

- (1) A person must not discharge or allow or cause to be discharged into the municipal sewer system any deleterious material that, in the opinion of the Director, is likely to result in annoyance to any person, or damage or block the municipal sewer system.
- (2) A person who contravenes subsection (1) is responsible for all costs incurred by the City in the remediation of the damage or blockage.

23. Discharges to Municipal Stormwater Systems and Watercourses

- (1) No person shall discharge or allow or cause to be discharged into a Municipal Stormwater System or watercourse any of the following:

**CAPITAL REGIONAL DISTRICT (CRD)
BYLAW NO. 2922**

(As amended by Bylaws No. 3016, 3046, 3075, 3105, 3350)

*Consolidated version authorized in accordance with Bylaw No. 3014,
CRD Consolidation Authorization Bylaw No. 1, 2002*

CAPITAL REGIONAL DISTRICT SEWER USE BYLAW NO. 5, 2001

*A Bylaw to Regulate the Discharge of Waste into Sewers Connected to a Sewage Facility
Operated by the Capital Regional District*

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