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HIGHLAND WATER AND SEWER SERVICES COMMISSION (MALIVIEW)

Notice of Meeting on **THURSDAY, November 21, 2019 at 10:00 AM**
Creekside Meeting Room, 108 121 McPhillips Ave, Salt Spring Island, BC

Gary Holman Laura Travelbea Brian Travelbea

ADDENDUM to the AGENDA

5. New Business

5.1 Maliview Waste Water Treatment Plant Regulatory Noncompliance and Funding Request For Corrective Action

Attachments:

Appendix 1, Written Warning Letter, Enforcement Branch of Environment Canada, September 23, 2019

Appendix 2, Response to Written Warning Letter, Capital Regional District, October 11, 2019

Appendix 3, Request for Proposal for Maliview Waste Water Treatment Plant, Capital Regional District, November 6, 2019 (Cover Page only)

To ensure quorum, advise Tracey Shaver 250.537 4448 if you cannot attend.



Executive Services
625 Fisgard Street
Victoria, BC V8W 2S6

T: 250.360.3125
F: 250.360.3130
www.crd.bc.ca

October 11, 2019

File: 4500-30
Waste Management Permit – Maliview Sewer
5240-20
Maliview Sewer System

Gregory Lee
Inspector and Fishery Officer
Environmental Enforcement Directorate
Enforcement Branch
Environment and Climate Change Canada
201 – 401 Burrard Street
Vancouver, BC V6C 3S5
via email: gregory.lee3@canada.ca

Dear Mr. Lee:

RE: RESPONSE TO WRITTEN WARNING LETTER (FILE: 8530-2019-07-23-11959) ISSUED FOR MALIVIEW WASTEWATER TREATMENT FACILITY

The purpose of this letter is to provide you and your department information as to how the Capital Regional District (CRD) plans to address the issues highlighted in the Written Warning – *Fisheries Act* (File No. 8530-2019-07-23-11959; September 19, 2019; Appendix A) regarding the CRD's Maliview Wastewater Treatment Plant (WWTP) on Salt Spring Island, BC.

BACKGROUND AND REGULATIONS

The Maliview wastewater system consists of 101 sewer service connections discharging to a collection system that conveys flows to the WWTP. The Maliview WWTP is a 60 m³/day Rotating Biological Contactor (RBC) secondary treatment plant that discharges treated effluent into the marine receiving environment of Trincomali Channel. Authorization to discharge falls under the provincial British Columbia Municipal Wastewater Regulation. The CRD notes that the small plant discharge (i.e., < 100m³/day) exempts the facility from the requirements of the federal Wastewater Systems Effluent Regulation.

The CRD meets provincial regulatory requirements by monitoring physical and chemical parameters on a monthly basis. Toxicity testing is not required under the provincial regulation. Monitoring results confirm that provincial regulatory limits for effluent quality and flow volumes are occasionally exceeded as a result of the influence of inflow and infiltration during wet weather events. All exceedances are reported to the provincial regulator. To follow up on effluent and flow volume exceedances, our monitoring in the receiving environment (using bacteria as a surrogate) indicate that the plume is generally non-detectable because of the small volumes released to the marine environment.

Federal monitoring requirements under the *Fisheries Act* focus on end-of-pipe toxicity and not receiving water conditions. Results presented in your September 19, 2019 correspondence represent the first toxicity results for this facility. The CRD is taking this matter seriously and is committed to the corrective action plan below that will be undertaken to address the contravention of subsection 36(3) of the *Fisheries Act*.



CORRECTIVE ACTION PLAN

Phase 1

The CRD retained the services of the RBC Original Equipment Manufacturer (OEM). Senior operations staff met the OEM on site on September 28, 2019 with the objective of reviewing the RBC operation and performance, and providing optimization recommendations. The following were the recommendations from the OEM which the CRD is in the process of implementing, and will be completed by December 31, 2019.

- The frequency of waste sludge hauling has been increased with the effect of reducing the solids retention time in the facility and improving the organic removal efficiency of the RBC.
- The fats, oils and grease (FOG) removal frequency has been increased which will improve the organic removal efficiency of the RBC.
- Some biomass will be removed from the first stage of the RBC to promote a healthier re-growth of biofilm on the contactor discs.
- Short circuiting of the return activated sludge from the primary clarifier to the secondary clarifier will be resolved.
- Once the above actions are completed, the CRD will reassess plant performance and effluent quality.

Phase 2

The CRD completed a Strategic Asset Management Plan (SAMP) in 2015 for the Maliview Wastewater Service (Appendix B). The SAMP includes sections on long term capital improvements that would be focused on improving the treatment capacity and performance of the WWTP. The basis of the improvements to the system is the Asset Condition Evaluation and Engineering Study completed by Stantec Engineering in 2011. The long term capital plan outlined in the SAMP includes the following proposed projects:

- Improve the sanitary sewer service connections at each property to reduce the amount of inflow and infiltration entering the collection system in an effort to reduce peak flows and thereby reduce the size of the upgraded WWTP treatment units.
- Upgrades to the WWTP with the optimal scope to be determined. The 2011 Stantec report recommends upgrades to the primary treatment system along with ultra-fine screening.

In an effort to ensure the correct upgrades to the WWTP are scoped and completed in a timely and cost effective manner, during Phase 2 of the corrective action implementation the CRD will retain an engineering consultant to complete the following scope of services:

- Review existing documentation including the Asset Management Plan and past engineering studies;
- Review and / or collect influent flow and quality data in order to develop a design basis and inform future stages of design;
- Review site constraints and characteristics to inform future stages of design; and,
- Develop and recommend a conceptual design for either augmenting the existing WWTP or upgrading to a new technology.

The CRD will also execute a public outreach campaign to educate the wastewater system users about the negative impacts of disposing of fats, oils and grease into the sewer system on the wastewater treatment plant process.



The CRD Salt Spring Island Electoral Area Director has recently committed funds (\$50,000) from the Community Works Fund grant program to fund this consulting project. The final report and conceptual design will be completed by June 30, 2020.

Phase 3

The final phase of the corrective action plan will be to complete the upgrades recommended by the engineering consultant.

The scale and cost of the recommended upgrades will likely exceed the funding available in the Service's Capital Reserve Fund account. The Maliview Wastewater Service has very limited financial capacity, so CRD staff will need to explore alternative funding strategies which will likely be a mix of debt financing paid by the 101 property owners in the service area and potential grants from senior levels of government.

The CRD staff will work to provide local ratepayers with balanced and objective information through formal public meetings, and various engagement techniques to assist them understanding the analysis, alternatives, and solutions provided by the engineering consultant, as well as the regulatory requirements. Financing project upgrades would require debt borrowing which is subject to obtaining electoral assent through a formal voting process in accordance with the Local Government Act and the Community Charter. In the event that the community approves financing the capital upgrades, the CRD will review potential grants to reduce the overall costs required to be funded through debt. Once the funding sources have been secured, the capital upgrade project will be implemented. Subject to the above, the target completion date for Phase 3 is December 31, 2022.

If you have any questions or require further clarification on any of our responses, please contact our Senior Manager of Operations, Matt McCrank at 250.474.9662 or mmccrank@crd.bc.ca.

Sincerely,



Robert Lapham, MCIP, RPP
Chief Administrative Officer

Attachments: 2

Appendix A – ECCC Written Warning (File No. 8530-2019-07-23-11959)
Appendix B – Strategic Asset Management Plan

cc: Gary Holman, Salt Spring Island Electoral Area Director
Ted Robbins, General Manager, Integrated Water Services



**Appendix A
ECCC Written Warning (Report No. 8530-2019-07-23-11959) – September 19, 2019**



Environment
Canada

Environnement
Canada

CRD EXECUTIVE OFFICE

Received

SEP 23 2019

**ENFORCEMENT
BRANCH**
Environmental Enforcement



**DIRECTION GÉNÉRALE DE
L'APPLICATION DE LA LOI**
Application de la loi en environnement

WRITTEN WARNING

FISHERIES ACT

File: 8530-2019-07-23-11959

**PROTECTED B
ENFORCEMENT**

September 19, 2019

Registered with acknowledgement of receipt

The purpose of this warning is to inform:

Capital Regional District
625 Fisgard Street
Victoria, BC, V8W 1R7

c/o Matt McCrank
Senior Manager, Infrastructure Operations
Capital Regional District
479 Island Hwy
Victoria, BC, V9B 1H7

Robert Lapham
Chief Administrative Officer
Capital Regional District
625 Fisgard Street
Victoria, BC, V8W 1R7

That information gathered during inspections of your facility on Salt Spring Island between July 22, 2019 and September 16, 2019 by the undersigned inspector and fishery officer designated by the Minister of the Environment under the *Fisheries Act*, gives me reasonable grounds to believe that the Capital Regional District and its responsible officials were in contravention of subsection 36(3) of the *Fisheries Act*.

ALLEGED FACTS

As a result of an on-site inspection on August 22, 2019 I, the undersigned inspector and fishery officer determined the following alleged facts:

Canada

1. That the Capital Regional District operates the Maliview Wastewater Treatment Plant located at the intersection of Maliview Drive and Walkers Hook Road on Salt Spring Island (N 48.91043, W 123.52452).
2. That the Maliview Wastewater Treatment Plant discharges wastewater effluent into the Trincomali Channel of the Strait of Georgia. The Trincomali Channel is "water frequented by fish" as defined by the *Fisheries Act*. The effluent discharge point is located in Fisheries and Oceans Canada Fisheries Management Area 17-2. <http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/tidal-maree/a-s17-eng.html>.
3. That effluent samples were collected on August 22, 2019 from the final effluent sampling well of the Maliview Wastewater Treatment Plant and delivered to the Pacific and Yukon Laboratory for Environmental Testing (PYLET) for analysis.
4. That the LT₅₀ Rainbow Trout acute lethality analysis showed 100% mortality at 100% effluent concentration after 2 hours.
5. That the LC₅₀ Rainbow Trout pH controlled acute lethality analysis showed 100% mortality at 100% effluent concentration after 2.67 hours.
6. I was informed by Craig Buday, Regulatory Toxicologist at the PYLET that the sampled effluent had a total ammonia concentration of 69.0 mg/L and a pH of 7.76. At pH 7.76, the acutely lethal concentration of un-ionized ammonia is 0.68 mg/L. The sampled effluent had an un-ionized ammonia concentration of 1.07 mg/L. The total ammonia & un-ionized ammonia concentrations were approximately 1.5 times greater than the LC₅₀ acutely lethal concentrations to Rainbow Trout, and therefore the sampled effluent was deleterious to fish.

THE LAW

Fisheries Act

Deposit of deleterious substance prohibited

- 36(3) Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

Subsection 36(4) refers to deposits made under the authority of certain types of regulations and does not apply in this instance.

Offence and punishment

- 40(2) Every person who contravenes subsection 36(1) or (3) is guilty of an offence and liable

(a) on conviction on indictment,

(i) in the case of an individual,

(A) for a first offence, to a fine of not less than \$15,000 and not more than \$1,000,000, and

(B) for a second or subsequent offence, to a fine of not less than \$30,000 and not more than \$2,000,000, or to imprisonment for a term not exceeding three years, or to both,

(ii) in the case of a person, other than an individual or a corporation referred to in subparagraph (iii),

(A) for a first offence, to a fine of not less than \$500,000 and not more than \$6,000,000, and
(B) for a second or subsequent offence, to a fine of not less than \$1,000,000 and not more than \$12,000,000, and

(iii) in the case of a corporation that the court has determined to be a small revenue corporation,

(A) for a first offence, to a fine of not less than \$75,000 and not more than \$4,000,000, and
(B) for a second or subsequent offence, to a fine of not less than \$150,000 and not more than \$8,000,000; or

(b) on summary conviction,

(i) in the case of an individual,

(A) for a first offence, to a fine of not less than \$5,000 and not more than \$300,000, and
(B) for a second or subsequent offence, to a fine of not less than \$10,000 and not more than \$600,000, or to imprisonment for a term not exceeding six months, or to both,

(ii) in the case of a person, other than an individual or a corporation referred to in subparagraph (iii),

(A) for a first offence, to a fine of not less than \$100,000 and not more than \$4,000,000, and
(B) for a second or subsequent offence, to a fine of not less than \$200,000 and not more than \$8,000,000, and

(iii) in the case of a corporation that the court has determined to be a small revenue corporation,

(A) for a first offence, to a fine of not less than \$25,000 and not more than \$2,000,000, and
(B) for a second or subsequent offence, to a fine of not less than \$50,000 and not more than \$4,000,000.

Other offences

40(3) Every person who

- (c) fails to provide notification that he or she is required to provide under subsection 38(4) or (5), or
- (e) fails to take any reasonable measures that he or she is required to take under subsection 38(6) or fails to take those measures in the required manner, or
- (f) fails to provide a report that he or she is required to provide under subsection 38(7), or

is guilty of an offence punishable on summary conviction and liable, for a first offence, to a fine not exceeding two hundred thousand dollars and, for any subsequent offence, to a fine not exceeding two hundred thousand dollars or to imprisonment for a term not exceeding six months, or to both.

Continuing offences

78.1 Where any contravention of this Act or the regulations is committed or continued on more than one day, it constitutes a separate offence for each day on which the contravention is committed or continued.

Offences by corporate officers, directors or agents

78.2 Where a corporation commits an offence under this Act, any officer, director or agent of the corporation who directed, authorized, assented to, acquiesced in or participated in the commission of the offence is a party to and guilty of the offence and is liable on conviction to the punishment provided for the offence, whether or not the corporation has been prosecuted.

CONCLUSION

This warning alleges a contravention of subsection 36(3) of the *Fisheries Act*. It is intended to bring this matter to your attention in order for you to take the necessary corrective action to ensure compliance with the *Fisheries Act* or to exercise due diligence in the future. This document is not a finding of guilt or civil liability, and is not an administrative adjudication.

This warning and the circumstances to which it refers will form part of Environment and Climate Change Canada's records of the Capital Regional District and its responsible officials, and will be taken into account in future responses to alleged violations and for internal purposes such as setting the frequency of inspections. Environment and Climate Change Canada will consider taking further action if you do not take all necessary corrective steps to comply or do not exercise due diligence in the future.

This warning is issued in accordance with the Compliance and Enforcement Policy for the Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act*. The complete text of this policy is available on Environment and Climate Change Canada's website:

<https://www.canada.ca/en/environment-climate-change/services/environmental-enforcement/publications/compliance-enforcement-policy-fisheries-act.html>

The complete text of the *Fisheries Act* is available on the Department of Justice website: <http://laws-lois.justice.gc.ca/Search/>

For more information or to respond to the alleged facts contained in this warning, please call or write the undersigned. Your comments will be considered, and where appropriate, a response provided. Any comments you make, as well as Environment and Climate Change Canada's response, will be maintained on file with this warning in Environment and Climate Change Canada's records.



Gregory Lee
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Enforcement Branch
Environment and Climate Change Canada
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c.c.
Tricia Bloomfield
Acting Operations Manager, Coastal District
Environmental Enforcement Directorate
Enforcement Branch
Environment and Climate Change Canada
201 – 401 Burrard Street
Vancouver, BC, V6C 3S5



Request for Proposal

**RFP No. SSI 2019-018
Maliview Wastewater Treatment Facility
Consulting Engineering Services**

November 5, 2019

Capital Regional District
Salt Spring Island Electoral Area
108 – 121 McPhillips Avenue, Salt Spring Island, BC V8K 2T6