



The Corporation of the City of Courtenay

Staff Report

To: Council

File No.: 5340-03

From: City Manager (CAO)

Date: July 17th 2024

Subject: Non-Enforcement of “Sanitary Sewer Use, Extension and Connection Bylaw No. 1327”

PURPOSE:

The purpose of this report is to seek Council approval for the temporary non-enforcement of the Sanitary Sewer Use, Extension, and Connection Bylaw No. 1327, Section 2.3.2 to allow for the Comox Valley Regional District (CVRD) to discharge water produced during the excavation of the wet well at the new sanitary lift station on Comox Road into the City sanitary collection system.

BACKGROUND:

The CVRD is undertaking excavation for the wet well of the new Regional Lift Station on Comox Road between the end of July and the end of October 2024. The timing of the work aligns with the driest time of the year, thereby limiting the amount of groundwater or storm water intrusion into the wet well excavation site. The dewatering plan includes a network of wells to temporarily lower the water table of the site. The flows from these wells and the dewatering flows of the main excavation site will be piped into an on-site settling and filtration bin with the primary discharge back to the environment or into the roadside swale.

DISCUSSION:

In the event the settling and filtration equipment becomes overloaded or the discharge is too turbid or the chemical makeup of the water is such that it and cannot be discharged to ground, the CVRD has requested the authorization to discharge dewatering flows into the City’s sanitary collection system, see Attachment 1. The current Sanitary Sewer Use, Extension, and Connection Bylaw No. 1327, Section 2.3.2 states “*No person shall cause or permit any storm water or uncontaminated water¹ to be discharged to the sanitary sewer*”. Council approval is requested to allow for non-enforcement of this clause.

The period of non-enforcement would commence in late July until late October. If construction is complete prior to the expected end date the authorization would terminate at that time.

The proposed secondary disposal option requires the use of manhole 4-001 located to the west of the construction site. The transmission main from this manhole crosses under Comox Road for a distance of 32 meters before reaching the Courtenay Pump Station. As provided by the CVRD, the maximum possible daily discharge would be 10,833 m³/day with a maximum instantaneous peak flow rate of 126 L/s. It is understood that the current pumping capacity of the Courtenay Station is to a maximum sustained flow of 300 L/s.

To aid staff in the review and facilitate this request for non-permitted use of the City’s sanitary sewer system for the purpose of construction (ground) water discharge, the City requested the following information:

¹ “Uncontaminated water” means any wasted water not contaminated with wastewater and which is suitable for discharge to storm sewers.

“Wastewater” means the water-borne wastes of the community derived from human or industrial sources including domestic wastewater and industrial wastewater, but does not include rainwater, groundwater or drainage of uncontaminated water.

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- water analysis from a qualified geotechnical engineer (eg. hydrocarbons, BETX, PAHs, Metals, Suspended Solids, etc.)
 - Maximum Discharge Duration: # hours/day; # days/week; # weeks/year
 - Total discharge volume over the requested term of the Permit: # m3
 - Maximum Daily Discharge Rate: # m3
 - Maximum Instantaneous Peak Flow Rate: # litres/second
 - Discharge Flow Rate Profile (24hours)
- Indemnification Agreement

Upon the direction of Council, an indemnification agreement will be signed between the City with the CVRD to ensure that in the event of a blockage, spill, or surcharge, all responsibility for mitigation is with the Comox Valley Regional District, see Attachment 2.

The CVRD’s Construction Environmental Management Plan, summarizes the regulatory requirements for environmental monitoring, permitting, and mitigation measures during the project, see Attachment 3.

At this time, staff are unable to fully consider the risk of non-enforcement of City bylaws as the CVRD’s intent is to test the water at a later date, as such the City does not have the information necessary to assess the request in accordance with the precautionary principles. When water testing data becomes available, the City will then have the necessary information to accurately assess all of the environmental risks.

Bylaw Enforcement and Policy Alignment

The newly adopted Bylaw Compliance Policy clearly outlines the expectations of Courtenay residents and Council in regard to the City’s response to activities that may “negatively impact the environment, public health, safety and wellbeing” – classifying activities with adverse environmental impacts at a Priority One level, with the highest diligence in enforcement approach for any violations. Additionally, the Bylaw Compliance Policy prioritizes voluntary compliance, as such, all efforts should be made to undertake the proposed work in a manner that complies with City bylaws.

When considering the issue of water from excavation being added into the City’s sanitary collection system, several factors must be carefully examined to make an informed decision on whether to enforce environmental regulations. The potential presence of contaminants in the water is a key consideration, as it could pose risks to public safety and the environment. The City must weigh the possibility of residents being harmed or liabilities being incurred as a result of this contamination. In this case, if the water from excavation is found to contain hazardous substances (that cannot be treated by the waste management system or poses a risk to that system), and therefore could potentially harm residents or compromise the integrity of the sanitary collection system, immediate action may be necessary to enforce regulations and prevent any adverse impacts.

For the City to fully consider the request to not enforce the Bylaw, the precautionary principle posits considerations for decision-makers. As outlined in the most recent edition of “Nature Without Borders Regional Conservation Strategy” (2013), to determine if the precautionary principle is triggered, decision-makers are to consider the following:

- *What is the full range of anticipated impacts of the proposed action (direct and indirect, magnitude, spatial, temporal, reversibility)?*
- *What are the known and unknown variables involved with these anticipated impacts?*

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To date, the CVRD has provided the following information in aid of providing clarity as to the potential risks of the proposed activities that would inform the decision-making approach founded on the precautionary principle:

- operating period
- spill prevention and containment plan
- flow information
- total remediation or excavation site area: # acres; or # m²
- Maximum Discharge Duration: # hours/day; # days/week; # weeks/year
- Total discharge volume over the requested term of the Permit: # m³
- Maximum Daily Discharge Rate: # m³
- Maximum Instantaneous Peak Flow Rate: # litres/second

However, in the absence of the water quality information, staff are not able to offer a supportive recommendation for the possibility of adding water, whether contaminated with unknown pollutants or not, to the sanitary sewer system due to the potential risks involved. With a better understanding of the conditions, the City would be able to analyze the potential risks, thus offering an evidence-based recommendation.

Sanitary systems are specifically designed to manage sewage, which contains known contaminants, of which can be effectively treated by the receiving wastewater treatment facilities. Introducing water of unknown contamination levels could compromise the treatment process and potentially lead to issues such as increased treatment costs, reduced treatment efficiency, and possible environmental harm. It is crucially important to a review process that all real or potential contaminants are identified, in an effort to ensure the preservation of the treatment process and ultimate the protection of the environment.

POLICY ANALYSIS:

The City of Courtenay adopted the Bylaw Compliance Strategy in 2023, classifying environmental protection as a level one priority item.

Regional Growth Strategy: 2B-1 Local governments should work together to adopt consistent actions and policies for environmental and natural resource protection, through OCP's, zoning and other mechanism, that promote the principles of precaution, connectivity and restoration.

FINANCIAL IMPLICATIONS:

The CVRD will ensure that any flows conveyed are captured through a meter installed at the discharge point. These volumes will be subtracted from the City's billed flows into the Courtenay Pump Station.

OPTIONS:

1. THAT the Comox Valley Regional District (CVRD) be requested to provide a water analysis from a qualified geotechnical engineer (e.g. hydrocarbons, BETX, PAHs, Metals, Suspended Solids, etc.); and

THAT once the following conditions have been met to the satisfaction of the City Manager, Council approve the CVRD's request to discharge excavation water into the City of Courtenay sanitary sewer system as part of the Regional Lift Station on Comox Road Project up until November 15th, 2024:

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- that the water quality has been quantified and the CVRD has provided documentation that all regulatory assurances have been met, and,
 - an Indemnification Agreement has been executed by both parties.
2. THAT Council deny the request and advise the CVRD of this decision.
 3. THAT Council provide alternative direction to Staff.

ATTACHMENTS:

1. 20240705 Dewatering Discharge Letter to K. Shaw
2. Dewatering Discharge Indemnification Agreement
3. 20240529 Comox Valley Sewer Conveyance CEMP

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