

# Core Area Wastewater System

## Community Update

Capital Regional District | January 2023

The Capital Regional District (CRD) is responsible for operating the McLoughlin Point Wastewater Treatment Plant (MPWWTP) in Esquimalt, the Residuals Treatment Facility (RTF) located north of Hartland Landfill in Saanich, and the conveyance system that directs wastewater to the treatment plant and connects it to the Residuals Treatment Facility.

The CRD continues to optimize the treatment plant and conveyance infrastructure to minimize any impacts in the community. The CRD continues to monitor odour on a regular basis, as well as respond to community odour complaints. Should you experience an unpleasant odour which you believe is coming from the Core Area Wastewater Treatment System, it can be reported by calling 250.940.7400 or emailing [wastewater@crd.bc.ca](mailto:wastewater@crd.bc.ca). Below you can find highlights from our overall optimization and corrective action plan:

### McLoughlin Point Wastewater Treatment Plant

- As of September 2022, the odour control system is fully functional and operating as per the design specifications during normal operating conditions. However, the CRD continues to monitor the odour control system performance and discharges, and is working directly with equipment suppliers to seek opportunities to further improve potential odour removal.
- CRD staff continue to respond to every complaint and are logging and mapping these concern over the past two years to analyze trends based on location, time, and maintenance activities and correlate the occurrence with other potential contributing factors.
- An audit of the odour collection and treatment systems performance with the owner's engineer is underway and will continue in 2023, making recommendations for further optimization where possible.
- The secondary odour treatment system has been modified to extract air from the tertiary treatment process tanks to eliminate this potential source of odour laden air.
- New odour measurement data at McLoughlin Point Wastewater Treatment Plant and the adjacent communities will be collected and analyzed in partnership with Vancouver Island University (VIU), with odour profiles collected over the course of 2023 to capture any seasonal variations. With VIU, the CRD is hoping to 'fingerprint' the chemical odour profiles from different sources and associate these profiles with odour present in different locations.
- Additional odour survey work has been scheduled at specific times of day and by boat (between MPWWTP, West Bay and Work Point Marina).
- Regular meetings will continue to be held on an ongoing basis to provide updates to community groups with the next meeting with the Esquimalt Liaison Committee scheduled in March 2023.

## Conveyance System

- The odour control systems for the Residual Solids Conveyance Line (RSCL) are also fully functional and operating as per the design specifications during normal operating conditions. Like MPWWTP, the CRD continues to monitor the performance of these odour control systems and optimize odour removal where possible.
- The odour control system at the Macaulay Point Pump Station is being investigated to ensure optimal odour removal prior to being emitted from the station.
- Due to the nature of the complaints through the system (location, timing, wind direction, operational activities occurring), it is believed that there are other potential sources of odour that may be contributing to the impacts in the neighborhoods, so CRD staff have continued to work with the City of Victoria (COV) to identify other potential sources.
- Testing has revealed that there are 16 properties that could have the home/building sewer connected to the COV storm drain system. This means that sewer/waste is likely being discharged from the homes into the municipal storm drain pipes that are 'dry' during the summer months which would accumulate and likely cause significant odour.
- Bacteriological testing has confirmed discharges through an outfall at Barnard Park into West Bay show significantly elevated levels of wastewater contamination which could be causing odour in the area.
- Elevated levels of hydrogen sulfide has been confirmed at two storm drain manholes on Hereward Road which indicates wastewater exists in the storm drain system.
- More investigation work is planned, including smoke and dye testing which the CRD will work with the COV to understand how they plan to address the cross-connections. Township of Esquimalt staff will also be included in the on-going investigations due to the interconnectedness of the municipal infrastructure further upstream.

## Residuals Treatment Facility

- Delivery of Class A biosolids to Lafarge under the Biosolids Beneficial Use Strategy is currently paused due to equipment failure at Lafarge.
- During planned and unplanned shutdowns at Lafarge, Class A biosolids will be managed under the CRD's Short Term Contingency Plan and either used at Hartland Landfill as a biosolids growing medium (BGM) to improve vegetation growth in areas of the landfill and as an engineered biocover to mitigate fugitive methane emissions (currently not occurring) or landfilled directly depending on operational requirements at the landfill.
- Management of biosolids at Hartland Landfill is not anticipated to have any environmental implications due to the controls that are in place to ensure the protection of adjacent ground and surface water resources.
- Best management practices are implemented during the hauling, blending and application of biosolids as BGM and interim landfill cover to ensure effective dust control.
- Monthly biosolids production reports are available [here](#) and you can find out more information on the Biosolids Beneficial Use Strategy at [www.crd.bc.ca/biosolids](http://www.crd.bc.ca/biosolids).

For more information on the Core Area Wastewater Treatment System go to [www.crd.bc.ca/wastewater](http://www.crd.bc.ca/wastewater).