

# Wastewater Notice

## Moving Bed Biofilm Reactor Media Discharge

Capital Regional District | March 2021

The CRD has received reports of small plastic pieces found on shorelines in Esquimalt near Sturdee Bay and Victoria near Ogden Point. The CRD can confirm the pieces match the Moving Bed Biofilm Reactor (MBBR) media used in the wastewater treatment process at the McLoughlin Point Wastewater Treatment Plant. An operational task being completed at the Plant on February 22 unfortunately resulted in the MBBR media being inadvertently transported from the first stage of the secondary treatment process into the tertiary treatment process. Although it could not be confirmed with effluent sampling at the time, it was suspected that approximately 1-3 cubic meters of media could have been discharged out the effluent outfall which terminates 2 kilometres from shore. Some media was also discharged at the Plant, but it was contained to the site and quickly collected. The incident was reported immediately to Emergency Management BC as per the BC Ministry of Environment and Climate Change Strategy Spill Reporting Regulations. Knowing the media floats, on February 23 – 24 the CRD surveyed beaches from Ogden Point to McMicking Point which were selected due to the direction of the prevailing winds and no media was found. With the recent reports, the CRD has deployed a crew to the shorelines between Esquimalt and Victoria again to remove any media that may remain on the beaches. There is no public health risk associated with the media discharge, but the CRD remains concerned about the discharge of plastic to the environment. The CRD is also reviewing operational procedures to reduce the risk of future media discharges.

There have also been concerns raised regarding media that is being stored outside the Plant which is different than the MBBR media. It is filter media (Biolite) used in the secondary treatment process, which is finer in size and made of natural shale/clay. The media is being stored safely to ensure it is not released to the environment and will be used in the Plant in the coming weeks.

What is MBBR Media?

- MBBR media is made of recycled high density polyethylene (HDPE) approximately 1 cm in length and honeycombed in form. It is used in the first stage of the secondary treatment process at the McLoughlin Point Wastewater Treatment Plant. Millions of these plastic shapes 'carry' biofilm to remove soluble organics from the water. The media is not considered biodegradable.

What is Biolite Media?

- Biolite media is made of natural shale/clay and is granular in size and shape. It is used in the second stage of the secondary treatment process at the McLoughlin Point Wastewater Treatment Plant. The media removes organic substances in the water not removed through the upstream treatment processes.

What to do if you find media on the beach?

- Please report to the CRD at 1.844.815.6132 or via email at [wastewater@crd.bc.ca](mailto:wastewater@crd.bc.ca), and the CRD will send a clean-up crew to the location of the sighting.