



STAFF REPORT

Title: Cold Lake Regional Utility Services Commission (CLRUSC) Waste Water Treatment Plant - Moving Bed Biofilm Reactor (MBBR) Pilot Project

Meeting Date: March 17, 2020

Executive Summary:

In line with the recommendations of the Waste Water Treatment Facility Feasibility Study (2018), a pilot study on Moving Bed Biofilm Reactor (MBBR) was initiated at Cold Lake Regional Utility Services Commission (CLRUSC's) lagoon site on Nov. 1, 2019. The pilot study is in progress and anticipated to complete by May 2020. Two interim progress reports have been presented to the CLRUSC in Nov 2019 and Feb 2020. The intent of this staff report is to update the Corporate Priorities Committee of Council on the progress of the MBBR pilot project.

Background:

The existing wastewater system license is due to expire on Jan 1, 2022. Alberta Environment and Parks expects the Commission to upgrade the facility and be operational by 2022 in order to meet the desired effluent criteria. To meet stringent regulatory effluent limits, and to assess the effectiveness of recommended MBBR technology, the pilot project was initiated. The pilot project will evaluate the performance of the MBBR technology during the winter months when the ammonia concentration in the lagoon effluent is higher and the microbial activity is lower.

The results of the pilot study in the form of a Draft Report is expected to be available for review by June 2020.

Alternatives:

Recommended Action:

For information only.

Budget Implications (Yes or No):

Yes

Submitted by:

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