



CORPORATION OF THE TOWNSHIP OF ESQUIMALT

Municipal Hall
1229 Esquimalt Road
Esquimalt, B.C. V9A 3P1

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REQUEST FOR DECISION

DATE: June 29, 2020 Report No. EPW-20-019
TO: Laurie Hurst, Chief Administrative Officer
FROM: Jeff Miller, Director of Engineering and Public Works

SUBJECT:
Interim Report on Integrated Resource Management

RECOMMENDATION:

That Council receive the interim report for information and direct staff to commence a public engagement process.

RELEVANT POLICY:

Solid Waste Collection and Disposal Bylaw, 2014, No. 2815

STRATEGIC RELEVANCE:

Healthy, Livable and Diverse Community - develop and implement strategies that reduce impact on the environment consistent with our Climate Action Goals.

Local Services and Infrastructure - Identify long term financial requirements for local services and infrastructure, promote opportunities to share services where operationally and financially beneficial.

BACKGROUND:

The origin of this project began in 2018 with a Notice of Motion after the Capital Regional District abandoned the idea of an Integrated Resource Management (IRM) philosophy. Through Staff

Reports EPW-18-019 and EPW-19-032, a request for proposal (RFP) was developed. The RFP would review the waste streams of solid waste, kitchen scraps, yard/garden, and sanitary waste latent heat and how an IRM philosophy could be employed to manage them. Council also provided direction that gasification be the treatment technology for the solid waste streams. The RFP was released in 2019 and work began in 2020.

The original scope of the work was to develop the report with a public engagement component and then present the final report to Council. However as the public engagement process was about to commence the COVID-19 Pandemic started. The scope of work was then modified to include the production of an interim report (see Attachment 1) with public engagement to occur in a virtual environment after Council reviewed the interim report.

The highlights of the report include:

- Potential location of the gasifier plant at the Public Works Yard
- The gasifier plant would treat solid waste, kitchen scraps and, yard/garden waste streams
- Latent heat from sanitary collection system is not viable at this time
- There is potential that the proposed system would meet Ministry of Environment requirements but no confirmation has been received that the Ministry would approve an operating license for this type of treatment system
- The potential system has the ability to treat only municipal gathered solid waste, kitchen scraps and yard/garden waste streams
- The potential system has the ability to treat municipal gathered waste stream along with the same waste streams gathered by private haulers within the Township

ISSUES:

1. Rationale for Selected Option

Staff's recommendation is that Council receive the interim report for information and direct staff to complete a public engagement process. The interim report discusses the philosophy and economics of IRM through a Township lens; however, no public engagement has occurred yet due to COVID-19. The public engagement process should to be implemented so that Council has an understanding of the public's expectations and views.

During the discussions for the siting of the waste water treatment plant, a number of public engagement processes and activities suggested that there was support for IRM and gasification. However, due to the nature of these engagements about siting of the waste water treatment plant and because IRM was a component of this discussion, how much support IRM and gasification had was not clearly visible. The engagement process will allow for a better understanding of the IRM philosophy and what level of support this philosophy and technology has with the residents.

2. Organizational Implications

The undertaking of public engagement and the finalizing of the report will have impact on various staff members and their work plans. The Director of Engineering and Public Works along with the Communications Manager will be directly involved in the engagement process and finalizing of the report. This work can be accommodated into their work plans.

Additional activities such as carrying out the field testing of the waste streams will involve the

Director and both Managers of Engineering and Public Works to facilitate this work which can also be accommodated into their work plans.

As the final report is prepared and received by Council the movement to an IRM philosophy will impact the Chief Administrative Officer, Director of Financial Services, Director of Development Services and the Director of Engineering and Public Works.

The level of work assigned each position will vary depending on direction(s) provided by Council.

3. Financial Implications

The interim report looked at two scenarios for the treating of the various waste streams. These scenarios are:

1. The first scenario was if only municipal collected/controlled solid waste streams are utilized in the IRM philosophy
2. The second scenario utilizes municipal collected solid waste streams and private collected solid waste streams

Under both scenarios the IRM philosophy could be implemented. It is anticipated that the return on investment will be dependent on market conditions for the treated waste streams. Scenario 1 has the lesser potential of providing the return on investment due to the volume of material being processed and the capital/maintenance costs associated with it. Scenario 2 has a greater potential in providing a return on investment. Please see the interim report (Attachment 1) for a detailed breakdown of costs/earning associated with each scenario and sub-scenarios.

Should Council provide direction to move forward with further development of IRM and gasification, there should be the expectation that there will budgetary implications for additional studies, capital work and maintenance costs. These costs will impact other projects and programs within the Township's future Financial Plans.

4. Sustainability & Environmental Implications

The IRM philosophy and gasification has the potential to create a number of positives with respect to the environment. How these positive impacts are achieved and maintained have not entirely been defined or confirmed. This type and scale of project will be a significant undertaking by the Township. A similar type project has not yet been undertaken by other municipalities or industry. As such, the Township will be on the leading edge.

While IRM and gasification have been carried out in other regions of the world with success, it is new to the North American market. Staff have concerns that the report is overly optimistic as to the number of positive outcomes predicted.

5. Communication & Engagement

Staff and the consultant will develop an online public engagement process. The development will take place during July and August with public engagement beginning in September. The engagement period will be approximately two months. At the end of the process, the information will be reviewed and added to the final report. This final report will then be provided to Council for their review and direction.

ALTERNATIVES:

1. That Council receive the interim report for information and direct staff to commence a public engagement process.
2. That Council receive the interim report for information and direct staff to commence a public engagement process and perform field testing of the various waste streams.
3. That Council receive the interim report for information and no further work be carried out on this project.