

March 29, 2016

To: His Worship the Mayor
and Members of City Council

Re: Revised Hauled Wastewater Program

**RECOMMENDATION OF THE PUBLIC WORKS AND INFRASTRUCTURE
COMMITTEE – MARCH 10, 2016**

1. That City Council approve the following rates for the Hauled Wastewater Station (HWS) (formerly referred to as the Septage Receiving Station), phased-in over three years:
 - a) monthly hauled wastewater permit rates (cost based on hauling capacity per vehicle per month) be set at:
 - i. \$5.00/.455m³/month effective January 1, 2017;
 - ii. \$8.00/.455m³/month effective January 1, 2018; and,
 - b) discharge rates per usage be set at:
 - i. \$5.00/m³, effective when the new HWS becomes operational (planned for September 30, 2016);
 - ii. \$10.00/m³, effective January 1, 2017; and,
 - iii. \$15.72/m³, effective January 1, 2018.
2. That City Council approve the transfer of \$1.5 million from the General Utility Reserve to Capital Account U6016 to upgrade and pave a section of Condie Road.
3. That City Council approve and authorize amendments to the *Interim Extra-Municipal Servicing Agreement Policy* that contain the following:
 - a) notification to the City if the land use has changed;
 - b) notification if the land has been subdivided or the volume of wastewater significantly increases;
 - c) re-application if the owner of the land that was approved to haul wastewater to the City changes; and,
 - d) alignment of the fee schedule as recommended.
4. That the Director of Planning or their designate be directed to prepare amendments to the *Interim Extra-Municipal Servicing Agreement Policy*, to include provisions for the new hauled wastewater transfer program, as identified in recommendation 3 and Appendix E.
5. That City Council approve and authorize amendments to *The Sewer Service Bylaw, No. 5601* that contain the following:
 - a) updated requirements for hauled wastewater permit, including issuance of an Radio Frequency Identification Device (RFID) tag;
 - b) updated hauled wastewater permit obligations; and,

- c) updated hauled wastewater fee schedule.
6. That the City Solicitor be directed to prepare amendments to *The Sewer Service Bylaw, No. 5601* (Bylaw) to include provisions relating to the new Hauled Wastewater Program, as identified in recommendation 5 and particularly in Appendices A and B.

PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE – MARCH 10, 2016

The Committee adopted a resolution to concur in the recommendations contained in the report. Recommendation #7 does not require City Council approval.

Councillors: Sharron Bryce (Chairperson), John Findura and Bob Hawkins were present during consideration of this report by the Public Works and Infrastructure Committee.

The Public Works & Infrastructure Committee, at its meeting held on March 10, 2016, considered the following report from the Administration:

RECOMMENDATION

1. That City Council approve the following rates for the Hauled Wastewater Station (HWS) (formerly referred to as the Septage Receiving Station), phased-in over three years:
 - a) monthly hauled wastewater permit rates (cost based on hauling capacity per vehicle per month) be set at:
 - iii. \$5.00/.455m³/month effective January 1, 2017;
 - iv. \$8.00/.455m³/month effective January 1, 2018; and,
 - b) discharge rates per usage be set at:
 - iv. \$5.00/m³, effective when the new HWS becomes operational (planned for September 30, 2016);
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- d) alignment of the fee schedule as recommended.
4. That the Director of Planning or their designate be directed to prepare amendments to the *Interim Extra-Municipal Servicing Agreement Policy*, to include provisions for the new hauled wastewater transfer program, as identified in recommendation 3 and Appendix E.
5. That City Council approve and authorize amendments to *The Sewer Service Bylaw, No. 5601* that contain the following:
 - a) updated requirements for hauled wastewater permit, including issuance of an Radio Frequency Identification Device (RFID) tag;
 - b) updated hauled wastewater permit obligations; and,
 - c) updated hauled wastewater fee schedule.
6. That the City Solicitor be directed to prepare amendments to *The Sewer Service Bylaw, No. 5601* (Bylaw) to include provisions relating to the new Hauled Wastewater Program, as identified in recommendation 5 and particularly in Appendices A and B.
7. That this report be forwarded to the March 29, 2016 meeting of City Council for approval.

CONCLUSION

The Administration prepared this report in response to the Septage Receiving Station (SRS) report (CR14-148), to provide City Council the option to establish a revised Hauled Wastewater Program. This program would include a revised permitting system for wastewater haulers and cost recovery permit and discharge rates for those using the City's owned and operated HWS, based on actual construction, operation and maintenance costs. CR14-148 also instructed the Administration to provide recommended amendments to the Bylaw and the City's *Interim Extra Municipal Servicing Policy*, to support and facilitate the revised Hauled Wastewater Program.

The Administration has completed extensive consultation with the hauled wastewater industry and considered options for implementing a revised Hauled Wastewater Program. The Administration's recommendations for a revised Hauled Wastewater Program are based on the following components:

- Providing a higher level of service even if it means an increase in costs;
- Ensuring the rules of the facility are clear and enforced;
- Protecting public assets and raising the standard for persons to access the hauled wastewater station;
- Ensuring the facility is capable of monitoring the quality of discharged wastewater; and,
- Recovering construction, operation, and maintenance costs and ensuring costs are transferred to users of the facility.

These components were developed based on best industry practices in consultation with stakeholders.

The Administration recommends revising the Hauled Wastewater Program as outlined in Appendix A, which includes the issuance of a RFID tag to access the HWS and requirements to

complete a revised manifest for discharged wastewater. The Administration also recommends phasing in new permit and discharge rates to ensure program costs are fully recovered as outlined in Appendix B.

BACKGROUND

Hauled wastewater is a broad term and can include waste from: septic tanks, holding tanks, industrial lagoons, sewer cleaning material, process water from pre-treatment devices (grease traps or car wash grit interceptors), or the slurry from high pressure water washing and water excavating.

Historical Treatment of Hauled Wastewater in Regina

The City has accepted hauled wastewater from a number of sources originating within Regina and the surrounding area for many years. Currently, wastewater haulers obtain a permit from the City based on truck size, for an average charge of \$360.00 per year. This results in an annual revenue of approximately \$36,000.00. With this permit, wastewater haulers are allowed to deliver hauled wastewater to the current Septage Receiving Station (SRS), located at a lagoon at the wastewater treatment plant (WWTP). Due to the lagoon's location, the extended process time and dilution, the risks to the City were low resulting in little need for monitoring hauled wastewater discharge. As a result, systematic monitoring at the SRS was not done. With the reduced processing time at the new WWTP and more residential concerns regarding odour, it is more critical to ensure the wastewater discharged at an SRS meets the Bylaw. This led the Administration to design and construct a mechanical HWS. Based on information from haulers and staff observations, the Administration believes that the hauled wastewater that is being discharged does not always comply with existing wastewater quality standards within the Bylaw. Increased monitoring and enforcement is therefore built into the new HWS.

The operating and maintenance costs for the current SRS site at the WWTP are approximately \$45,000.00 per year. The City currently operates its Hauled Wastewater Program at a level below full cost recovery. Current permit fees for wastewater haulers do not cover the expenses associated with operating and maintaining the current SRS at the WWTP. Based on annual volumes and revenues, current permit fees equate to \$0.55/m³ for a lagoon style process, making the City's current rate an industry low when compared to other cities with a mechanical facility.

The City needed to find a new location for the HWS before the end of 2016, as the lagoon location will no longer be available for use when the WWTP upgrades are complete.

New Hauled Wastewater Station

The Administration developed a project to explore alternatives for a new HWS. After considerable research, the Administration presented CR 14-148 to City Council on December 15, 2014 and received approval to:

1. Proceed with the design and construction of a new Septage Receiving Station that is capable of meeting existing customer service levels and that can be expanded based on future growth needs as outlined in Option 3. The current estimated cost of this facility is \$10.0 million and the annual operating cost is estimated at \$258,000.00, including costs for permit management related to the facility.

2. Return to Council in 2016 to recommend a permit system and septage user rates based on actual construction costs and amendments to both the Bylaw and the City's *Interim Extra-Municipal Servicing Agreement Policy*.

The Administration has conducted research and is prepared to recommend a revised Hauled Wastewater Program, as outlined below.

DISCUSSION

Revised Hauled Wastewater Program

The Administration explored numerous options for revising the City's Hauled Wastewater Program and developed recommendations, based on what other cities do for hauled wastewater services, best practices and stakeholder input. Appendix C to this report summarizes the open houses that the Administration completed to understand the wastewater hauling industry and listen to their concerns. The Administration held several open houses with the hauled wastewater industry and general public. In total, 10 open houses were completed and numerous additional conversations were held with industry and affected stakeholders. The themes, from the open houses and additional conversations, that the Administration has based the revised Hauled Wastewater Program on include:

- Increasing costs to provide a higher level of service;
- Ensuring the rules of the facility are clear and enforced;
- Protecting public assets and raising the standard for persons to access the hauled wastewater station;
- Ensuring the facility is capable of monitoring the quality of discharged wastewater; and,
- Recovering construction, operation, and maintenance costs and ensuring costs are transferred to users of the facility.

This consultation and previous direction from Council has led to recommended changes to the revised Hauled Wastewater Program, including a new HWS.

The new HWS will be located west of Regina at 950 Condie Road, due to its proximity to the WWTP. Construction on the new HWS began in June, 2015 and is scheduled for completion in the fall of 2016. A key issue to be addressed at the new HWS is the limited on-site monitoring at the current septage discharge site. The new HWS will have systematic monitoring, which is essential to ensuring only allowable material in acceptable quantities enters into the wastewater system. The new HWS will be secured with perimeter fencing, video surveillance and access restrictions. Gate access into the HWS will require RFID tags, which will be issued by the City. Instruments will monitor the wastewater for unacceptable levels of key parameters. Mechanical equipment will remove larger debris, which will be collected and hauled to the landfill.

The current Bylaw requires wastewater haulers to obtain a permit from the City prior to being allowed to discharge at the City's HWS. As part of the permit application process, the City requires that wastewater haulers provide vehicle information, hauling capacity and license plate numbers. Hauling companies also must attest that they will comply with the Bylaw. The present criteria to obtain a hauled wastewater permit is limited and does not provide sufficient assurances that wastewater haulers will operate safely and responsibly.

The complexity of the new HWS requires that haulers using this new station are appropriately trained, which will require the City to be more diligent prior to issuing permits. Below is a summary of what wastewater haulers will need to confirm prior to being granted a hauled wastewater permit:

- A permit to operate from the regulator (Province of Saskatchewan);
- Responsibility of ensuring staff are trained on site processes, rules, and hazards;
- Proof of appropriate insurance;
- A waiver for City to perform a financial credit check; and,
- Safe and mechanically sound equipment.

Code of Practice

Feedback from the wastewater hauling industry included a request to have the rules and expectations clearly articulated, with an emphasis placed on common language. The Administration recognises the merit of this request and a Code of Practice is being developed through consultations with the industry and will be finalized and available prior to opening the facility. It will provide rules and practices which will guide behaviours and enable each business to update their standard operating procedures. The Code of Practice will be provided to wastewater haulers when a permit is issued and on an as-needed basis.

Rates

A service operated on a full cost recovery basis means the expenses are completely paid through user fees. Without charging a fee that reflects the actual cost of collecting and processing the hauled wastewater, the City is not operating this program on a full cost recovery basis and the cost of the program would be partially paid for through utility fees. It is therefore recommended that the entire cost of the HWS be paid for by the users of the facility.

It is recommended that both a monthly permit fee and a volumetric discharge rate be charged to users. The cost recovery rates, as described in Appendix B, are \$8.00/.455m³/month (monthly permit fee) and \$15.72/m³ (discharge rate). This equates to approximately \$1,440.00 annually in permit fees and approximately \$100.00 per visit, based on an average truck's size. The proposed fees are derived from actual construction costs and estimated operating costs. The proposed discharge fee is similar to other Western Canadian municipalities, whose fees range from \$6.80/m³ to \$20.36/m³, as noted in Appendix D.

1. Monthly Permitting Fee for Wastewater Haulers

A permit will be required for each vehicle in order to access the HWS. Based on consultations with wastewater haulers, the Administration recommends a phased-in approach to the monthly permit fee. The increase from the current rate of \$2.00/.455m³/month to the cost recovery rate of \$8.00/.455m³/month was considered prohibitive to haulers. As such, the Administration recommends beginning with rates of \$5.00/.455m³/month effective January 1, 2017. As 2016 permits have already been issued at the current rate, the rate increase will not occur until 2017. The intent of the monthly permit is to cover administrative costs associated with issuing the permits, RFID tags and general fixed administrative costs.

2. Discharge Fees for Wastewater Haulers

The discharge fee is the charge applied to the volume of wastewater discharged at the site. The Administration again recommends a phased-in approach to the discharge fee, as the City's current site does not have a discharge fee. The cost recovery rate will be \$15.72/m³. During consultations, wastewater haulers expressed a concern with such a significant increase in rates and requested the City consider a phased-in approach. To accommodate this request, the Administration recommends an initial fee of \$5.00/m³ effective when the new HWS becomes operational and a subsequent rate increase of \$10.00/m³ effective January 1, 2017. The intent of the discharge fee is to cover general processing costs and ensure users of the facility are paying based on usage. The total discharge fee, per trip, will be determined based on a pre-determined truck volume as collected during the permit process.

A portion of the HWS is designed to handle high grit wastewater from the City's sewer cleaning program and will not be available to private industry. The expenses for this part of the station are not included in the discharge fee calculation, as this service is designed to maintain the sewer system and is for City use only. Construction, operating, and maintenance expenses for this service will be paid by the Utility.

To support the intent and enforcement of the revised Hauled Wastewater Program, revisions to both the Bylaw and *Interim Extra-Municipal Servicing Agreement Policy* are required. The following section discusses how the Bylaw and policy will need to be changed.

1. Sewer Service Bylaw, No. 5601

The intent of the recommended changes to the Bylaw are to increase the oversight and security of the new HWS as well as to ensure users of the HWS act responsibly and professionally. The specific changes to the Bylaw are outlined in Appendix A and include the issuance of a RFID tag. The RFID tag will be used to access the HWS and will remain with the vehicle to ensure only permitted vehicles enter the HWS. A more detailed manifest must also be completed for every load of wastewater that is discharged at the HWS. The required information on the manifest will include the following:

- Company information;
- Source of wastewater;
- Wastewater quantity and quality; and,
- Confirmation that the wastewater meets the Bylaw.

In order to reduce the risk to the City, hauled wastewater from industrial commercial institutional (ICI) effluent must not be mixed. This material must be declared on a manifest and presented from a single source. Domestic waste from non-ICI sources may be mixed in order to create efficiency for the wastewater hauling industry. Further information related to wastewater quality concerns and Bylaw changes are outlined in the "*Sewer Service Bylaw No. 5601 – Repeal*" report. In addition to the info above, an updated fee schedule as outlined in Appendix B is also required to implement a cost recovery model.

2. Interim Extra-Municipal Servicing Agreement Policy

The intent of the changes to this Policy is to ensure it remains in alignment with the Bylaw. Changes to the Policy include:

- Notification to the City if the land use has changed;
- Notification if the land has been subdivided or the volume of wastewater dramatically increases;
- Re-application, if the owner of the land that was approved to haul wastewater to the City changes; and,
- Align the fee schedule as recommended.

The Administration recommends that in addition to the permit fee and ongoing discharge fees, the City consider subjecting approved septage discharge applications to a one-time fee. This fee would be similar to the principles of the One-time Connection Fee charged to proponents approved to connect to our water, wastewater and drainage systems directly, as outlined in the *Interim Extra-Municipal Servicing Fees and Surcharges*. The One-time Connection Fee is intended to recover the City's growth related capital costs for utilities, roads, and parks and recreational facilities, and ensures development outside the City does not place a disadvantage upon development within the city. Further analysis, discussion and research of other municipalities is necessary to properly assess the feasibility of a one-time fee for new development approved to discharge hauled wastewater. Appendix E includes the recommended changes to the *Interim Extra-Municipal Servicing Policy* to ensure this policy is in alignment with the proposed changes to the Bylaw.

Additional Work Related to the HWS

Plans to pave portions of Condie Road were not in the initial scope of the HWS. However, after hearing the concerns of the wastewater haulers at the public consultations with industry, the Administration recommends additional funding be allocated to pave a portion of Condie Road. This upgrade will improve the site condition and ensure the site is accessible in all weather conditions. The upgrade will also reduce the impact on wastewater hauler trucks and provide an increased level of service. The cost to complete the upgrade to Condie Road is estimated to be \$1.5 million. The Administration recommends the funds be transferred from the Utility Reserve to Capital Account U6016, with awareness that the discharge cost recovery rate will be increased by approximately \$0.70m³ to \$15.72m³. The Administration will plan to complete design and upgrades to Condie Road in 2016.

RECOMMENDATION IMPLICATIONS

Financial Implications

To recover costs, revenues will need to repay the Utility Reserve for construction, operating and maintenance expenses. Proposed permit and discharge rates, as detailed in Appendix B, support full recovery of program costs. The cost recovery model forecasts full cost recovery over the 50 year lifespan of the asset. Costs are generally fixed and are assumed to be \$500k/year initially. Revenue is dependent on use of the site and is linked to precipitation, with more revenue in wetter years and less revenue in drier years. Current projections are that annual revenues will be

\$850k/year. Revenues will likely be higher or lower for a given year than currently forecast; therefore, this program will need to be monitored with a multi-year lens.

The cost to complete the upgrade to Condie Road is estimated to be \$1.5 million. The Administration recommends the funds be transferred from the Utility Reserve to Capital Account U6016.

Environmental Implications

The new HWS will properly handle and convey hauled wastewater to the WWTP for treatment. In addition, increased monitoring of the hauled wastewater will reduce the risk of high strength wastewater entering the WWTP, which could exceed regulatory parameters and place the City in non-compliance with its permit to operate.

Policy and/or Strategic Implications

The Administration's recommendation to revise the City's Hauled Wastewater Program is consistent with the City's Official Community Plan, as it will "support a more sustainable and beneficial approach to growth within the region through collaborative regional planning and service delivery", OCP Regional Context Goal #1.

The revised program enables the City to maintain service for existing customers who comply with the Bylaw. A key objective of this program is to ensure that it is completely financed from user fees, which is consistent with Goal 1.1.2 of the Official Community Plan; "Where the benefits of a program or service are directly attributable to specific beneficiaries, the costs are to be paid through user fees or other similar charges". To keep fees low and competitive, built-in excess capacity for new developments is limited.

Other Implications

Wastewater haulers have been advised that waste types that are currently improperly discharged at the existing site, such as hydrovac, car wash, garage pit, grease trap, or other waste types will no longer be accepted or will be surcharged at the new site and that the industry needs to develop alternative solutions over time.

The Administration has completed research and has determined that other industrial companies will accept wastewater that is prohibited by the Bylaw.

Accessibility Implications

The new HWS includes an administrative office which is fully accessible.

COMMUNICATIONS

Consultation with industry stakeholders commenced in September, 2014. Administration regularly heard concerns and adjusted plans accordingly. Consultations on changes to the Bylaw and Hauled Wastewater Program are on-going with private industry, residents, and regional generators, including public consultations. A summary of consultations, to-date and planned, are detail in Appendix C.

DELEGATED AUTHORITY

The recommendations contained in this report require City Council approval.

Respectfully submitted,

PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE

Linda Leeks

Linda Leeks, Secretary