



REPORT FOR ACTION

Ashbridges Bay Treatment Plant Pelletizer - Renewal of Operation, Maintenance and Pellet Marketing Services Agreement with Veolia Water Canada, Inc.

Date: December 17, 2019

To: Infrastructure and Environment Committee

From: General Manager Toronto Water

Wards: All Wards

SUMMARY

This report seeks City Council authority for the General Manager, Toronto Water, to finalize negotiations with Veolia Water Canada, Inc. ("Veolia") and enter into and execute a ten (10) year renewal of the Operation, Maintenance and Pellet Marketing Services Agreement between Veolia and the City dated September 24, 2007, as subsequently amended in 2010 ("OM&M Agreement"), on amended terms and conditions substantially consistent with the principles outlined in Attachment 1 to this report.

The OM&M governs the relationship between the City and Veolia pertaining to the operation and maintenance by Veolia of the Ashbridges Bay Treatment Plant ("ABTP") Pelletizer Facility ("Pelletizer Facility") which was commissioned and put into full-time service in 2009. The services provided by Veolia under the OM&M also include the transportation and marketing of the biosolids pellets (generated by the Pelletizer Facility) to the agricultural sector in south-western Ontario. Unless renewed, the OM&M will expire in February 2020.

Since inception of the OM&M, production volumes and reliability have consistently improved. Also, since 2016, the services provided by Veolia under the OM&M has helped the City to achieve 100% beneficial use of the ABTP biosolids. The recommended ten (10) year renewal, which is permitted in the OM&M, subject to the approval of City Council, will ensure continuity of service to 2030. In addition to addressing in principle the proposed renewal and related contract amendments, Attachment 1 includes certain proposed amendments to the OM&M in recognition of the service performance achieved by Veolia to date and the City's need to plan for an eventual replacement facility over the course of this renewal period.

RECOMMENDATIONS

The General Manager, Toronto Water, recommends that:

1. City Council authorize the General Manager, Toronto Water, to finalize negotiations with Veolia Water Canada, Inc. ("Veolia") and enter into and execute a ten (10) year renewal of the Operation, Maintenance and Pellet Marketing Services Agreement between Veolia and the City dated September 24, 2007, as amended by the Amendment Agreement dated March 1, 2010 ("OM&M Agreement"), on amended terms and conditions substantially consistent with the principles outlined in Attachment 1 to this report, and otherwise on terms and conditions satisfactory to the General Manager, Toronto Water, and in a form satisfactory to the City Solicitor ("Renewal Term Agreement").

FINANCIAL IMPACT

There are no anticipated incremental financial impacts resulting from the adoption of this Report. The 2020 Approved Operating Budget for Toronto Water contains funding of approximately \$5.0 million and is considered to be sufficient for the services delivered by Veolia. If additional funds over and above the approved amounts are required, this can be accommodated in Toronto Water's future year operating budgets. Any incremental services to support the City implementation of Pelletizer related capital works will be funded through Toronto Water's future capital program.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

In March 1999, City Council authorized the negotiation and execution of an agreement with USF Canada Inc. (now Veolia) for the design, construction and commissioning of the Pelletizer Facility at the ABTP capable of processing 25,000 dry tonnes of biosolids per year. Authority was also given to negotiate and sign a 15 year marketing agreement with USF Canada Inc. to transport, store and market the biosolids pellets to be generated by the Pelletizer Facility. Based on the negotiations, it was intended by the parties that, upon final commissioning of the Pelletizer Facility, City staff would be responsible for the daily operation and maintenance of the Pelletizer Facility.

<http://www.toronto.ca/legdocs/1999/minutes/council/cc990302.htm>

At its May 21, 22 and 23, 2003 meeting, City Council authorized staff to enter into an agreement with USF Canada Inc. for a five-year term to transport, store and market up to 32,500 dry tonnes of biosolids pellets from the ABTP.

<http://www.toronto.ca/legdocs/2003/agendas/council/cc030521/wks4rpt/cl002.pdf>

On August 21, 2003, prior to the finalization and execution of the marketing agreement, and before the City's acceptance of the Pelletizer Facility, a fire severely damaged the Pelletizer Facility. As a result, the marketing agreement between the City and USF Canada Inc. was never entered into.

At its July 20, 21 and 22, 2004 meeting, City Council received a Confidential Report and authorized staff to begin the negotiation of a claim settlement agreement between the City and Factory Mutual Insurance Company ("FM Global") arising from the fire at the Pelletizer Facility and to negotiate a rebuild agreement of the Pelletizer Facility with Veolia.

<https://www.toronto.ca/legdocs/2004/minutes/committees/pof/pof040708.pdf>

At its meeting on February 1, 2 and 3, 2005, City Council granted authority to enter into the negotiated agreements with FM Global for the claim settlement and with Veolia to allow the rebuilding of the Pelletizer Facility to its condition the day before the August 2003 fire with the addition of several enhancements to the Pelletizer Facility as requested by the City.

Authorization was also given to allow staff to begin negotiations with Veolia regarding a 20 year Operations, Maintenance and Marketing Agreement, and to report back to Works Committee with the proposed final terms and conditions for final approval by City Council.

<http://www.toronto.ca/legdocs/2005/minutes/council/cc050201.pdf>

At its meeting of July 16, 17, 18 and 19, 2007, City Council granted authority to finalize and execute the OM&M with Veolia to provide all staff and resources necessary to process and market 25,000 dry tonnes per year of biosolids generated at the ABTP.

<http://www.toronto.ca/legdocs/mmis/2007/pw/reports/2007-06-27-pw07-cr.pdf>

At its meeting of August 5 and 6 2009, City Council granted authority to amend the OM&M with Veolia, based on the Term Sheet in Attachment 1 of the Staff Report, thereby allowing full time operation of the Pelletizer Facility to commence.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2009.PW25.14>

At its meeting on May 14, 2014, Bid Committee granted authority to award Request for Proposal 9117-14-7036 to Associated Engineering (Ont.) Ltd. for Professional Engineering Services in order to conduct a Condition Assessment Study of the Pelletizer Facility at the ABTP.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.BD180.4>

COMMENTS

Background:

The Pelletizer Facility was put into full time operation in 2010 and is a critical component of the City's beneficial use biosolids management strategy for the ABTP. The pelletizer anchors a biosolids program that achieves 100% beneficial use of the biosolids produced at the ABTP.

Originally constructed between 1999 and 2003 by USF Canada (now known as Veolia), the Pelletizer Facility was severely damaged by a fire on August 21, 2003. After protracted negotiations with Veolia and the insurer for both the City and Veolia, an agreement was reached to rebuild the Pelletizer Facility and the rebuild began in mid - 2005. Various enhancements were made to the Pelletizer Facility and commissioning, final testing and acceptance of the rebuilt Pelletizer Facility commenced in May 2007.

As the facility designer and builder, Veolia was considered best positioned to effectively operate and maintain the Pelletizer Facility. As such during the rebuild, staff sought and obtained Council approval to negotiate with Veolia, and award an agreement to operate and maintain the Pelletizer Facility as well as market the pellets produced by the facility. The resulting agreement referred to as OM&M was negotiated as a ten year agreement with a mutual option to renew for an additional ten years on amended terms and conditions, subject to City Council approval.

The services provided by Veolia under the OM&M cover the full range of activities required to staff, operate and maintain the Pelletizer Facility on a continuous basis (24/7) and to develop and sustain a pellet production and marketing business. The OM&M commits the City to providing biosolids that meet the Ontario regulatory requirements for agricultural land application and, in turn, Veolia is required to convert the biosolids to pellets and identify, develop and sell the pellets to beneficial use end markets.

For 2019, the Pelletizer facility through the OM&M is expected to process and therefore beneficially use 53% of all biosolids produced at ABTP. Four (4) other service providers handle and process the remaining 47% of ABTP biosolids.

Overview of the OM&M:

The OM&M will expire in February 2020 unless it is renewed. The original term under the OM&M is ten (10) years. The OM&M provides for a renewal for an additional ten (10) year term on the basis of a mutual agreement by the parties, subject to City Council approval. The original negotiated unit price for pellets actually produced by Veolia under the OM&M was subsequently amended with Council approval in 2009 and has since been adjusted annually based on inflation. Annual adjustments to the unit price will continue under this renewal in accordance with the provisions of the OM&M and 2009 amendment. Highlights of the OM&M are as follows:

Services:

Veolia provides all labour, management, technical support staff, and all other resources to operate and maintain the Pelletizer Facility. Veolia also is solely responsible for the marketing, handling and distribution of pellets produced at the Pelletizer Facility and has established and maintains a pellet marketing function. The City only pays the unit price for pellets actually produced by Veolia. Payments by the City to Veolia are therefore performance based.

Under the OM&M, Veolia is responsible to pay for the first \$60,000 of each incident of repair and replacement or corrective maintenance. To date, the City has not had to fund any repairs to the Pelletizer Facility over this \$60,000 threshold.

Pricing:

The City pays Veolia for pellets produced based on a per dry tonne basis of biosolids processed into pellets. This price is subject to annual CPI adjustments and has a sliding scale adjustment based on the annual volume of biosolids processed.

Monitoring:

Veolia is required to periodically prepare and present various documents which the City uses to monitor Veolia's performance under the OM&M. These include: Operations and Maintenance Plans, Quarterly Operations Reports, Compliance Reports, Quarterly Maintenance Reports, Annual Operations and Maintenance Reports, Annual Pellet Marketing and Distribution Reports, and Corporate Financial Reports. The City performs certain testing to ensure suitable biosolids quantity and quality has been provided to Veolia by the City. Veolia is responsible for monitoring pellet quality and reporting to the City.

Asset Protection and Maintenance:

During the term of the OM&M, the City can and has implemented capital improvements or enhancements to the Pelletizer Facility. Over the past ten years, the City has funded approximately \$1.86 million in capital improvements, all aimed at preserving the City's investment and extending the useful life of the asset. Veolia, in turn, has implemented capital improvements to the Pelletizer Facility at its expense in order to improve reliability and generate efficiencies.

Pellet Marketing Plan:

Veolia periodically updates its Pellet Marketing Plan that focusses on bulk sales to the agricultural market with ongoing efforts to develop all-season year round demand in order to minimize the need for pellet storage. Bulk sales to the agricultural sector and on farm storage have successfully mitigated the need for any centralized winter storage facility. Veolia continues its efforts to market to diversified industries that use fertilizer in their production process, including: turf producers, ornamental plant nurseries, greenhouses, golf courses, landscapers, etc. Long term efforts continue to focus on identifying and securing the highest value end markets.

Performance:

Despite commissioning and start-up challenges between 2007 and 2009 that resulted in a series of shut downs, Veolia has consistently improved year-over-year production

reliability over the ten year contract term and has achieved annual production level improvements from 15,340 dry tonnes in 2010 to a projected 23,803 dry tonnes in 2019.

Payments to Veolia are based on biosolids volumes processed through the Pelletizer Facility. Payments that include annual inflation adjustments have risen from \$2.383 million in 2010 to a projected \$4.886 million for 2019 (Figure 1: Ten Year Pellet Production and Cost). Even after accounting for utilities (hydro and natural gas) expenses that are paid by the City, biosolids processing through the Pelletizer Facility remains the City's low cost biosolids management alternative.

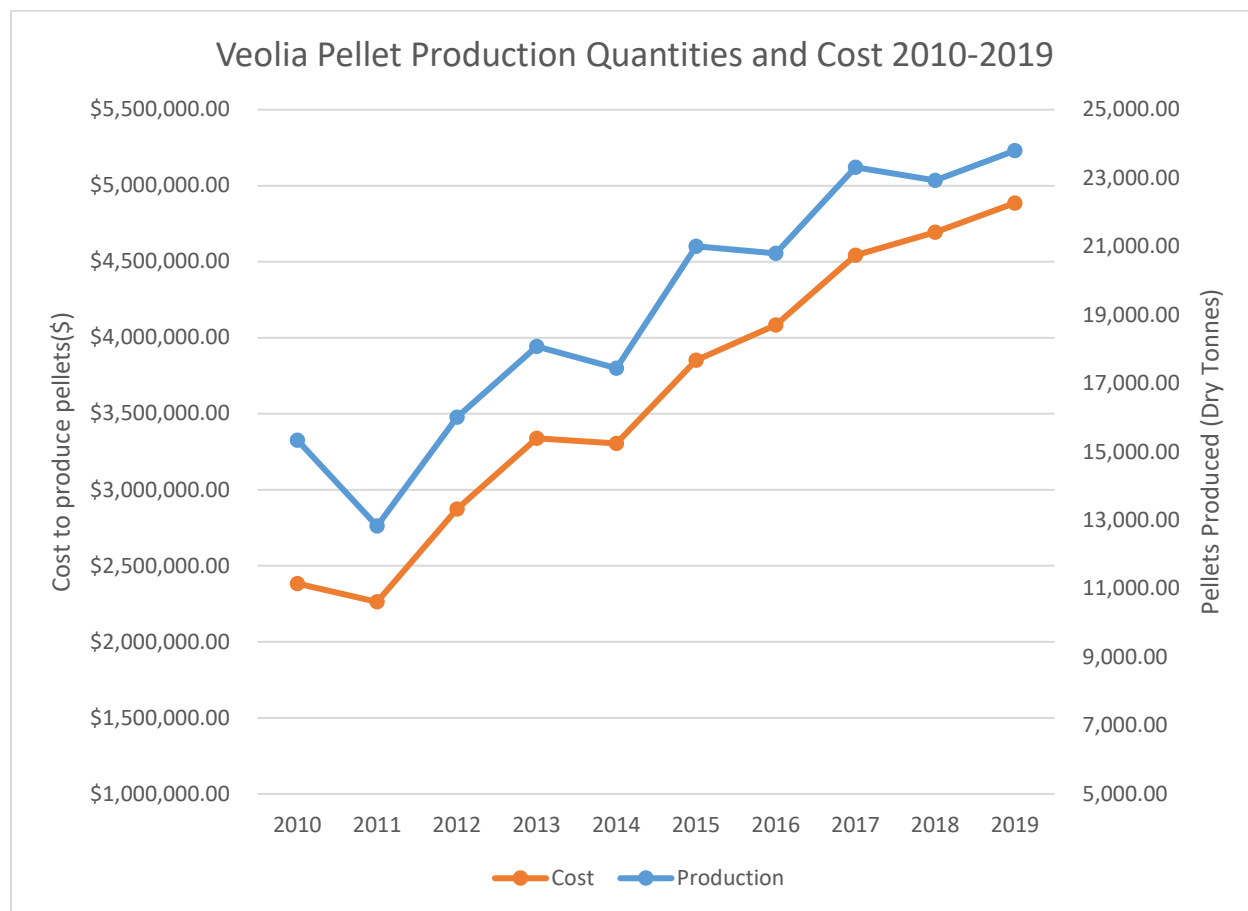


Figure 1: Ten Year Pellet Production and Costs

Projected Costs (2020 to 2030):

The projected total cost for the recommended renewal of the OM&M for the additional ten (10) years is fully dependent on assumptions related to the remaining life of the Pelletizer Facility and the expected production reliability as the facility ages. Assuming 2019 production levels can be maintained, and three (3) percent annual inflation rate increases, the value of the Veolia contract renewal would be approximately \$57.7 million over the ten year period. Reduced reliability and production levels are, however, expected over the ten year term but cannot be projected at this time.

Condition of the Pelletizer Facility:

In 2014, the City commissioned a third party review of the condition of the Pelletizer Facility in order to assess its remaining useful life. The engineering assignment was awarded to Associated Engineering and the study was completed in 2016. The condition assessment included a review of the architectural, structural, process, mechanical, electrical and instrumentation condition of the Pelletizer Facility. An odour assessment and review of odour control strategies, and an evaluation of options to improve the operation of the truck loading facility were also performed.

Numerous recommendations were developed and grouped into a set of short and medium term capital upgrades that are currently in design. Given the age of the Pelletizer Facility (originally built in 2003), the capital upgrades are aimed at maintaining or improving safety, reliability, integrity and regulatory compliance. The study identified a number of longer-term and more costly recommendations that the City should consider but implementation of these recommendations would depend on both the remaining useful life and the number of years before the City constructs a replacement facility.

The most notable outcome of the condition assessment was the determination of an estimated remaining useful life of the Pelletizer Facility. Based on normal wear and tear of certain internal components, and assuming the wear rate observed continues, the remaining useful life could be as short as 10.5 to 11 years (from 2016). However, two subsequent re-assessments have been more optimistic as the wear rate has diminished and a ten (10) year life (from 2020) is now anticipated. Based on this assessment and the City plan to construct and commission a replacement facility within the next ten (10) years, the longer-term improvements (beyond ten years) mentioned above will not be pursued.

Replacement of the core pelletizer equipment, namely the Seghers Dryers, with comparable equipment is not an option as Seghers no longer manufactures this type of biosolids dryer, nor does it service previously installed Seghers dryers. Also, while several other thermal oil dryer vendors service the municipal biosolids sector, none manufacture a vertically oriented dryer suitable for replacement within the existing Pelletizer Facility building footprint. Consequently, once the Seghers dryers reach the end of their useful life, the Pelletizer Facility will need to be shut down. If ongoing annual dryer testing confirms that the rate of wear remains less than the 2016 forecast, the remaining operating life of the Pelletizer Facility will be extended to the full ten (10) year term of this renewal. Conversely, if the rate of wear increases, the Pelletizer Facility may need to be shut down sooner – meaning that a replacement facility would need to be available sooner.

Development of a Replacement Facility:

Recognizing the critical importance of the Pelletizer Facility to the operation of the ABTP and the achievement of 100% beneficial use of biosolids, the City will in 2020 commence the development of a replacement facility to be in place and ready for service by approximately 2027 or 2028 and no later than the expiry of this ten (10) year renewal. If the rate of wear on the existing Pelletizer Facility were to indicate an end of life before the expiry of the ten year renewal period (2030), then at that time an alternate

operating strategy will be developed for Council approval that could include an additional interim agreement extension to Veolia to transition to the new facility. During the development of the new Pelletizer, operation, technical and advisory services will be required from Veolia to assist the City's project team. Therefore, provision is required within the proposed OM&M renewal to purchase additional Veolia professional services as needed. The scope and value of these services remain to be determined but are estimated to range from \$0.75 million to \$1.0 million over the ten year renewal period. These funds will be carried in future Toronto Water Capital budgets once the costs and related services are known.

Proposed Renewal Term Agreement:

Attachment 1 to this report sets out the principles upon which it is recommended that City Council authorize the General Manager, Toronto Water, to finalize negotiations with Veolia and enter into and execute a ten (10) year renewal of the OM&M.

In addition to a renewal of the OM&M for another ten years, it is recommended that the OM&M be updated based on current known conditions. Many of the principles are administrative in nature and align with the ongoing expectations of the City. Also, as the Pelletizer Facility was originally constructed in 2003 and then rebuilt for the 2010 commencement of the OM&M, key components of the Pelletizer Facility are aging and will need to be monitored over the duration of the renewal period

CONTACT

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SIGNATURE

Lou Di Gironimo
General Manager, Toronto Water

ATTACHMENTS

Attachment 1 – Proposed Renewal Term Agreement

Attachment 1: Proposed Renewal Term Agreement

It is recommended that the following principles guide the finalization of negotiations between the General Manager, Toronto Water, on behalf of the City, and Veolia and form the basis of the proposed Renewal Term Agreement to be entered into and executed by the parties:

- The OM&M be renewed for an additional ten year term, and otherwise on terms and conditions satisfactory to the General Manager, Toronto Water, and in a form satisfactory to the City Solicitor;
- Existing payment provisions and annual unit rate adjustments within the OM&M and the 2009 amendment will carry forward and continue under the Renewal Term Agreement;
- Veolia obtain, maintain and deliver to the City, to the extent necessary, any updated insurance and financial security required by the City under the OM&M including, without limitation, as applicable, Performance Bond, Letter of Credit, Parent Guarantee and/or any related letters of consent to the renewal and any amendment of the OM&M, all in a form acceptable to the City, acting reasonably;
- Veolia provide, to the extent necessary, any updated representations and warranties as may be required by the City, acting reasonably;
- Amendments be made to the OM&M requirements regarding the submission of corporate financial statements;
- The OM&M be updated to reflect current standards and references to Laws (as that term is defined in the OM&M) including, without limitation, as applicable, terminology related to regulatory requirements and updated Environmental Compliance Approvals;
- The change order provisions in the OM&M be expanded to allow service adjustments that will assist the City in developing and commissioning a new replacement facility before the eventual decommissioning of the Pelletizer Facility. This mechanism could then be used to purchase technical and operational expertise and assistance from Veolia during the course of the City's development and construction of a new replacement Pelletizer facility;
- Adjustments be made to the value of the minimum required on-site spare parts inventory that Veolia must maintain under the OM&M. Adjustments to be based on the historical parts requirements of the first ten years of the operation and maintenance of the Pelletizer Facility;
- The deletion of natural gas consumption targets under the OM&M as energy efficiency is affected by operational interruptions within the City controlled ABTP. Also efficiency is expected to diminish due to both City requested interruptions as well as normal wear and tear as the Pelletizer Facility approaches the end of its useful life;
- Consideration of and the potential relief from certain other OM&M requirements that will become more difficult to achieve as the Pelletizer Facility approaches the end of its useful life;
- The inclusion in the OM&M of updated names, titles, addresses and notice provisions for each party, as may be applicable;
- Amendments be made to the OM&M record and documentation provisions to allow for digital storage and retention of key documents;
- Deletion of the Final Condition Survey provisions and references thereto, as applicable, as the City has already assessed the condition of the Pelletizer Facility through a separate initiative; and,
- Each party shall be responsible for its own expenses (including, without limitation, legal fees) incurred in connection with the negotiation and completion of the Renewal Term Agreement.