

High Solids Anaerobic Digestion Facility History

Origin and Design and Construction (2013 - 2018)

The High Solids Anaerobic Digestion Facility (HSADF) project was initiated with a budget of \$30.8 million (CR_670) and approved by Council in 2013. After bids came in significantly over the initial business case budget estimates, changes were made to the delivery methodology for the project to manage costs. The project was separated into several contracts and retendered.

Waste Services also returned to Council to request additional funds, increasing the approved budget to \$37 million in 2015 to reflect the updated HSADF business case (CR_3593). The budget was then increased to \$38.9 million in 2017 (CR_4751).

The HSADF partly relied upon infrastructure in the Edmonton Composting Facility (ECF). After the sudden closure of the ECF, a budget increase of \$2.7 million was required in 2018 to enable the HSADF to operate independently. This brought the total approved budget to \$41.7 million (CR_6115).

HSADF Commissioning (2018 - 2021)

Upon construction project completion, the HSADF completed cold commissioning but did not pass the hot commissioning performance test. Additional capital and operating funds totaling approximately \$13.4 million were committed over a three year period between 2018 and 2021 to enable the safe operation of the facility and address multiple operational issues. This enabled the facility to contribute to Waste Services' organic waste diversion efforts in the absence of other organic waste processing alternatives.

Capital improvements during this period followed the City's contract management processes and other relevant procurement and project management methodology. Operational expenditures were made in accordance with the terms of the City's contract with the facility operator and approved in accordance with the City's delegation of authority.

Transition to Distributed Model of organics processing (2021 - 2024)

Since the successful implementation of the Distributed Model of organics processing in 2022, Waste Services has pursued a strategy of using multiple facilities with a 50/50 division of City and third-party organics processing to manage program

ADDENDUM Attachment 5

risk and ensure reliability of service to ratepayers. During this period, the HSADF has continued to process organic waste as a component of the overall program and no further significant investments have been made.

Summary of HSADF Costs and Approvals

Date	Council Meeting	Additional Cost	Description	Total Cost
August 27, 2013	CR_419 (private)	n/a	<ul style="list-style-type: none"> Initial business case 	\$30.8 million
November 6, 2013	CR_670	n/a	<ul style="list-style-type: none"> Bylaw 16642 created 	\$30.8 million
August 27, 2015	CR_2806 (private)	\$6.16 million	<ul style="list-style-type: none"> Revised business case 	\$37 million
May 3, 2016	CR_3593	n/a	<ul style="list-style-type: none"> Bylaw 16642 amended 	\$37 million
May 9, 2017	CR_4751	\$1.98 million	<ul style="list-style-type: none"> Contractor-identified improvements prior to commissioning Bylaw 16642 amended 	\$38.9 million
September 4, 2018	CR_6115	\$2.73 million	<ul style="list-style-type: none"> New infrastructure to replace infrastructure shared with the closing ECF 	\$41.7 million
2018-2021	n/a	\$12.9 million	<ul style="list-style-type: none"> Cumulative operational and capital fixes committed to allow the facility to run 	\$54.6 million
June 25, 2021	CO00650	\$530,000	<ul style="list-style-type: none"> Commissioning and performance testing services 	\$55.1 million
2021-2024	<ul style="list-style-type: none"> Shift to shared 50/50 division of City and third-party organics processing Organics processing program review initiated by Waste Services in 2022, conclusions reviewed by an IIS consultant in 2023-24 			
2013-2024				\$55.1 million