

Southwest Regional Development Corporation

Newsletter Winter 2018

Southwest Regional Development Corporation (SRDC) Board of Directors is very pleased to announce that the Southwestern Manitoba Zero Waste System Project (formerly known as the SRDC Gasification Demonstration Project) is set to get underway by late April – early May 2018. While it has taken more than three years to get to this point, SRDC has never wavered in its commitment to this innovative and highly impactful project.

Southwestern Manitoba Zero Waste System Project

The Zero Waste System project was introduced under the SRDC Innovation Initiative. The SRDC board agreed that it met with the purpose and goals of this initiative and was impressed by the prospect that this system could solve costly landfill issues faced by virtually all municipalities - all at a relatively low cost and in an environmentally sound manner. The success of this endeavour would benefit small business and municipalities found across this region and beyond.

- Project proponents are Celtic Power & Machining from Rapid City, MB and Sigma Professional Engineering from Florida, USA. They have developed the Zero Waste System.
- The Zero Waste System gasification unit is a modular structure built within a standard shipping container.
- Up to a maximum of 17 tons of baled municipal, industrial, medical, agricultural and/or non-hazardous wastes can be inserted into the unit.
- Contents of the "gasifier" are heated to a relatively low temperature and "cooked" until all that remains is glass, metal and ash – recyclable materials free of contaminants.
- The gasification process takes approximately 14 hours.
- The resulting "syngas" is flared off or can be harnessed to power a generator to produce electricity.

Project Purpose

- × The project will include extensive testing of the gasification system along with an investigation into an innovative composting technology beneficial to landfill operations.
- × The project is meant to prove the viability of using a gasification unit for the safe disposal of municipal solid waste.
- × By conducting emission tests on various feed stocks commonly found in landfills, the project will verify that the gasification of those feed stocks meet all current environmental standards.
- × The project will prove that gasification is safe, cost effective and environmentally friendly.

Funding secured

Word was received at the end of May 2017 that SRDC's funding proposal to the Federation of Canadian Municipalities (FCM) was successful. A matching dollar grant for \$350,000.00 was awarded to the Zero Waste System project. Project stakeholders have committed the necessary funds to equal that grant including:

- ✓ \$200,000.00 from Evergreen Environmental Technologies (EET) - owner of the Class 1 landfill where the demonstration project will be situated;
- ✓ \$100,000.00 in-kind labour and material costs provided by system proponents - Celtic Power & Machining and Sigma Professional Engineers;
- ✓ \$50,000.00 from SRDC.

The funding agreement with FCM stipulated that all monies released must flow through a municipal corporation rather than SRDC. In compliance, the Rural Municipality (RM) of Minto-Odanah (one of the municipal partners that own EET) has taken on that administrative role while SRDC continues to be represented on the project overseeing committee along with EET and system proponents.