

**Contract No. R-027-037**  
**“Landfill Gas to Compressed Natural Gas Fast-Fill Fueling Station”**  
 Submitted by City of Fargo  
 Principal Investigator: Terry Ludlum

**PARTICIPANTS**

<b>Sponsor</b>	<b>Cost Share</b>
City of Fargo	<u>\$500,000</u>
Subtotal Cash Cost Share	\$500,000
North Dakota Industrial Commission	<u>\$500,000</u>
Subtotal Renewable Energy Program	<u>\$500,000</u>
 Total Project Cost	 \$1,000,000

Project Schedule – 36 months	Project Deliverables:
Contract Date – December 1, 2016	Status Report: January 1, 2017 ✓
Start Date – August 1, 2016	Status Report: July 1, 2017 ✓
Completion Date – September 30, 2019	Status Report: January 1, 2018 ✓
	Status Report: July 1, 2018 ✓
	Status Report: January 1, 2019 ✓
	Status Report: July 1, 2019 ✓
	Status Report: January 1, 2020*
	Status Report: July 1, 2020*
	Final Report: December 31, 2020*
	Report on Economics/success of project: September 30, 2021*
	Report on economics/success of project: September 30, 2022*

*\*Denotes change from original contract.*

**OBJECTIVE/STATEMENT OF WORK:**

The purpose of this project is to utilize landfill gas (LFG) by converting it to compressed natural gas (CNG) to be utilized by the city fleet and commercial partners. The applicant will install a fast-fill CNG fueling system and storage system.

This is the second phase of the project. The first phase, which has not yet been completed, includes a compressor upgrade and gas conditioning equipment. The estimated cost is \$2,723,400. The second phase includes the CNG fueling station and storage, as well as the start of fleet replacement. Only the fueling station and storage are included in this funding. The City will pay the rest of the costs with Qualified Energy Conservation Bonds (QECHB) and the City of Fargo’s Solid Waste capital budget.

At a total project cost of \$1,000,000, the estimated average annual fuel savings of 24 trucks is \$296,500. During the gradual conversion of trucks to CNG, the adjusted payback period is 14.15 years.

This project will serve as a demonstration project and will provide information for private and public fleets in the state that may want to use CNG.

**STATUS:**

The contract has been drafted and has been forwarded to the City of Fargo. The contract has now been fully executed.

1/4/2017 - Status report received and has been posted on the website. It states in part: All funds described in Contract No. R-027-037 will be utilized for Phase II of the project which is scheduled to begin in March of 2018. The City of Fargo Solid Waste Division has not included any of the funds defined with the contract or any city matching funds in the 2017 Landfill Capitol Improvement budget. Funds described within the contract and matching funds will be included in the 2018 and 2019 budgets for the development of Phase II - CNG Fast Fueling Station.

The Phase II work will include:

- Prepare and advertise for equipment
- Select/Procure Equipment
- Delivery of Equipment
- Design of Balance of Plant
- Prepare Bid Documents for Installation Contract
- Construction
- Startup and Training

6/30/2017 - Status report received and has been posted on the website. It states in part that the Landfill Gas to Compressed Natural Gas Project Schedule has been updated. All funds described in Contract No. R-027-037 will be utilized for Phase II of the project which is scheduled to begin in March of 2018.

1/2/2018 - Status report received and has been posted on the website. It states in part that the Landfill Gas to Compressed Natural Gas Project Schedule has been updated. All funds described in this contract will be utilized for Phase II of the project which is scheduled to begin in March of 2018. Funds described within the contract and matching funds will be included in the 2018 and 2019 budgets for the Development of Phase II. The schedule for the CNG Fast Fill Fueling Station is as follows:

Prepare and advertise for Equipment	March 2018
Select/Procure Equipment	June 2018
Delivery of Equipment	September 2018
Design of Balance of Plant	November 2018
Prepare Bid Documents for Installation Contract	January 2019
Construction Phase	July - September 2019
Startup and Training	September 2019

7/12/2018 - Status report received and has been posted on the website. It states in part that the Landfill Gas to Compressed Natural Gas Project Schedule has been updated. All funds described in this contract will be utilized for Phase II of the project which is scheduled to begin in March of 2019. Funds described within the contract and matching funds will be included in the 2018, 2019, and 2020 budgets for the Development of Phase II. The schedule for the CNG Fast Fill Fueling Station is as follows:

Prepare and advertise for Equipment	March 2019
Select/Procure Equipment	June 2019
Delivery of Equipment	September 2019
Design of Balance of Plant	November 2019

Prepare Bid Documents for Installation Contract  
Construction Phase  
Startup and Training

January 2019  
July - September 2020  
September 2020

An update to the report indicated that there were not enough qualifying bids for the construction phase of Phase I of the project. There is a possibility that the project will not get rebid until next spring with a May-June 2019 starting date. This will cause a subsequent delay in Phase II.

1/7/19 – Status report received. It states in part that delays were incurred due to an equipment vendor design oversight which resulted in the need to formally reject all proposals and re-advertise the construction project due to a lack of qualifying bids. They have since re-advertised and have been able to proceed with the project. The revised schedule is on track.

7/26/19 – Status report states in part that Phase I of the project is expected to be completed in August 2019. Anticipated costs for Phase I was \$1,815,102. Total paid to date for Phase I is \$2,143,230. Phase II is now scheduled to begin October 2019. Revised schedule for Phase II is as follows:

Project update to City Utility Committee and City Commission	October 2019
Prepare and Advertise for Equipment	December 2019
Select Equipment	March 2020
Delivery of Equipment	July 2020
Design of Balance of Plant	July 2020
Prepare Bid Documents for Installation Contract	August 2020
Construction Phase	September 2020
Startup and Training	November 2020

The applicant has requested and been granted a no cost extension.

Updated 7/30/2019