# **City of Denton**



City Hall 215 E. McKinney Street Denton, Texas www.cityofdenton.com

## **AGENDA INFORMATION SHEET**

**DEPARTMENT:** Solid Waste & Recycling Department

**CM/ DCM/ ACM:** Mario Canizares

**DATE:** August 22, 2017

### **SUBJECT**

Receive a report, hold a discussion, and give staff direction regarding a compressed natural gas (CNG) fueling facility at the intersection of Mayhill Road and Spencer Road.

## **BACKGROUND**

During the last several weeks, staff members in the Solid Waste Department have evaluated financial impacts of the department's investments into compressed natural gas (CNG). As previously reported to the City Council, differences in market prices between diesel and CNG have narrowed substantially, and fuel cost savings associated with CNG no longer cover the costs of converting refuse vehicles to CNG (approximately \$40,000 each). The fuel cost associated with the mobile fueling platform that currently provides fuel for these vehicles is also not sustainable. Staff recommends taking immediate action to reduce further negative financial impacts.

Staff presented various options to address CNG fueling costs for the existing fleet to the City Council on July 25, 2017. During this meeting, the Council directed staff to determine the availability and possible use of local CNG fuel stations. If a local source was not available, staff was directed to pursue the proposed CNG fueling station for City of Denton use only. Staff conducted additional research and found that there is a potential local CNG fueling option for a fueling facility that is currently under consideration. However, the timing of the construction and configuration of this fueling station is uncertain at this point, and it is possible that this station may not be built at all. Staff performed analyses under the assumption that the station would be available soon at the proposed location, which is approximately 20 miles round trip from Solid Waste operations at Mayhill Road. Considering the current fleet of CNG vehicles, the time it would take to fully age out these vehicles, vehicle depreciation and fuel usage associated with the additional travel miles, and additional staff time, this option would cost approximately \$3,208,154. This option has a higher degree of uncertainty, is substantially more expensive, and contains additional elements of risk such as transit time delays when compared to the proposed option of completing construction of the CNG fueling station at Mayhill for City of Denton use only.

Staff presented these findings to the Public Utility Board (PUB) on August 14, 2017 and requested a recommendation. The PUB recommended completing construction of the CNG fueling facility for City of Denton use (5-0).

### **RECOMMENDATION**

Staff recommends completing construction of the CNG fueling facility for City of Denton use only.

## **ESTIMATED SCHEDULE OF PROJECT**

If construction of the CNG fuel facility moves forward, staff estimates construction will be completed within a six month period.

## PRIOR ACTION/REVIEW (Council, Boards, Commissions)

October 22, 2012 – PUB discussion regarding CNG

November 5, 2012 – City Council discussion regarding CNG

April 15, 2014 – Awarded a mobile fueling contract to Ultimate CNG

January 6, 2015 – First amendment to the contract with Ultimate CNG

November 9, 2015 – Second amendment to the contract with Ultimate CNG

August 22, 2016 – Awarded Zeit Energy a contract for CNG fuel facility construction

July 24, 2017 – PUB discussion regarding CNG

July 25, 2017 - City Council discussion regarding CNG

August 14, 2017 – PUB discussion regarding CNG

## FISCAL INFORMATION

The construction of the CNG fuel facility will be funded from the Solid Waste Department's capital improvement program (CIP). The purchase of natural gas and additional operational expenses will be funded from the department's operating fund.

## STRATEGIC PLAN RELATIONSHIP

The City of Denton's Strategic Plan is an action-oriented road map that will help the City achieve its vision. The foundation for the plan is the five long-term Key Focus Areas (KFA): Organizational Excellence; Public Infrastructure; Economic Development; Safe, Livable, and Family-Friendly Community; and Sustainability and Environmental Stewardship. While individual items may support multiple KFAs, this specific City Council agenda item contributes most directly to the following KFA and goal:

Related Key Focus Area: Sustainable & Environmental Stewardship

Related Goal: 2.5 Develop Capital Improvement Program (CIP) based on community

needs

### **EXHIBITS**

1. Agenda Information Sheet

2. Presentation

Respectfully submitted: Ethan Cox, 349-7421 Director of Solid Waste