



AGENDA MEMORANDUM

Action Item for the City Council Meeting January 28, 2025

DATE: January 14, 2025

TO: Peter Zaroni, City Manager

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Construction Contract Award

Cefe Valenzuela Landfill Backup Generators

CAPTION:

Motion to award a construction contract to McDonald Municipal & Industrial, located in Houston, Texas, to replace two 100kW diesel backup generators and the current concrete at the Cefe Valenzuela landfill, in the amount not to exceed \$298,469.00 with FY 2025 funding available from the Solid Waste's Capital Improvement Plan (CIP) fund.

SUMMARY:

This motion approves a construction contract for the Cefe Valenzuela Backup Power Generators project. The new generators will comply with the TCEQ's Title V Air Regulations. The project involves the demolition of related infrastructure, replacing two 100kW diesel backup power generators, and replacing existing electrical wiring and concrete foundations at the Cefe Valenzuela landfill.

BACKGROUND AND FINDINGS:

The Cefe Valenzuela Landfill serves Council District 1 through Council District 5. It is located outside city limits, 14 miles southwest of Corpus Christi's City Hall, at the intersection of Farm to Market 2444 and County Road 20. The landfill property covers 2,273.59 acres. All landfill activities will occur within a 500-foot buffer zone surrounding the property perimeter.

The landfill permit specifies how the city must safely store, process, and dispose of waste materials. All waste must be disposed of in accordance with the rules and orders of the Texas Commission on Environmental Quality (TCEQ) and the laws of the State of Texas. Nothing in the permit exempts the city from compliance with any applicable environmental rules, regulations, or laws.

The landfill is required to operate six days per week, regardless of the inclement weather, for environmental reasons and the health of our community. Thus, having a reliable backup generator is an essential investment. In the event of a power outage, the backup generator will power the scalehouse, servers and blower motors to the flare and gas plant helping ensure operations at the landfill can continue without interruption, preventing any potential environmental hazards or health risks. Furthermore, the landfill is a critical facility after windstorm events.

Cefe Valenzuela Landfill is subject to a general operating permit from TCEQ, outlined in 30 Texas Administrative Code, Ch. 122, subpart F, which is authorized under Title V of the Clean Air Act. This is commonly referred to in the industry as a Title V operating permit.

Title V subject's facilities, such as Cefe Valenzuela Landfill, to certain permitting, reporting and operating conditions. Standards of performance for stationary compression ignition engines (diesel generators) are outlined in 40 Code of Federal Regulations, Part 60., Subpart IIII. This project will replace the two existing generators with 40 CFR Ch. 60.4210 compliant generators. The decision to upgrade to new diesel generators is one of reliability and lack of alternate energy infrastructure onsite, such as gasoline and natural gas.

Other City facilities can utilize the existing 100 kW generators because the current generators are Tier III level. Tier III generators are adequate as emergency backup generators for non-Title V facilities. This contract includes the removal and transportation of the existing generators to the City's Asset Management Department. There, Asset Management will evaluate the generators and install them at the compatible locations where they will be most beneficial.

PROJECT TIMELINE:

2024	2024	2025 - 2026
January - August	September - December	January - January
Design / Permit	Bid/Award	Construction

Project schedule reflects award in December 2024 with anticipated completion by January 2026. The generators will be replaced one at a time, but within the scope of this project. The generators are manufactured after the contractor orders them. This ensures that each generator is customized to meet the specific needs and requirements of the project. The production of generators has been long since Covid and production time has not improved.

COMPETITIVE SOLICITATION PROCESS:

On September 18, 2024, the Contracts and Procurement Department issued a Request for Bids (RFB #6039) for Cefe Valenzuela Backup Generators. The City of Corpus Christi received bids from five bidders. The city analyzed the bids according to the contract documents and determined that McDonald Municipal & Industrial was the lowest responsive and responsible bidder. As the lowest bid received was within the acceptable range of the Engineer's Opinion of Probable Construction Cost, the city decided to proceed with the project. A summary of the bid is provided

below:

BID SUMMARY		
CONTRACTOR	BASE BID	TOTAL
McDonald Municipal & Industrial Houston, TX	\$298,469.00	\$298,469.00
Scott Electric Co Corpus Christi, TX	\$356,817.20	\$356,817.20
Bonco LLC Driscoll, TX	\$393,770.00	\$393,770.00
CRI Electric, Inc San Antonio, TX	\$417,817.00	\$417,817.00
TAKNEK LLC Gainesville, TX	\$436,870.00	\$436,870.00
<i>Engineer's Opinion of Probable Construction Cost</i>	<i>\$433,060.00</i>	<i>\$433,060.00</i>

In February 2024, the Council awarded McDonald Municipal & Industrial the construction contract for installing a backup power generator for the Nutrition Education Services Center (Central Kitchen) at Del Mar College West Campus. McDonald Municipal & Industrial has installed over 1,000 emergency generators in the past 10 years at various facilities, including water facilities, wastewater facilities (such as WWTPs and lift stations), data centers, commercial office buildings, shipping ports around the Gulf Coast, fire stations, police stations, and more. These generators range from 15KW to 2500KW and include diesel, propane, and natural gas options. Below is a brief list of comparable projects McDonald Municipal completed in the last five years:

- (Chelford City). Installation of a 2000 kW generator, a new 3000 A electrical service, and new electrical distribution throughout a WWTP site in Harris County, Texas, to provide emergency power to the facility. – Contract Amount: \$2.3M
- (Fort Bend Levee Improvement District 2). Construction of a new building to house an electrical distribution system, a 450KW natural gas generator, and a 450KW diesel generator for redundant feeds to a storm water pumping station. – Contract Amount: \$2.1M
- (City of Bay City Harvey Recovery Generators). Installation of four generators at four separate sites in the City of Bay City. The work included new electrical distribution equipment, concrete pads, and site work for a "turnkey" installation. – Contract Amount: \$1.35M
- (City of Pearland Recreation Center & Natatorium). Installation of a new 750KW natural gas generator at a large building for the City of Pearland to provide housing for the community during a natural disaster. The work included a new concrete pad and new electrical distribution equipment. – Contract Amount: \$1.26M
- (Pintail Pump Station) Installation of new site utilities, driveway, generator pad, a 1000KW

generator, and modifications to an existing EATON switch. – Contract Amount: \$1.06M

ALTERNATIVES:

There are no alternatives to the generator project. If Solid Waste Department fails to replace the current generators with new EPA-compliant generators, the Cefe Valenzuela Landfill will be in violation of TCEQ emission requirements

FISCAL IMPACT:

The fiscal impact in FY2024 is an amount of \$298,469.00 with funds available from Capital Improvement Plan (CIP) fund. This item will utilize funds from the Capital Equipment Purchasing account and will not draw upon Construction/Rehab account funds. The remaining funds from within the Construction/Rehab account will be utilized for any change orders and unforeseen changes in scope.

FUNDING DETAIL:

Fund: **Solid Waste 2024 CO (Fund 3375)**
Department: Solid Waste (31)
Organization: Grants & Capital Projects Funds (89)
Project: Cefe Valenzuela Landfill Backup Generators (Project No. 23099)
Account: Capital Equipment Purchases (550720)
Activity: 23099
Amount: \$298,469.00

Overall Contract Total \$298,469.00

RECOMMENDATION:

Engineering staff recommend awarding a construction contract for Cefe Valenzuela Backup Generators to McDonald Municipal & Industrial for the replacement of the existing two generators at Cefe Valenzuela Landfill.

LIST OF SUPPORTING DOCUMENTS:

Location & Vicinity Maps
Bid Tab
CIP Page
PowerPoint