



City Commission Agenda Report

City of Kalamazoo

Date: **6/7/2021**

Item: **G.3.**

TO: Mayor Anderson, Vice Mayor Griffin, and City Commissioners

FROM: James K. Ritsema, ICMA-CM, City Manager
Prepared by: James J. Baker, PE, Public Services Director and City Engineer

DATE: June 7, 2021

SUBJECT: Contract with Kalamazoo Oil Company for Biodiesel (Bid Ref# 40509-016.0)

RECOMMENDATION:

It is recommended that the City Commission approve a contract with Kalamazoo Oil for a pilot term contract for biodiesel in the amount of \$125,000 (Bid Ref# 40509-016.0).

BACKGROUND:

In accordance with planning and preliminary analysis carried out to support the City of Kalamazoo draft sustainability plan, biodiesel was selected as a preliminary potential alternative fuel source to reduce the City fleet's carbon emissions. In engine and equipment platforms certified to operate on biodiesel by the manufacturer, emissions reductions can be achieved without modifications. Fuel specific energy density, cold weather performance, selective catalyst reduction (SCR), engine gas recirculation (EGR), diesel particulate filter (DPF) and fuel filtration systems will need to be evaluated under actual conditions to verify and quantify overall biodiesel performance within the fleet.

Under this proposed biodiesel pilot from June 2021 through June 2022 fuel performance across all temperatures, operating conditions and engine/vehicle and equipment configurations will be analyzed. The selected vehicles and equipment will be trialed and evaluated against vehicles and equipment of the same or like make, model and year running conventional petroleum diesel fuel from existing suppliers for comparisons. Maintaining operational readiness will be the primary determinate of success with the biodiesel pilot.

A licensed underground tank and dedicated fuel pump at the Stockbridge facility will be dedicated to this pilot, all vehicles and equipment selected for the pilot will be card and code

accessed for biodiesel only. Equipment not selected for the pilot will not be able to access the biodiesel. Public Services is teaming up with the City of Portage Public Works Department during this biodiesel pilot. Portage Public Works trucks and equipment will also be accessing the biodiesel pump at Stockbridge to conduct their own pilot evaluation with City of Portage owned vehicles and equipment.

STRATEGIC VISION ALIGNMENT:

Strategic Goal Impact:



Environmental Responsibility - A green and health City.



Good Governance- Ensuring the City organization has the capacity and resources to effectively implement the community's Strategic Vision in a way that is sustainable over the long term.

COMMUNITY ENGAGEMENT:

Appropriate Depth of Engagement

Inform (one-way conversation) – no feasible alternatives available due to legal/regulatory restrictions, standards and best practices, or resource limitations; the community will be made aware of the project.

FISCAL IMPACT:

The free on board (FOB) rack or spot price of biodiesel at the fuel terminal is decimal cents to a few cents below conventional diesel, rack prices change daily. Biodiesel (meeting the bid specifications) is not currently available at local terminals and will be transported from Indiana. Transportation costs and additive usage result in a final delivered price of biodiesel slightly above or below conventional diesel. Prices for May 17, 2021 compare as follows:

Proposed Biodiesel, Summer	\$2.2378	Delivered
Proposed Biodiesel, Winter	\$2.2717	Delivered
Conventional Diesel	\$2.2473	Delivered

Public Services concludes that there is no material price difference between biodiesel and conventional petroleum diesel.

The proposed encumbrance with Kalamazoo Oil will be in addition to existing encumbrances with Kalamazoo Oil, however biodiesel usage during the pilot will reduce petroleum diesel on a

one for one basis.