



Date: November 18, 2019

To: Thomas J. Bonfield, City Manager
Through: W. Bowman Ferguson, Deputy City Manager
From: Joseph W. Clark, Fleet Management Director
John L. Ferguson CAFM, Assistant Fleet Management Director
Subject: 2019 Clean Fuel Advanced Technology Grant Award

Executive Summary

The Fleet Management Department was awarded a 2019 Clean Fuel Advanced Technology (CFAT) grant. With this grant, the department plans to retrofit one (1) existing General Services, Urban Forestry bucket truck with a product called SmartPTO. This technology aids in the reduction of truck idle time, significantly reducing vehicle emissions.

The grant funding under consideration is part of the Volkswagen AG (VW) settlement. In June 2016, the U.S. Department of Justice issued a partial consent decree settling claims by the U.S. EPA and the Federal Trade Commission against German automaker, VW. The civil complaint filed against Volkswagen claimed that the automaker installed software on its diesel engine vehicles to disable emission controls under normal use and to turn on emission controls only when the vehicle was being tested.

In North Carolina, about 18,700 of the affected vehicles are registered, making the state eligible to receive \$92 million to reduce air pollution from mobile sources. Governor Roy Cooper directed the North Carolina Department of Environmental Quality (DEQ) to develop a plan for how the funds VW settlement are to be used. The North Carolina Clean Energy Technology Center (NCCETC) at North Carolina State University was chosen to review proposals and award funding for projects through the Clean Fuel Advanced Technology (CFAT) Project.

The City could choose not to accept the grant and incur the full cost of installing engine idle reduction technology. The cost estimate for one SmartPTO is approximately \$61,797.

The Clean Fuel Advanced Technology Grant contract was not reviewed for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

Recommendation

The administration recommends that the City Council authorize the City Manager to execute all documents related to the grant from North Carolina State University;

To adopt the 2019 Clean Fuel Advanced Technology grant project ordinance in the amount of \$61,797; and

To adopt an ordinance amending the General Capital Improvements Project Ordinance, Fiscal Year 2019-20, as amended, the same being Ordinance #15486, for the purpose of adding \$49,438 to the 2020 CIP Fleet Replacement project.

Background

The grant funding under consideration is part of the Volkswagen AG (VW) settlement.

In June 2016, the U.S. Department of Justice issued a partial consent decree settling claims by the U.S. EPA and the Federal Trade Commission against German automaker, VW. The civil complaint filed against Volkswagen claimed that the automaker installed software on its diesel engine vehicles to disable emission controls under normal use and to turn on emission controls only when the vehicle was being tested. This “defeat device” resulted in better real world fuel mileage and driving performance, but also resulted in the release of thousands of tons of Nitrogen Oxide (NOx) emissions in excess of regulated limits.

Volkswagen agreed to spend \$14.7 billion to settle allegations of cheating emissions. The settlement is divided into three distinct parts.

- Ten billion dollars of the settlement money will be used to buy back or modify diesel vehicles from consumers.
- The second requirement of the settlement is that VW must create a National Zero Emission Vehicle (ZEV) Investment Plan and spend \$2 billion on ZEV infrastructure programs and brand neutral media activities aimed at increasing public awareness of zero emission vehicles.
- The third component of the settlement is the environmental mitigation trust. To mitigate environmental damages from violating the Clean Air Act, the settlement requires VW to invest \$2.9 billion in an independently administered environmental mitigation trust, which will fund projects to reduce diesel emissions.

How each state chooses to invest its funds is determined by state air, energy and climate goals, existing infrastructure, expected emissions reductions benefits, and many other variables. In North Carolina, about 18,700 of the affected vehicles are registered, making the state eligible to receive \$92 million to reduce air pollution from mobile sources. Governor Roy Cooper directed the North Carolina Department of Environmental Quality (DEQ) to develop a plan for how the funds VW settlement are to be used.

The North Carolina Clean Energy Technology Center (NCCETC) at North Carolina State University was chosen to review proposals and award funding for projects through the Clean Fuel Advanced Technology (CFAT) Project. Projects are focused on reducing transportation-related emissions.

Issues/Analysis

The City is committed to reducing fossil fuel use and carbon reduction in its buildings and operations. With this grant, the Fleet Management Department will retrofit one (1) existing General Services, Urban Forestry bucket truck with a product called SmartPTO. This technology aids in the reduction of truck idle time, significantly reducing vehicle emissions. Utilizing the organization’s existing vehicle maintenance tracking system, fuel and mileage data will be meticulously collected on each vehicle in operation and reported back to the project sponsors.

Utilizing historical data, coupled with post retrofit data, Fleet Management will be able to clearly quantify the benefits of this technology by demonstrating the before and after effects on fuel usage. This data will be fed into a model to quantify the reduction in environmental gases, thus proving its positive effects on the air quality in Durham County.

Based on this data, the department will evaluate the feasibility of expanding this technology to other vehicles presently in service. Per conditions of the grant, the one (1) initial prototype will be operated for a minimum of ten (10) years (equipment to be transferred to another vehicle if replaced due to age) and reported on quarterly for a minimum of 3 years.

By accepting the grant, the City will take advantage of the cost-sharing model by providing 20% of the upfront cost for this device and the remaining portion of the equipment costs will come from the Clean Fuel Advanced Technology (CFAT) 2019 Grant.

Alternatives

The City could option not to accept the grant and incur the full cost of installing engine idle reduction technology.

Financial Impact

The City would net \$49,438 towards the purchase of one (1) SmartPTO via the grant. The total cost estimate for one SmartPTO is approximately \$61,797. The City's local match portion of the grant is \$12,359 and is appropriate with the existing 2020 CIP Fleet Replacement Fund (30620115-732300-S3020).

Equal Business Opportunity Summary

The Clean Fuel Advanced Technology Grant contract was not reviewed for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.