

City of Bel Aire, Kansas

STAFF REPORT

DATE: 10/03/2023

TO: City Manager

FROM: Marty McGee

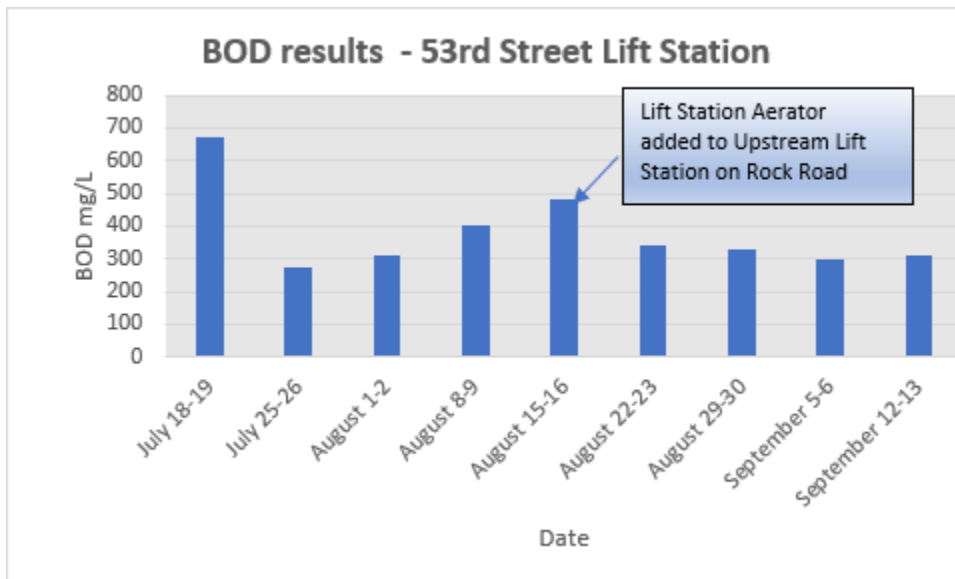
RE: Lift Station Oxygenators



BACKGROUND: We are experiencing highly corrosive H₂S gases (Hydrogen Sulfide), and FOG (Fats, Oils, and Grease) build up in parts of our sewer systems; this causes advanced aging of our system. Public Works has field tested a loaned unit in our Rock Rd lift station for 6 weeks, during this time we have seen a noticeable change for the better in our lift station sample results.

DISCUSSION: Installing oxygenators will create agitation in the wet wells, this agitation aerates the water which interrupts bacterial generation of hydrogen sulfide, the odor causing chemical in sewage, by maintaining aerobic conditions. The agitation also introduces dissolved oxygen into the water, which results in a lower BOD, (biochemical oxygen demand), a regulated parameter in the CCUA discharge permit.

The graph below demonstrates the positive impact on the sample results collected from the lift station located downstream of where the unit was installed. Results collected since August 16th are consistent with what is found in sewage that is typical of household wastewater.



Contractors	Bid amount
Core and Main	\$11,000 Per Unit \$33,000.00 Total
Lloyd Harold LLC	\$3,999.99 Per Unit \$11,999.97 Total
USA Bluebook	

FINANCIAL CONSIDERATIONS: Funding for this project will be taken from the lift station operations line item of the Sewer Utility funds.

POLICY DECISION: Staff is adhering to City policy in gathering a minimum of three bids.

RECOMMENDATION: Staff recommends the City Council accept the bid from Lloyd Harold LLC.