## City of Rigby Council Meeting Minutes July 20, 2021

## Work Meeting:- Review Peer Review on WWTP Upgrades:

Present:

Mayor Richardson, Richard Datwyler, Aliza King, Doug Burke, Roarke Burke, Becky Harrison, Nicole Weight, Mitch Bradley, Marvin Fielding, Jim Mullen, Laura Marcolini via Zoom, Luke Jolley, Kyle Jones, Scott Humphreys, David Swager

Marvin Fielding presented a power point presentation reviewing the process the city took to meet the DEQ ammonia reduction at the WWTP. The city on a test basis brought in the NUVODA system. The results of the trail run were less than adequate for the reduction the city needed for the winter months. Due to a number of factors: insufficient loading of media and not enough mixing of the media. Possible solution is to acquire additional mixers to test for adequate mixing and oxygen aeration. Fielding proceeded to explain the other items being proposed on the project but were not part of the peer review or the reason for this evening meeting.

Laura Marcolini is the consultant retained by Harper Leavitt through a contract the city issued with HLE. Ms. Marcolini reviewed the DMR reports on the sewer plant along with other data to see if the proposal being submitted by Keller was adequate and would meet the ammonia reduction the city needs to meet. In her summary of conclusions she addressed the kenaf settling and mixing which needed to done. She noted the kenaf has a specific gravity of 1.22 higher than water and therefore will tend to settle on the floor if there is a lack of floor mixing and low cross-sectional fluid velocities in the oxidation ditches. Her study/review noted the city does not test for nitrate which is a factor to consider in the removal of ammonia. She also mentioned that Nuvoda recommended a loading of 2%. If the city needed to increase this percentage it would need to be verified from Nuvoda if it could be increased to achieve the desired results. As for the mixing of the kenaf media she recommended the city to consider whether a mechanical mixing coupled with a diffused aeration system would be sufficient to keep the kenaf in suspension. She recommended the city consider a mechanical mixer coupled with a fine bubble diffuser to be the most cost effective in the long term for the city. If air diffusers were to be used, the city should contact Nuvoda to determine the airflow per unit floor area to achieve proper mixing of the kenaf.

Council asked various question regarding nitrates, total kjeldahl nitrogen (TKN), nitrogen, and additional testing as recommended.

Being a work meeting no decision made and meeting adjourned 7:34pm

**CITY OF RIGBY** 

Jason Richardson, Mayor

ATTEST:

David Swager, Clerk