



AGENDA ITEM ANALYSIS

Project/Issue Name: 21-62 An Ordinance of the City Council of the City of Republic, Missouri, Approving Entry of an Abatement Order on Consent with the Missouri Department of Natural Resources Regarding Wastewater Treatment and Authorizing the Execution of Same by the Mayor.

Submitted By: Andrew Nelson, Republic BUILDS Director

Date: October 5, 2021

Issue Statement

To authorize the Mayor to enter into an Abatement Order on Consent (AOC) with The Missouri Department of Natural Resources (MDNR).

Discussion and/or Analysis

On October 4, 2011, the City of Republic and MDNR entered into a Voluntary Compliance Agreement (VCA) to address discharges of wastewater through a wet weather outfall, a constructed bypass of full treatment during wet weather events. The City currently experiences a wet weather peaking factor of 4, meaning that our average day flow of approximately 1.8 Million Gallons per Day (MGD) is quadrupled to approximately 7.2 MGD during heavy rain events. The design capacity of the WWTP currently is 3.2 MGD. The VCA required elimination of discharges from the wet weather outfall within five years and allowed for only one extension of five years. On October 17, 2016, the Department extended the VCA deadline to October 4, 2021.

The City of Republic hired Burns & McDonnell in 2018 to update the masterplan, map the entire sewer system within the city, and propose inflow and infiltration (I&I) reduction methods that would allow us to focus our efforts on the parts of town with the Most I&I. this plan was original going to begin in 2020 but was delayed due to COVID 19 and emergency budget implementations. The BUILDS department plans to begin targeted I&I reduction in the first of several areas later this year. Even with elimination of excessive I&I in the most egregious areas, we would not be able to eliminate enough I&I to not have to bypass to outfall 002.

Therefore in 2020 Burns & McDonnell was again retained to assist in the upgrade of the WWTP to accommodate city growth as well as eliminate the illicit discharge from outfall 002. This will be accomplished through a “blending process” in which in wet weather events, excess influent is not directly discharged from the plant, but bypasses the more extensive process but is still filtered and disinfected. This is an acceptable process with MDNR and allows us to still meet our effluent pollutant limits.

Currently the WWTP Burns & McDonnell is designing will have a wet weather capacity of 16 MGD. This upgrade will take approximately 12 months to fully design and approximately 18 months to build. Because



we will not have the upgrade completed by October 2021 City of Republic requested an AOC to give additional time to get into compliance. This AOC would go into effect in October of 2021 and expire in 2024.

Recommended Action

Staff recommends approval.