



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
Phone: 304-926-0495 / Fax: 304-926-0463

Harold D. Ward, Cabinet Secretary
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MEMORANDUM

To: Marie Prezioso, Chair

From: Katheryn Emery, P.E. Engineer Chief
Sewer Technical Review Committee

Date: October 21, 2024

Subject: City of Mullens
Critical Needs Repairs
Wastewater Treatment Plant and Pump Stations

1. This committee has reviewed the preliminary application and engineering report submitted for the above referenced project in accordance with Chapter 31, Article 15A. It has been determined that the proposed project is:
 - a. Consistent with the intent of the Infrastructure and Jobs Development Act and is the most cost-effective, environmentally sound alternative for solving the wastewater needs in this area.
 - b. Not consistent with the Act and may not be the most cost effective, environmentally sound alternative for solving the wastewater needs in this area.
 - c. Same as (a) above except that certain issues need to be addressed prior to design and construction as the attached comments indicate.
2. Our recommendation is that:
 - a. The Funding Committee needs to review the proposed sources of funding to determine the best mix of grant and/or loan funds in accordance with applicable guidelines.
 - b. The Funding Committee should recommend that the Council approve the proposed project and its funding plan.

- c. ___ The Funding Committee does not need to review the funding assumptions on this project because of deficiencies in the engineering report. The proposed project should be tabled for the consultant to address technical comments.
- d. ___ This project should be referred to the Consolidation Committee.

3. Other remarks:

The project proposes to replace the SBR control panel, blower, UV disinfection system, in addition to repairing the generator and installing cellphone-based telemetry. New pumps and guide rails will be installed at 3 pump stations, and new pump stations will be installed at 2 other locations. This will address aged and failing components at the plant and in the system. The City is currently under DEP Order No. 8517 for violations of their NPDES permit and is also under investigation by the WV State Auditor.

The total cost for this project is \$735,000, and the City intends to pursue a \$735,000 IJDC Critical Needs grant.

It is recommended that only the SBR control panel be funded at this time as it is the most critical of the requests. The City is working on a rate increase and a project to address all of the issues. If another failure occurs prior to the complete project, the IJDC can address it at that time. The City can also use the rate increase to borrow the necessary funding to address the other concerns at this time if it chooses to do so.

Using the Combined Application, the Engineering Fees appear to be within the ASCE curve.

Preliminary Project Ratings:

Public Health Benefits: 15
Compliance with Standards: 20



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MEMORANDUM

TO: Katheryn Emery, P.E., Engineer Chief

FROM: Michael King, P.E., DWWM

DATE: October 16, 2024

SUBJECT: City of Mullens
Critical Needs Repairs
Wastewater Treatment Plant and Pump Stations

RECOMMENDATION

The IJDC Application and Preliminary Engineering Report prepared by Thrasher Engineering has been reviewed and is technically feasible.

PROJECT DESCRIPTION

The City of Mullens operates a combined sewer collection and treatment system permitted under NPDES Permit No. WV0020681. It is permitted as a combined sewer overflow (CSO) system and contains three (3) CSO outlets. The Mullens 0.33 MPD WWTP serves approximately 700 customers and includes 3 CSOs.

The proposed project will replace a collection of broken or compromised equipment which is vital to running the WWTP and pump stations. In the WWTP, the project proposes to replace the SBR control panel, blower, UV disinfection system, in addition to repairing the generator and installing cellphone-based telemetry. New pumps and guide rails will be installed at the Oak Street, Poplar Street, and WWTP pump stations, and new pump stations will be installed at the 4th Street and Gulf (requires 2 pumps) pump stations. The project also proposes to install variable frequency drives (VFDs) at the Poplar Street, Gulf, and WWTP pump stations, as well as cellphone-based telemetry at all five (5) pump stations.

The proposed total cost for this project is \$735,000, and the City intends to pursue a \$735,000 IJDC Critical Needs grant. The proposed monthly rate for 3,400 gallons is \$26.88 (0.006% MHI).

NEED FOR PROJECT

The City of Mullens has been addressing WWTP issues since the city suffered a catastrophic flood in 2001. Components of the WWTP have been failing over the 20+ years since, which has resulted in untreated wastewater discharging into the receiving stream, the Guyandotte River. The City is currently under Order No. 8517 for violations of their NPDES permit, and equipment replacement is required for the treatment plant to achieve even a nominal level of treatment. Additionally, the City of Mullens is currently being investigated by the WV State Auditor.

DEFICIENCIES/COMMENTS

- The PER will need to be developed into a facilities plan that meets CWSRF requirements if CWSRF is used.
- Using the Combined Application, the Engineering Fees appear to be within the ASCE curve.

Preliminary Project Ratings:

Public Health Benefits:	15
Compliance with Standards:	20