

June 30, 2021

Limited Environmental Review and Finding of No Significant Impact

City of Columbus - Franklin County
JPWWTP Raw Sewage Pump Valve Actuator Replacement
Loan number: CS390274-0371

The attached Limited Environmental Review (LER) is for a wastewater treatment facility improvements project in Columbus which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) below-market interest rate revolving loan program. The LER describes the project, its costs, and expected environmental benefits. Making available this LER fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WPCLF program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. This project's relatively narrow scope and lack of environmental impacts qualifies it for the LER rather than a more comprehensive Environmental Assessment. More information can be obtained by calling or writing the person named at the end of the attached LER.

Upon issuance of this Finding of No Significant Impact (FNSI) determination, award of funds may proceed without further environmental review or public comment unless new information shows that environmental conditions of the proposed project have changed significantly.

Sincerely,

Jonathan Bernstein

Jonathan Bernstein, Assistant Chief Division of Environmental and Financial Assistance

Attachment

LIMITED ENVIRONMENTAL REVIEW

Project Identification

Project: JPWWTP Raw Sewage Pump Valve Actuator Replacement

Applicant: City of Columbus

910 Dublin Road Columbus, OH 43215

Loan Number: CS390274-0731

Project Summary

The City of Columbus in Franklin County has requested \$1,045,000 from the Ohio Water Pollution Control Loan Fund (WPCLF) for replacement of the raw sewage pump valve actuator system at the Jackson Pike Wastewater Treatment Plant. This project will allow for more flexible operation and less maintenance during wastewater treatment.

History and Existing Conditions

Jackson Pike Wastewater Treatment Plant (JPWWTP) is one of two wastewater treatment plants operated by the city of Columbus to serve Columbus and 25 contracting suburban communities. Part of the JPWWTP wastewater treatment process includes a hydraulic system containing five raw sewage pumps. Currently, each pump has a cone valve that aids the dedicated pump when starting. The cone valve actuators are operated through a common hydraulic pump and oil header with enough pressure and capacity to operate one valve at a time. This design limits operation and requires cumbersome maintenance due to the frequency and quantity of hydraulic fluid replacement. The hydraulic system was replaced in-kind in 2010 but maintains the same operational limits.

Project Description

This project will replace the common hydraulic system with individual actuator systems to allow for multiple cone valves to be in operation at the same time. Several hundred gallons of hydraulic fluid will be removed from service through the installation of these cone valves and the existing hydraulic system can be demolished once the new valves are in place. The new valves will also contain a fail-safe system which will allow a valve to return to its safe position upon the loss of power, preventing damage to the valve and actuator.

From an operations standpoint, the plant will have more flexibility when starting pumps. These changes will reduce the cumbersome maintenance and associated costs of the existing hydraulic system and extend the longevity of the wastewater treatment system as a whole.

The construction footprint for this project will remain within the confines of the existing wastewater treatment plant, thereby minimizing effects on environmental resources. The contractor is responsible for best management practices to control erosion and sedimentation, minimize the creation of dust, and maintain local traffic during construction.

Maps of the project location are provided in the exhibits below.

Implementation

Project Costs

Columbus plans to borrow \$1,045,000 from the WPCLF. During the 20-year loan period, Columbus will save approximately \$143,958 by using WPCLF dollars at the standard rate of 0.54%, compared to the market rate of 1.79%.

Local Economy

The current Columbus residential sewer bill is approximately \$565/year. Projected residential sewer bills with the implementation of this and other associated wastewater projects are expected to increase to approximately \$711/year, or 1.4% of median household income (MHI) of Columbus, which is \$51,612.

By using WPCLF financing for this project, Columbus has minimized the economic impact on customers.

Project Schedule

The anticipated loan award will occur in July 2021. Construction is expected to commence shortly after the funds have been awarded and completion of the project is expected by the following year.

Public Participation

A public notice was posted on the City of Columbus' Public Utilities webpage detailing the proposed project and contact information is provided for any public questions or concerns.

Ohio EPA will make a copy of this document available to the public on its web page: http://epa.ohio.gov/defa/ofa.aspx (Under the "What's New" tab, scroll to: "Documents Available for Review and Comment – WPCLF Documents for Review and Comment") and will provide it upon request to interested parties. Information supporting this Limited Environmental Review (LER) is available from the project contact named below.

Conclusion

The proposed project meets the project type criteria for an LER; namely, it is for the replacement of existing treatment works. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

- Has no significant environmental effect, no effect on high value environmental resources, and does not require extensive specific impact mitigation.
 - Construction for the project is limited to the previously disturbed footprint of the existing WWTP, which lacks important environmental features. Standard construction best management practices will be required to control dust, sediment runoff, noise, and maintain safety.
- Is cost-effective and not controversial.
 - The proposed project is cost-effective as it involves seeking replacement to existing infrastructure as opposed to no action, which will potentially disrupt the plant's functional ability to meet wastewater treatment needs and will continue to accumulate high maintenance costs. Ohio EPA is unaware of any specific opposition to or controversy about this project that will improve operational flexibility.

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- Does not create a new, or relocate an existing, discharge to surface or ground waters; will not create a new source of water withdrawals from either surface or ground waters; will not significantly increase the amount of water withdrawn from an existing water source; will not result in substantial increases in the volume of discharge or the loading of pollutants from an existing source or from new facilities to receiving waters; and will not provide capacity to serve a population substantially greater than the existing population.
 - This project involves the replacement of equipment within the footprint of the existing treatment plant. The project will not increase wastewater discharges, nor serve a greater population. There will be no change in pollutant loading. Rather, the project proposes to construct a more efficient means of operating the treatment process.

Based upon the available planning information for this project and the materials presented within this LER, Ohio EPA concludes that the proposed project will not result in any significant adverse impacts to any environmental features. The project is expected to have no significant short-term or long-term adverse impacts on the quality of the human environment or on sensitive resources such as surface waters, coastal zones, riparian areas, floodplains, wetlands, state-designated scenic or recreational rivers, prime or unique agricultural lands, aquifer recharge zones, archaeologically or historically significant sites, or threatened or endangered species.

This project will improve the wastewater treatment plant's operational flexibility to maintain efficient wastewater treatment for the city of Columbus.

Contact

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Exhibit 3: Project location