



Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

November 16, 2021

Limited Environmental Review and Finding of No Significant Impact

**City of Columbus – Franklin County
SWWTP Digestion Process Expansion
Loan number: CS390274-0288**

The attached Limited Environmental Review (LER) is for a wastewater treatment plant 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, Chief
Division of Environmental and Financial Assistance

Attachment

LIMITED ENVIRONMENTAL REVIEW

Project Identification

Name: SWWTP Digestion Process Expansion

Applicant: City of Columbus
910 Dublin Road
Columbus, OH 43215

Loan number: CS390274-0288

Project Summary

The City of Columbus in Franklin County has requested \$21,860,109 from the Water Pollution Control Loan Fund (WPCLF) to construct a new digester and associated electrical building to provide additional digestion capacity for the Chemically Enhanced Primary Treatment (CEPT) sludge at the Southerly Wastewater Treatment Plant. Construction will take place within the confines of the existing plant and is not expected to cause adverse environmental impacts.

History and Existing Conditions

Southerly Wastewater Treatment Plant (SWWTP) is one of two large municipal wastewater treatment plants operated by the City of Columbus. The anaerobic digestion process is an integral part of the wastewater treatment process at the SWWTP. The digestion process currently consists of three acid phase digesters and six methane phase digesters. This digestion process treats all of the thickened primary sludge (TPS) and a percentage of the thickened waste activated sludge and produces a Class B sludge digester biogas. Due to the new Chemically Enhanced Primary Treatment (CEPT) train installed in 2017, additional digester capacity is required in order to digest all of the TPS during peak flows.

Project Description

The purpose of this project is to expand the digestion process at the SWWTP in order to handle the additional peak solids loadings from the new CEPT facilities as well as improve operational deficiencies with the existing digestion system.

This project will provide an additional mesophilic digester (Digester 7), new electrical building, and will retrofit the three acid phase digesters into additional pre-digestion storage and mixing tanks. The rest of the digestion plant will be upgraded to operationally match the new Digester 7. Five of the existing digesters will have modifications including a standpipe for surface withdraw and recoating of the floating covers. Digester 6 will have the steel cover replaced with a concrete cover and will have a standpipe installed as well.

The new electrical building will incorporate sustainable design principles and products. The current acid-phase digesters will be repurposed as thickened primary sludge tanks for feed into the mesophilic digesters.

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 and minimize the creation of dust during construction.

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

Implementation

Project Costs

Columbus plans to borrow \$21,860,109 from the WPCLF. During the 20-year loan period, Columbus will save approximately \$3,031,141 by using WPCLF dollars at the standard rate of 0.65%, compared to the market rate of 1.90%.

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 \$737/year, or 1.4% of the 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 December 2021. Construction will start following loan award and is expected to last three years.

Public Participation

A public notice was posted on the City of Columbus' Public Utilities webpage detailing the proposed construction project. Contact information was provided for any public questions or concerns. Reviews of the respective environmental resources were completed by Ohio EPA, Division of Environmental and Financial Assistance (DEFA). The review agency does not oppose the project.

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 an action 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 Southerly WWTP, which lacks important environmental features. Standard construction best

management practices will be required to control dust, sediment runoff, noise, and maintain safety. Although construction will occur within the floodplain, the contractor will commit to take all necessary precautions to protect project work and equipment against flooding occurrences.

- *Is cost effective and not controversial.*

The proposed project is cost effective as it involves seeking replacements to existing equipment to increase CEPT sludge digestion capacity. Operation and maintenance costs to existing equipment will decrease at the completion of this project from the decrease in required labor and maintenance. DEFA is unaware of any specific opposition to or controversy about this project.

- *Does not create a new, or relocate an existing, discharge to surface or ground waters; 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 provide capacity to serve a greater population. There will be no change in pollutant loading.

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 provide operational improvements to the digestion system at Southerly WWTP and simultaneously increase wastewater treatment efficiency.

Contact

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Exhibit 1: Project location



Exhibit 2: Project location map

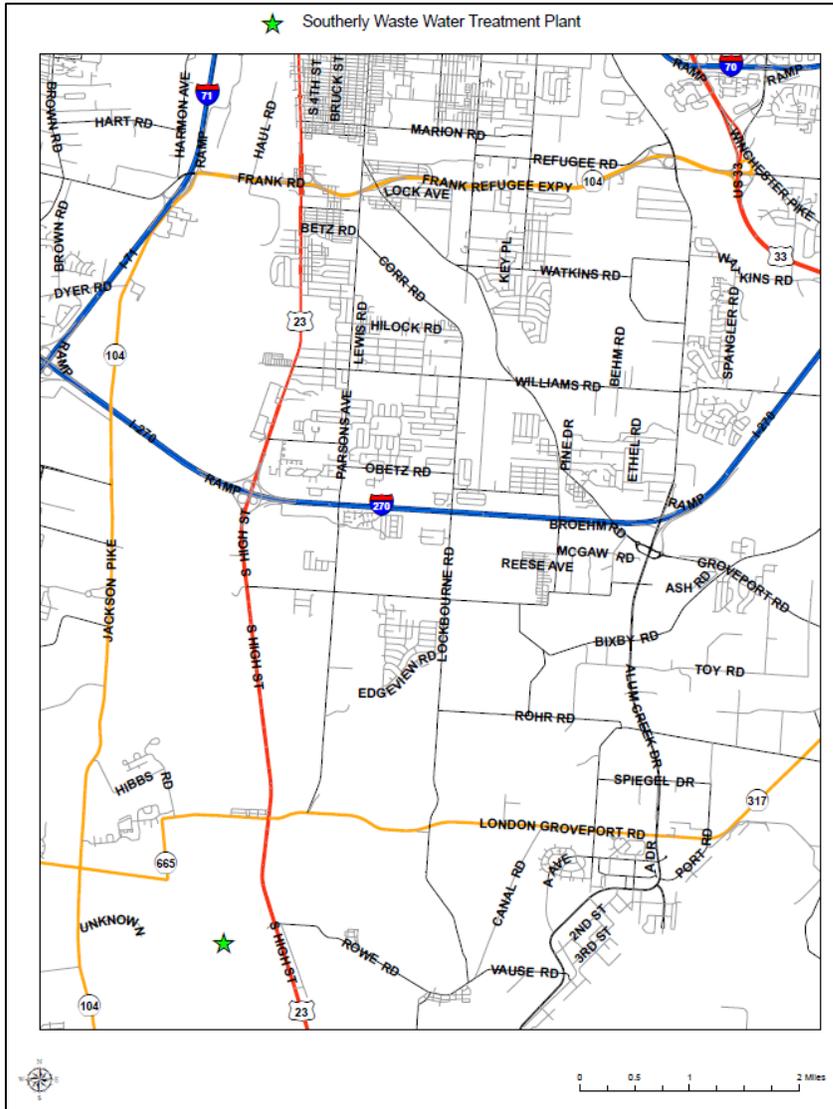


Exhibit 3: Project location within aerial imagery of SWWTP

