July 3, 2020

Limited Environmental Review and Finding of No Significant Impact

City of Germantown – Montgomery County
Water Tower and Telemetry Replacement
Loan number: FS390387-0003

The attached Limited Environmental Review (LER) is for a water storage tank replacement and telemetry upgrades project in Germantown which the Ohio Environmental Protection Agency intends to finance through its Water Supply Revolving Loan Account (WSRLA) 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 WSRLA 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: Germantown Water Tower and Telemetry Replacement

Applicant: Judith Gilleland, Village Official
Village of Germantown
75 North Walnut Street
Germantown, OH 45327

Loan Number: FS390387-0002

Project Summary

The Village of Germantown has applied to Ohio EPA Division of Environmental and Financial Assistance (DEFA) for a Water Supply Revolving Loan Account (WSRLA) loan for the construction of a new water tower, including remote telemetry improvements. Germantown has requested to borrow approximately $2,300,000 to pay for the improvements.

This project will involve the construction of a new 750,000-gallon storage tank to provide full water storage capacity and to correct the old failing water storage tower. The new water storage tower will be constructed on the same property adjacent to the existing tank to the west, located on Weaver Road. The construction requires a 50-foot waterline be installed to connect the new tower to existing waterline service in place. Supervisory Control and Data Acquisition (SCADA) improvements will be installed as part of this project, and remote telemetry and monitoring control equipment will be purchased and implemented as part of this project.

History & Existing Conditions

The City of Germantown is located in southwestern Montgomery County, Ohio (see Figures 1 and 2 for orientation). Germantown draws water from the Buried Miami Valley Aquifer from four wells located in Kercher Park on the south side of Germantown. The City's water plant has a capacity of 1.728 million gallons per day (MGD) and is sufficient for the current and future demand. Based on average water demand, the City maintains more than four days water storage for the system. According to the 2013-2017 American Community Survey, the population of Germantown is 5,500 people and the City does not anticipate a dramatic change in population in the near future.

The City water system is served by two pressure zones, an upper pressure zone that serves much of the city, and a lower pressure zone that serves the older part of town that can't handle higher pressures. Water is stored in the system within two tanks. The first water storage tank, built in 1981 and located on Weaver
Road, is a standpipe comprised of an upper tank of 270,000 gallons and a lower tank of 675,000 gallons for a total of 945,000 gallons (see Figure 3). A second water storage tower, built in 2010 and located on Dayton-Germantown Pike, has a capacity of 750,000 gallons and serves the upper pressure zone. When the 750,000-gallon tank was built, the City abandoned the upper portion of the Weaver Road Standpipe. The upper pressure system is now served solely from the Dayton-Germantown Pike tower and associated booster station. Germantown’s Weaver Road water storage tank is in poor condition and is unable to be filled to full capacity. The tank shows intense corrosion and failing paint. The Ohio EPA Public Water Supply System 2016 Sanitary Survey requested a response by the City concerning plans for the existing Weaver Road water tank, and the City responded with the decision to replace the water tower.

![Figure 2. Map of Germantown, Ohio in Montgomery County](image)

**Project Description**

The proposed water storage tank will be a welded steel 500,000-gallon water tank. Site improvements also include a driveway, 2 fire hydrants, 185 linear feet of 12-inch PVC watermain, 20 linear feet of 6-inch anchoring pipe, valves, and fittings. A new fence will be installed around the new
storage tower, located to the west of the existing Weaver Road tower (see Figure 3 for site map). The proposed tank was reduced in size to prevent pressure from being raised too high for areas of downtown and older areas of the city. Construction of the new tank, removal of the existing standpipe, and associated site work will cost approximately $1,889,000.

In addition to the water tower replacement, The City of Germantown will address problems with outdated electrical work and the limited, outdated SCADA system. The system will be installed with the new electrical work with the goal of monitoring the water tower levels and the distribution systems off-site using iPads. The cost to upgrade the electrical work is approximately $400,000, with the SCADA system portion costing approximately $150,000 of this amount.

![Figure 3. Project location – Existing water tower and 0.344-acre site marked for proposed tank](image)

**Implementation**

The total project cost of decommissioning the old water storage tower, constructing a new one, electrical improvements, and SCADA upgrades is approximately $2,300,000. Germantown will borrow this amount from the WSRLA at the 1% hardship interest rate. During the 30-year loan period, Germantown will save approximately $672,000 by using WSRLA financing, compared to the market rate of 2.63%.
The current Germantown residential water bill is approximately $324/year, which is 0.62% of the $52,059 median household income of Germantown and is generally considered affordable.

Anticipating loan award in August 2020, construction will begin shortly after and be completed by December 2021.

**Public Participation**

The project has been discussed at council meetings and the notes were posted on Germantown’s website, which is publicly accessible. Ordinances have been published in the newspaper to allow the public to be aware of the project, and public meetings have been held several times where the public could attend and comment. Germantown also publishes an annual water quality consumer confidence report and makes it available on their public website. A public notice letter outlining the water tower project and the WSRLA financing plan was distributed to water customers in spring 2020, as well.

**Conclusion**

The proposed project meets the project type criteria for a Limited Environmental Review (LER); namely, it is an action within an existing water treatment system, which involves the functional replacement of a water storage tower and improvements/additions to existing electrical and SCADA facilities. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

- **Will have no significant environmental effect and will require no specific impact mitigation, and have no effect on high-value environmental resources** because the construction will take place on land that was previously developed as water utilities property, and on land that is a fallow farm field. The 0.344-acre scrub-field where the proposed water storage tank will be is not high value habitat, and this project has been reviewed by ODNR and USFWS. Both these agencies concur with Ohio EPA decision of no negative impact to terrestrial habitat.

- **Is cost-effective and not a controversial action** – With the amount of wear and damage showing on the old water storage tower, it is more long-term cost-effective solution to replace it than to repair it. By using the standard rate low interest WSRLA financing for this project, Germantown has minimized the economic impact on customers. Germantown has made a good effort to make its residents aware of the project, and Ohio EPA is not aware of any opposition to this project.

- **Does not create a new source of water withdrawals from either surface or ground waters, or significantly increase the amount of water withdrawn from an existing water source** – This project will replace a water storage tower and will not change water withdrawn from sources.

- **Will not provide capacity to serve a population substantially greater than the existing population** - The water storage tower will be replacing an existing water storage tower and is smaller than the previous one.
Contact info

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