August 14, 2019

Limited Environmental Review and Finding of No Significant Impact

Village of Manchester – Adams County
Village of Manchester Sanitary System Improvements Phase III
Loan number: CS390563-0011

The attached Limited Environmental Review (LER) is for a wastewater treatment project in Manchester 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, as described in Ohio Administrative Code (OAC) 3745-150-05.

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, as described in OAC 3745-150-06. 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,

[Signature]
Jonathan Bernstein, Assistant Chief
Division of Environmental and Financial Assistance

Attachment
LIMITED ENVIRONMENTAL REVIEW

Project Identification

Project: Village of Manchester Sanitary System Improvements Phase III

Applicant: Mayor C. L. Wagner
400 Pike Street
Manchester, Ohio 45144

Loan Number: CS390563-0011

Project Summary

The Village of Manchester applied to the Ohio Water Pollution Control Loan Fund (WPCLF) for a $1,962,200 low-interest loan to finance the Village of Manchester Sanitary System Improvements Phase III project (Project). The Village will line 5,000 linear feet (LF) of sanitary sewer to address leaks in the aging infrastructure and make improvements at the wastewater treatment plant. Manchester is eligible for principal forgiveness, a loan that does not have to be repaid.

History & Existing Conditions

The wastewater treatment plant (WWTP) in the northwestern corner of the village, originally constructed in 1969 and upgraded in 1994, was designed to treat 0.3 million gallons per day (MGD) using the contact stabilization process. The separate sanitary sewer collection system, constructed in 1969 and later expanded, has 19 miles of sewer ranging in size up to 15 inches in diameter. The system experiences significant amounts of inflow and infiltration (I/I), causing sanitary sewer overflows and wastewater treatment problems. Inflow is extraneous water that enters sanitary sewers through direct connection, typically cross-connections to storm sewers, downspout drains, or leaky manhole lids; infiltration is extraneous water that enters sanitary sewers through pipe cracks or faulty joints. There is sanitary overflow from the interceptor sewer just upstream of the South Lift Station.

The South Lift Station, located along the Ohio River near the intersection of Second Street and Fair Avenue, receives the entire sewage flow from the village and pumps it to the WWTP. The elevation of the South Lift Station is below the 100-year flood elevation of 519 feet. At a flood elevation of 505 feet and higher, access to the lift station is under water. Flow records show I/I in the system. Ohio River flooding impacts operation of the South Lift Station. At high pool levels, the Ohio River produces a limitless source of I/I, causing the South Lift Station to operate continuously at maximum pumping capacity.

Evaluation of the sewer system using smoke testing, manhole inspections, dyed water testing, and closed-circuit televising show system-wide defects in pipes, manholes, and clean-outs. Based on the evaluations, Manchester prioritized rehabilitation activity to reduce I/I and eliminate sanitary sewer overflows.
**Project Description**

This project is phase III of a larger project to reduce excessive I/I, which will eliminate sanitary sewer overflows and high flows to the WWTP that cause poor treatment. It will structurally rehabilitate a 50-year old collection system, including the installation of a new roof structure, new generator and a new septic receiving station. See Figures 4 and 5.

Lining will be by installation of cured-in-place-pipe (CIPP) in 8-inch diameter sanitary sewers. The CIPP process typically involves the insertion of a fabric tube impregnated with a thermosetting or chemical setting resin into a sewer using water pressure then cured by circulating hot water through the pipe. After the liner is intact, a robot cutter opens the existing lateral connection holes to allow wastewater to enter the sewer. The seamless pipe prevents infiltration and exfiltration, restores structural integrity, and eliminates joints that can weaken and allow root intrusion. CIPP increases flow capacity because the new lining is much smoother than aged clay, brick, or concrete pipe. CIPP rehabilitation is a “trenchless technology” because the work is typically completed through existing manholes with minimal or no excavation required.

Sanitary sewer lines along the following streets will be lined: Cedar View Drive, Cemetery Street, Wilson Avenue, Locke Avenue, Main Street, Starks Avenue, Washington Avenue, and 2nd Street (Figure 2).

**Implementation**

Manchester is requesting a $1,962,200 principal forgiveness loan from the WPCLF. Manchester will save approximately $2,909,509 by using WPCLF financing, compared to the market rate (2.79%) for 30 years.

The village enacted sewer rate increases through 2020 in 2015, including a $5.55 monthly surcharge for debt service. The average annual residential sewer bill when loan repayment begins will be $414, which is approximately 1.4% of local median household income (MHI; $28,882). Sewer bills less than 1.8% of MHI are generally considered affordable. These numbers compare favorably to the Ohio average $655 sewer bill.

Project WPCLF loan award is anticipated in September 2019. Construction will commence June 2020 and be completed April 2021.

**Public Participation**

As part of its State Environmental Review Process, Ohio EPA's Division of Environmental and Financial Assistance (DEFA) will post this Limited Environmental Review (LER) and Finding of No Significant Impact to its web page located at: [http://epa.ohio.gov/defa/ofa.aspx](http://epa.ohio.gov/defa/ofa.aspx) (“WPCLF Documents for Review and Comment”).

The Project is fully supported by the County Commissioners, Village officials and the Ohio Valley Regional Development Commission. The Project was discussed at the February 4, 2014 and March 20, 2017 village council meetings which are held on the 1st and 3rd Mondays of each month and are open to the public.

Based on the limited environmental and economic impacts, this is considered an appropriate level of public participation.
Conclusion

All work will be conducted within the Village-owned right-of-way and easements including the sanitary sewers, sanitary manholes, and catch basins and area drains within the right-of-way, and the wastewater treatment plant. Construction will be in the same footprint as the existing sewer infrastructure.

The Project was reviewed in terms of potential direct, indirect and cumulative short- and long-term environmental impacts. Ohio EPA reviewed the Project under the National Historic Preservation Act and, found that no consultation was required with the agencies that administer these laws due to the limited scope.

No trees will be removed and all work will be in prior disturbed ground.

The Project meets the project type criteria for a LER; namely, it is minor upgrade within an existing wastewater treatment system. Furthermore, the Project meets the other qualifying criteria for a LER; specifically, it:

- **has no significant adverse environmental effect**, because it is not located on or near sensitive resources such as wetlands, state or federally-designated wild, scenic or recreational rivers, riparian areas, prime or unique agricultural lands, aquifer recharge zones, archaeologically or historically significant sites, or where threatened or endangered species or their critical habitat are present. The Project is not located in a coastal zone. It is not designed to serve a significant growth in population; therefore, it will have no adverse secondary environmental impacts, such as the conversion of farmland to more intensive uses, which are caused by the extension of public utilities that induce new building development.

- **does not require extensive specific impact mitigation**, as it will repair or replace existing infrastructure in place in areas lacking important environmental features. Noise, dust, odors and impacts to air quality will be minimal due to limited excavation, and can be easily controlled using typical construction impact mitigation measures.

- **has no adverse effect on high value environmental resources** because none are present in the proposed work areas.

- **is not a controversial action** as it is addressing a water quality problem and there is no cost to the village because the village qualifies for principal forgiveness.

- **does not create a new, or relocate an existing discharge to surface or ground waters**, since it does not involve the installation of a new point source discharge or the relocation of an outfall.

- **will not result in substantial increases in the volume of discharge or loading of pollutants from an existing source or from new facilities to receiving waters**, since it should result in the
reduction or elimination of a sanitary sewer overflow. The treatment capacity of the WWTP will not increase.

- will not provide capacity to serve a population substantially greater than the existing population as it will repair and improve existing infrastructure to meet current needs.

The planning activities for the Project have identified no potentially significant short- or long-term adverse impacts on the quality of the human environment or on sensitive resources such as floodplains, wetlands, surface water, coastal zones, endangered species or their critical habitat, cultural properties, farmland, raw water supplies, scenic or recreational rivers, air quality, farmland, or state and federal wildlife areas. Noise, dust, and odors associated with construction activities will have minimal effects.

**Contact information**

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Figure 2. Location of sewer lining (red border) and wastewater treatment plant (blue border)
Figure 4  Changes at the wastewater treatment plant and install new UV disinfection modules