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Jon Husted, Lt. Governor
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March 31, 2021

Limited Environmental Review and Finding of No Significant Impact

**City of Aurora – Portage County
Central Sludge Digestion and Storage Project
Loan number: CS390126-0014**

The attached Limited Environmental Review (LER) is for a wastewater treatment project in Aurora 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: Central Sludge Digestion and Storage Project

Applicant: City of Aurora
130 South Chillicothe Street
Aurora, Ohio 44202

Loan Number: CS390126-0014

Project Summary

The City of Aurora in Portage County has requested approximately \$9 million in financial assistance from Ohio EPA's Water Pollution Control Loan Fund (WPCLF) to make improvements to its central wastewater treatment plant (WWTP) located along the Aurora Branch of the Chagrin River. This proposed work includes five major solids handling improvements to the more easterly of the city's two WWTPs at an as-bid construction cost of \$8.58 million. The purpose of the proposed project is to replace the existing aerobic sludge digestion system with one that provides all three sludge processes (digestion, storage, and dewatering) at the Aurora Central WWTP, instead of hauling liquid sludge to Aurora's Westerly WWTP for storage and dewatering as currently practiced. All of the proposed construction will occur within the prior-disturbed portion of Aurora's Central WWTP site.

Aurora has indicated that its wastewater rates and associated fees will not need to increase through 2023 to pay for the construction of this proposed wastewater improvements project. The city estimates that the proposed project will require 18.5 months to complete.

History & Existing Conditions

Since it was first built in 1925, Aurora's Central WWTP has been upgraded several times. The latest upgrade was completed in 1997 and included the construction of an oxidation ditch to provide improved secondary treatment at the facility shown in Figure 1. In addition to the oxidation ditch, the city's Central WWTP wet stream processes include influent pumping, mechanical screening, flow equalization, grit removal, final settling, tertiary filtration, ultraviolet disinfection, and post-aeration. Following post-aeration, the WWTP's final effluent is discharged to the Aurora Branch of the Chagrin River, which is designated as a warmwater habitat resource and outstanding state waters/state scenic river. In contrast to the full complement of solids handling processes found at the city's Westerly WWTP, the Central WWTP's only solids treatment process includes aerobic digestion in a structurally unsound galvanized steel tank which is over fifty years old and whose air diffusers are in poor condition. The city does not regularly use the existing sludge cake storage structure at the Central WWTP because it would have to haul dewatered sludge back from its Westerly WWTP to do so. Given this situation, the city relies on hauling liquid sludge from the 1.5 million gallons per day (mgd) average daily flow rated Central WWTP to the 1.4 mgd rated Westerly WWTP for dewatering and final processing. Sludge from the city's two WWTPs is land applied Spring through Fall in accordance with the city's sludge management plan. The city's proposed improvements are consistent with the findings and recommendations of a May 2018 report on the conditions of

Aurora’s two WWTPs. This report is available on the city’s web site at <http://www.auroraoh.com/587/Wastewater-Treatment-Plants>.



Figure 1. Aurora Central WWTP existing components

Project Description

The Aurora Central WWTP’s sludge digestion, storage, and dewatering project consists of constructing five major new components at the WWTP site shown in Figures 2-3 below. They include a new 1.2 million-gallon sludge digestion and storage tank with three cells and new blowers, a sludge

dewatering system and building, sludge transfer pumps, a sludge pump and electrical building, and new electrical service and standby diesel generator. The new 750-kilowatt generator will replace the existing smaller emergency power generators and be able to power the entire WWTP during power failures. In addition, the project includes a new loop driveway, new yard hydrant system, and potable water connections to each of the new sludge processing facilities.

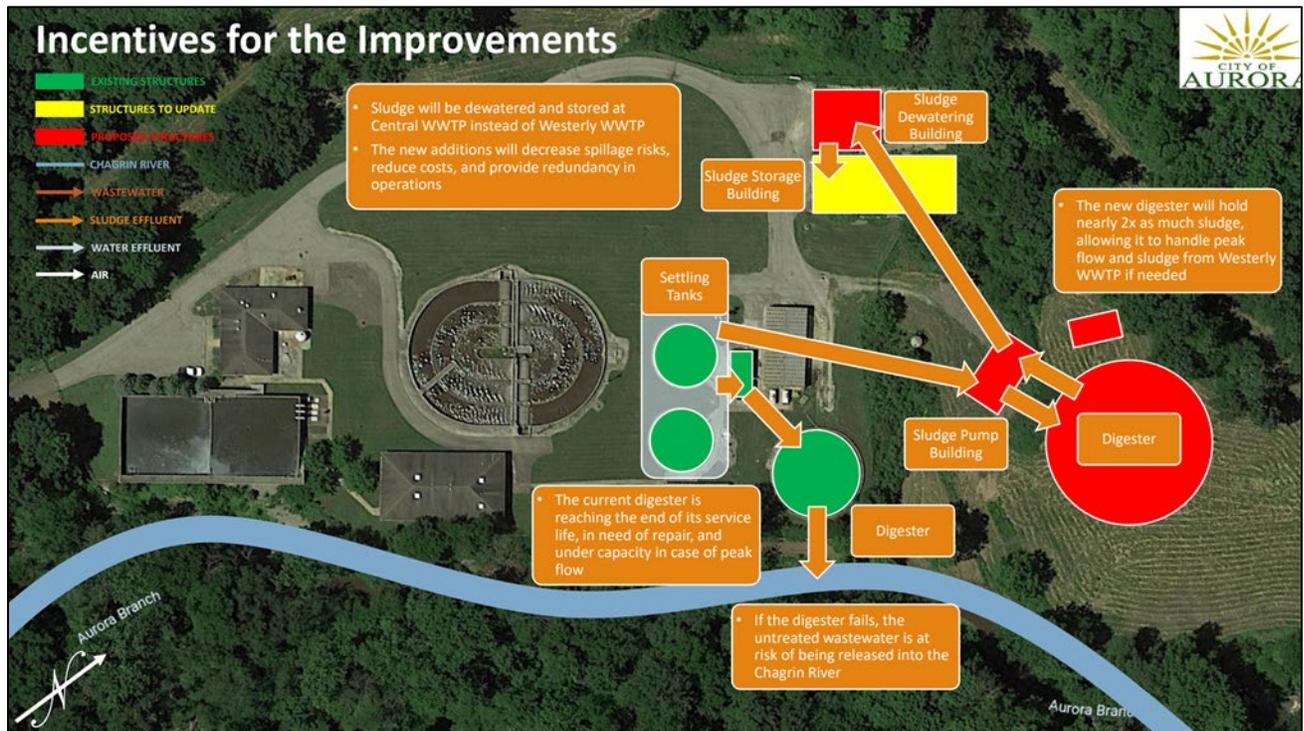


Figure 2. Proposed Aurora Central WWTP improvements layout

Of these five proposed components, the sludge digestion and storage tank is the biggest and will be about 20 feet deep and 120 feet in diameter. Operationally, two of the tank's three cells will be used for sludge storage and the other one will be used for sludge digestion. With this new tank and the existing sludge storage facilities at its Central WWTP, the city will have more than the 120 days of sludge storage required for a WWTP designed to handle 1.5 mgd of wastewater on an average daily basis. Other related improvements include a flow diversion chamber, activated sludge lines, other yard piping, a sludge recirculation pump, a new sludge dewatering belt filter press, replacement of existing waste activated sludge pumps and appurtenances in the existing pumps and blower building, and demolition of the existing aerobic digester building. All the new components will be built above the 100-year floodplain elevation. By completing these proposed sludge treatment improvements, the city will also have a backup sludge dewatering system available when the 30-year old Westerly WWTP's sludge dewatering equipment needs to be taken off-line for maintenance or repair.

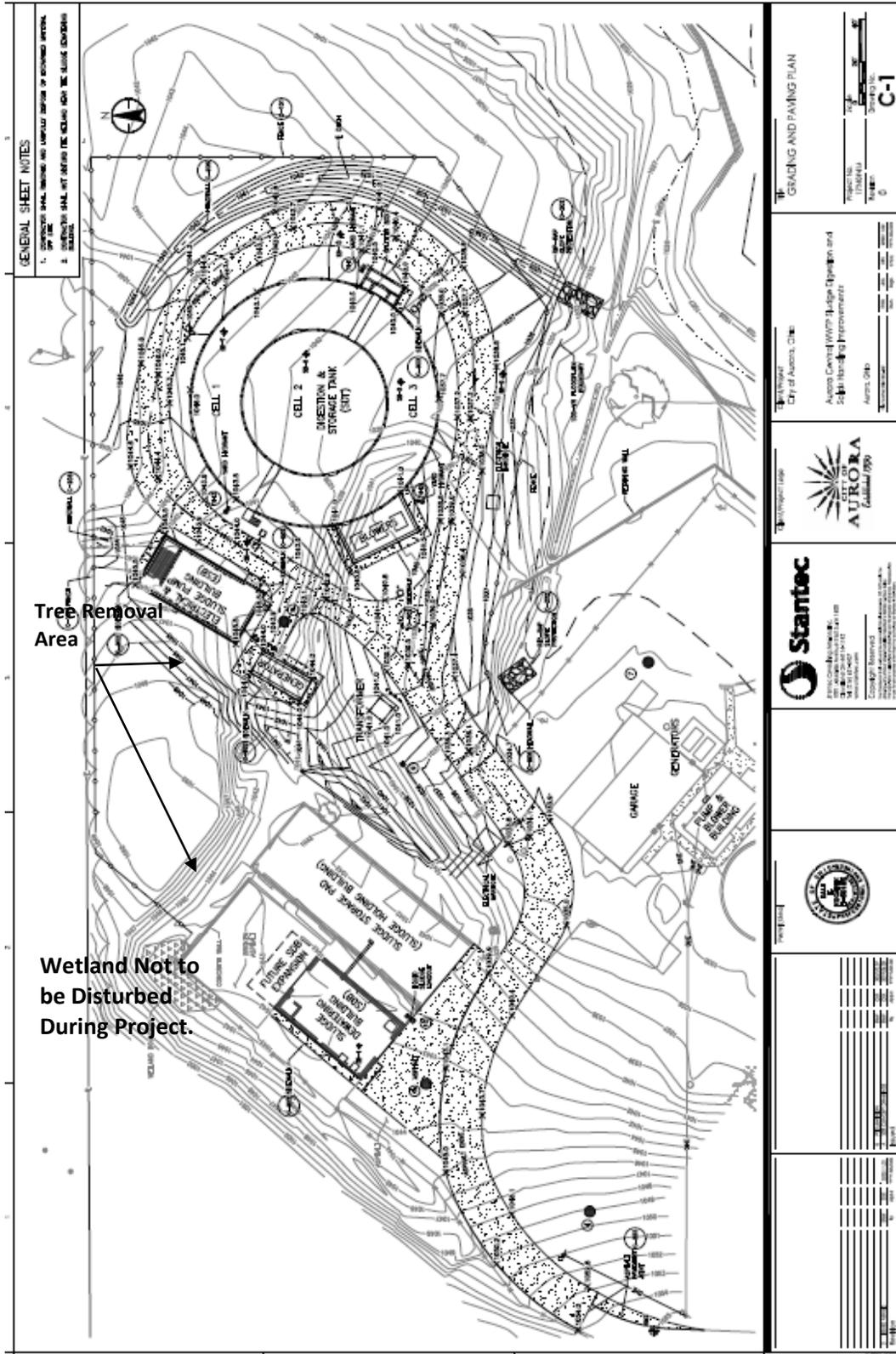


Figure 3. Proposed project improvements and grading/paving plan

Implementation

The current estimated total cost of the city's proposed project is \$9 million, of which approximately \$8.6 million is for construction and 0.47 million is for construction services.

The City of Aurora intends to finance this project through a 30-year low-interest loan from Ohio EPA's WPCLF. Currently, the WPCLF standard interest rate with a 30-year term is 0.74%. This fixed interest rate is adjusted monthly to reflect changing market conditions. The city will save about \$2 million when compared to a market-rate loan of 2.04%.

Currently, a residential customer in Aurora using on average 2000 cubic feet of water per quarter pays \$99 for wastewater, or about \$396 per year. Based on the estimated annual debt service and operation and maintenance costs associated with operating its two WWTPs, Aurora has estimated that it does not need to increase its wastewater rates for this project during the next year and a half during which it will be built. Accordingly, an average residential wastewater customer in Aurora can expect their annual fee to be about the same in 2023 as it is now when this project is done. When expressed as a percentage of the city's latest median household income (MHI) figure of \$94,141, these annual fees are about 0.42% of the city's 2014-2018 MHI and are considered generally affordable for an average residential wastewater customer.¹

By utilizing WPCLF funding the City of Aurora should be able to generate enough revenue under its current and proposed wastewater rate structure to continue to own, operate, and maintain its wastewater collection and treatment systems well into the future.

Under the city's proposed project schedule, WPCLF funds are expected to be awarded in April 2021, so that construction can commence soon thereafter. The city estimates that construction on this project can be completed in 18.5 months.

Public Participation

According to the city, this proposed project was first discussed at a city council meeting on August 19, 2019. Subsequently, a project fact sheet was posted on the city's web site and at city buildings during July and August 2020. According to the city, there were no comments or questions raised by the public during the interval when the project fact sheet was posted for public review. On this basis, and the limited scope of the project covered by this document, Ohio EPA has determined that no additional public review and comment on the proposed project is necessary. All potentially interested parties appear to have been given adequate opportunity to review and comment on this project and its costs.

Ohio EPA will make a copy of this document available to the public on its web page (<https://epa.ohio.gov/defa/ofa#169638769-wpclf-documents-for-review-and-comment>) and will provide it upon request. A copy may also be posted at city hall, other city buildings, and on its web site (if available).

¹ According to the city's web site, the minimum bill for water and sewer is based on usage consumption of up to 700 cubic feet (\$48.66) and there is no typical (average) water or sewer bill. The figures above are Ohio EPA estimates of usage and resulting fees.

Conclusion

The proposed project meets the project type criteria for a Limited Environmental Review (LER); namely, it is an action in a sewerred community that is for minor upgrading and/or minor expansion of existing treatment works, such as minor rehabilitation of existing facilities, functional replacement of existing mechanical equipment or structures, and construction of new ancillary facilities adjacent or appurtenant to existing facilities.

As all the proposed improvements will be limited to previously disturbed locations, the proposed 18.5-month long construction period for this project in Aurora is expected to result in no short- or long-term adverse environmental impacts. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

Will have no effect on high-value environmental resources. Given the proposed project's generally limited scope within prior-disturbed areas at the city's WWTP site shown in Figures 1-2, the city's proposed solids treatment improvements will have no effect on high-value environmental resources. For example, while comments from the Ohio Department of Natural Resources in 2019 indicated that the presence of the Indiana bat has been established in the general area and that additional summer surveys to validate the bat's presence or absence would not be useful, seasonal cutting between October 1 and March 31 of the trees growing in the area needed for the proposed improvements should not result in any adverse impacts to federally listed bat species. Similar conclusions were reached by ODNR for other federal and state listed species found in this part of Portage County because no in-stream work is proposed as part of this project. In addition, while the city's project is located along a state scenic river, it is also exempt from review by ODNR because it is located inside Aurora's corporation limits.

Further support for this conclusion stems from the fact that the city has its own local regulations covering the protection of riparian areas and wetlands. More specifically, the city requires that there be a minimum 75 feet riparian setback from the Aurora Branch of the Chagrin River and any other watercourse with a drainage area more than 0.50 square miles. The city also has a minimum standard of 25 feet riparian setback for all other watercourses regardless of drainage area size. This standard is extended to the outer edge of the 100-year floodplain where said floodplain is wider than the riparian setback. In the case of a Category 3 wetland, a 120-foot setback from the outer boundary of this type of wetland applies. For a Category 2 wetland, the required setback is a minimum of 75 feet from the outer boundary.

Will have no significant negative environmental effects and will require no specific impact mitigation unique to the assistance proposal because construction activities are limited to prior disturbed locations within Aurora's Central WWTP site and there will be no increase in the average daily flow rating of this facility. Rather, the proposed increase in sludge digestion, storage, and dewatering capacity is expected to improve the overall operational reliability of both the Central and Westerly WWTP's solids handling processes. Based on Ohio EPA's review, the proposed work to complete this project is straight-forward and the detail plans and specifications for the proposed project appear to include the minimum impact mitigation needed to address any concerns that could arise during construction. Similarly, by eliminating the need to haul liquid sludge between the city's two WWTPs, the risks for spills from tanker trucks along State Route 82 will be reduced.

Is cost-effective and not a controversial action. In comparison to the no-action and other available options considered during project planning, the chosen improvements were selected by Aurora as more cost-effective on the basis of costs and non-monetary factors. Moreover, the proposed

improvements constituting this project are non-controversial because they will not adversely impact the environment, or the residential rates already being paid for wastewater.

Will not create a new, or relocate an existing, discharge to surface or ground waters, or cause pollution of surface or ground waters. The proposed project will not result in either new, relocated, or additional discharges of wastewater to either surface or ground water on a permanent basis. Rather, the purpose of this project is to replace the existing aerobic sludge digestion system and liquid sludge hauling approach with one that provides more reliable sludge digestion, storage, and dewatering at the Aurora Central WWTP over the next twenty years. Significantly, no changes in the city's existing National Pollutant Discharge Elimination System (NPDES) permit covering its WWTP, to its WWTP's effluent outfall location, or a discharge of additional pollutants to local surface water resources are expected in response to this project in Aurora.

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. As noted above, the proposed improvements to Aurora's Central WWTP are not designed to facilitate future growth in or around the city, but rather to address the city's sludge processing responsibilities under the Clean Water Act. On this basis, the proposed project will not result in any net increase in the volume of discharge or the loading of pollutants from the city's collection system and WWTP or permitted to be discharged under the city's NPDES permit.

Will not provide capacity to serve a population substantially greater than the existing population. Based on information provided by the city during planning, Aurora is expected to experience an increase in population over the next twenty years. However, the purpose of this specific project is oriented toward sludge management, and not to increasing the 1.5 mgd average daily flow capacity of the Aurora Central WWTP. As such, the purpose of this project is to replace the existing WWTP components which have come to the end of their useful life and to address sludge handling needs at the city's two WWTPs, not future growth. On this basis, this criteria has been met.

To conclude, the planning activities for the proposed project identified no potentially significant, direct, indirect, or cumulative adverse impacts. The proposed project is expected to have no short- or long-term adverse impacts on the quality of the human environment or on sensitive resources such as air quality, floodplains, wetlands, prime or unique agricultural lands, aquifer recharge areas, archaeologically or historically significant sites, or threatened or endangered species. The City of Aurora's proposed sludge digestion and storage improvements project will enable the city to continue to address its regulatory responsibilities under the Clean Water Act.

Contact information

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