Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
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May 4, 2023

Limited Environmental Review and Finding of No Significant Impact

City of Columbus – Franklin County
Compost Facility Odor Control Improvements
Loan number: CS390274-0134

The attached Limited Environmental Review (LER) is for a compost facility odor reduction 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,

Kathleen Courtright

Kathleen Courtright, Assistant Chief
Division of Environmental and Financial Assistance

Attachment

LIMITED ENVIRONMENTAL REVIEW

Project Identification

Project: Compost Facility Odor Control Improvements

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

Loan Number: CS390274-0134

Project Summary

The City of Columbus in Franklin County has requested $12,000,000 from the Water Pollution Control Loan Fund (WPCLF) to perform odor reduction improvements at the Southwesterly Compost Facility consisting of additional composting pads, biofiltration system, and an updated control system for monitoring and odor control. Construction will take place within the confines of the existing facility and is not expected to cause adverse environmental impacts.

History & Existing Conditions

The Columbus Southwesterly Composting Facility (compost facility) is a biosolids beneficial reuse outlet currently permitted to process 200 wet tons per day of biosolids. The compost facility receives biosolids from Columbus' two wastewater treatment plants (Jackson Pike and Southerly) for processing. Material is processed in accordance with regulations using the negative aerated static pile technique to produce a Class A compost called Com-Til. Com-Til is used for agriculture, landscaping, and topsoil blending.

Odor control has always been critical for public acceptance and success of this facility but it has become even more critical in recent years as residential and commercial developments approach along State Route 104 and State Route 665. The existing odor control system at the facility was installed in 2001 and is in poor condition, restricting the facility's actual capacity.

Leachate from biosolids collects in the composting and odor control aeration system, causing inefficient foul air removal. It also collects on the two existing composting pads, causing anaerobic conditions that increase odor generation. Composting and odor control components such as the aeration system blowers and piping, electrical, instrumentation, and control systems are at the end of their useful lives. Long-term sun and UV exposure has deteriorated the odor control ductwork, exposing its fiberglass strands. Therefore, it is essential to upgrade the compost facility's odor control system to ensure its success and reduce nuisance odors.

Stormwater that falls onto the site comes into contact with sludge or composting materials and is conveyed through a system of catch basins and reinforced concrete storm sewers into a leachate lagoon on the east side of the facility. Additionally, an inner swale, located directly adjacent to the site, captures runoff draining away from the site and conveys this contaminated stormwater to the leachate lagoon. This lagoon has overflowed several times in the past.

In addition, Columbus has recently ceased operation of the incinerators at both Jackson Pike and Southerly Wastewater Treatment plants and subsequently increased its utilization of privately operated biosolids beneficial reuse outlets. As inclement weather and bad ground conditions can restrict private beneficial reuse outlets from accepting biosolids, it has become essential to increase the capacity of the compost facility to compensate for these possible interruptions.

Project Description

This project will replace the existing equipment with new as well as upgrade the technology and techniques used for composting. These improvements will result in better control of odors emitted to the surrounding area.

The project consists of:

- *Three compost pads including blowers and aeration legs* - Larger blowers and more efficient aeration headers will be constructed to capture more emissions from the compost pads and convey foul air to biofilters for treatment.
- *Twelve biofilters including blowers, headers, and new foul air distribution piping* – New manifolds will collect foul air from all compost pads and allow it to be distributed evenly to the biofilters for treatment. This common manifold system will replace the existing dedicated biofilters resulting in more even loading of foul air and therefore improved control of odors.
- *New instrumentation, monitoring, and control system* – Additional instrumentation will allow for more frequent monitoring and improved control of the process. These improvements will also allow adjustments in air flow when necessary, resulting in maximum efficiency of the systems while minimizing energy consumed and odors emitted from the process.
- *Improved leachate management* – Expansion of the existing lagoon, new collection piping, and new hard-piped drains will improve capture of leachate.
- *Site layout* – The new composting pads and biofilters will be moved farther away from residents that are downwind of the prevailing winds.
- *New electrical distribution equipment* – This equipment will include redundant feeds to prevent down time due to maintenance and inspection.

Construction will be sequenced to maintain two composting pads in service to maximize treatment capacity during the project. The construction footprint for this project will remain within the confines of the existing compost facility, 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.

Operation and maintenance costs for existing equipment will decrease at the completion of this project from the reduction in required labor and maintenance.

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

Implementation

Project Costs

Columbus plans to borrow $12,000,000 from the WPCLF. During the 20-year loan period, Columbus will save approximately $1,563,930 by using WPCLF dollars at the standard rate of 2.81%, compared to the market rate of 3.86%. WPCLF interest rates are set monthly and may change for a later loan award.

Local Economy
The current Columbus residential sewer bill is approximately $647 per year. Projected residential sewer bills with the implementation of this and other associated wastewater projects are expected to increase to approximately $820 per year, or 1.5% of the median household income (MHI) of Columbus, which is $54,902.

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

Project Schedule
The anticipated loan award will occur in May 2023. Construction will start following loan award and is expected to last two 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.

Ohio EPA will make a copy of this document available to the public on its web page: https://epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/announcements 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 criteria for an LER; namely, it is 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 Southwesterly Compost Facility, 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.
There is no feasible alternative to this important odor-control project. Ohio EPA 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 compost facility. 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 Ohio EPA's review of the planning information and the materials presented in this Limited Environmental Review, we have concluded that there will be no significant adverse impacts from the proposed project as it relates to the environmental features discussed previously. This is because these features do not exist in the project area.

This project will reduce odors that cause a public nuisance, replace equipment that has reached the end of its useful life, and increase flexibility within the city's biosolids beneficial use program.

Contact Information

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Exhibit 1: Project location

Exhibit 2: Project location