



Regional Planning Commission

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MEMORANDUM

Date: February 28, 2022

From: MVRPC Staff

To: MVRPC Facility Planning Subcommittee
MVRPC Technical Advisory Committee
MVRPC Board of Directors

Subject: Administrative review of Tri-Cities Wastewater Authority FPA boundary
Modification request of February 22, 2022

On February 22, 2022 the Tri-Cities Wastewater Authority (Tri-Cities) transmitted to the Miami Valley Regional Planning Commission a formal request to modify the boundaries of the Tri-Cities and Dayton facility planning areas within the Areawide Water Quality Management Plan. This memo serves as a completeness check and administrative review of this submission, and makes a recommendation regarding action on the request.

MVRPC Guidelines for Facility Plan Updates, adopted in 2005, include nine required data and documentation requirements to allow for staff and public review of the FPA change request. These nine elements (A through I) are reviewed in brief below.

A. Mapping of proposed boundaries

Tri-cities did provide a GIS shape file of the proposed FPA boundary modifications including both the area switching from Dayton to Tri-Cities and the area switching from Tri-Cities to Dayton. The attached Map 1 presents this relatively minor modification in the vicinity of Dayton International Airport. The total area involved in this proposed amendment is just over 466 acres, with 465 acres transferring to Tri-Cities and just over 1 acre transferring to Dayton.

Tri-Cities included a response in the submission to indicate that the complete area being added to the Tri-Cities FPA is expected to be served by sanitary sewers, connected to the existing Tri-Cities wastewater treatment facility. The area proposed to be added to the Dayton FPA is served by sanitary sewers.

B. Population projections.

Tri-Cities referenced the FPA population projections listed in Appendix R of the Areawide Water Quality Management Plan. The area in question has been zoned by the City of Vandalia as "Industrial Innovation." No new residential development is planned for this area. Existing homes in the area are likely to sell in the future and the properties converted to commercial/light industrial use. The existing homes are not served by sanitary sewer. Statements from Vandalia

city officials indicate that these homes could, but are not expected to, connect to sanitary sewer in the future. Staff concludes that the additional FPA area will not result in additional residential population within the Tri-Cities FPA.

C. Existing and Proposed Wastewater Management Prescriptions

The City of Vandalia states that all new development within the FPA addition will be served by sanitary sewer, connected to a new lift station with a designed flow capacity of approximately 146,000 gallons per day. This lift station will be connected to Vandalia gravity sewers that flow to the current TCA wastewater treatment facility. The existing homes are not served by sanitary sewer. Statements from Vandalia city officials indicate that these homes could, but are not expected to, connect to sanitary sewer in the future.

D. Existing and Proposed Wastewater Treatment Capacity

Tri-Cities provided data regarding current flows to the existing wastewater treatment facility, showing that the average annual flows were above 95 percent of rated capacity of the current facility design. Tri-Cities further described the timeline of planned facility upgrades including a 10 million gallon equalization basin to be added by 2023 and capacity improvements by 2029 designed to increase capacity to 16.1 million gallons per day. Based upon the projected pace of development in the new FPA area, and using the 146,000 GPD capacity of the lift station as an upper bound, Tri-Cities asserts the treatment facility will be able to handle all projected flows from the new FPA area.

E. Current facility permit limits

Tri-Cities did provide copies of all limits imposed by the Ohio EPA NPDES permit.

F. Narrative discussion of how wastewater treatment prescriptions meet the needs of projected population in the additional FPA area

As described above, Tri-Cities and Vandalia assert that the expected pace of development in the new FPA area and the planned treatment facility upgrades will allow for adequate capacity for wastewater treatment of all flows from the new area. Vandalia expects development of this area to occur over the next decade. Tri-Cities has planned facility upgrades for 2023 and 2029. Using the lift station' design capacity of 146,000 GPD as an upper bound, Tri-Cities is confident of the ability to serve all flows coming from future development in this FPA area.

G. Narrative discussion of how wastewater prescriptions will be protective of water resources

All wastewater flows from new development in the FPA area will be connected to sanitary sewers and treated at the Tri-Cities wastewater treatment facility. There will be no new on-site treatment in the FPA area. There will be no new package plant or WWTF discharging sites located within the new FPA area.

H. Narrative discussion of how the proposed FPA boundary change agrees or conflicts with land use plans or zoning for the location.

The area proposed to be added to the Tri-Cities FPA is entirely within the City of Vandalia. The city provided the current Zoning map indicating this area as “Industrial Innovation” which is consistent with the descriptions of future development in this area provided for this proposed update. Attached is Map 2, the zoning map provided by the City of Vandalia.

Additionally, Tri-Cities, the City of Vandalia and the City of Dayton have executed an agreement regarding the swap of FPA areas subject to this proposed change. A copy of the completed agreement was provided by the City of Vandalia. Vandalia City Council approved the agreement on December 20, 2019. Minutes of the meeting were also provided.

I. Documentation of public involvement related to the proposed boundary change.

Tri-Cities Wastewater Authority has not conducted any form of comment period on this request. The City of Vandalia did review, consider, and approve the agreement with the City of Dayton in an open public session on December 20, 2019, and minutes of the meeting were provided.

MVRPC will conduct an additional public participation process regarding this proposed change in the spring of 2022.

CONCLUSIONS

MVRPC staff determines that the boundary change submission is complete and may proceed to further consideration by the Facility Planning Subcommittee, the Technical Advisory Committee, and the Board of Directors.

A public comment period is currently scheduled to run from March 21, 2022 to April 19, 2022. The amendment is tentatively scheduled for inclusion on the TAC and Board agendas for the April/May meeting cycle.

The proposed change represents a minor update to the FPA boundaries for the Dayton and Tri-Cities FPAs. All affected parties to the proposal are in agreement with the update. Pending any new information raised by the MVRPC committees or by members of the general public during the comment period, at this time MVRPC staff recommends this proposal be adopted and incorporated into the Areawide Water Quality Management Plan.