



Environmental
Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

October 24, 2011

Notice of Issuance of a Limited Environmental Review and Finding of No Significant Impact to All Interested Citizens, Organizations, and Government Agencies

**Akron Water Pollution Control Station Step Feed Improvements
WPCLF# CS390095-0047**

The purpose of this notice is to advise the public that Ohio EPA has reviewed the referenced project and finds neither an Environmental Assessment (EA) nor a Supplemental Study (SS) is required to implement the project as discussed in the attached Limited Environmental Review (LER). Therefore, a Finding of No Significant Impact is being issued for this project.

The Water Pollution Control Loan Fund program requires the inclusion of environmental factors in the decision-making process for project approval. Ohio EPA has done this by incorporating a detailed analysis of the environmental effects of the proposed action in its review and approval process. Environmental information was developed as part of the facilities plan, as well as through the facilities plan review process. A subsequent review by this Agency has found that the proposed action does not require the preparation of either an EA or an SS.

Our environmental review concluded that because the proposed project is limited in scope and meets all applicable criteria, a Limited Environmental Review is warranted. Specifically, the proposed modification to the WPCS is a minor upgrading and modification of existing facilities.

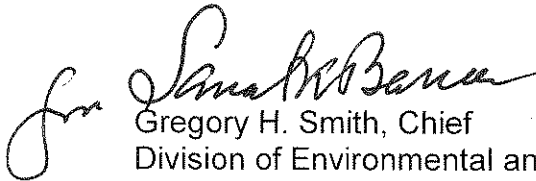
The proposed project:

- has no significant environmental effect;
- does not require extensive specific impact mitigation;
- has no effect on high value environmental resources;
- is cost effective;
- is not a controversial action;
- 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.

The LER presents additional information on the proposed project, costs, and basis for our decision. Further information can be obtained by calling or writing the contact person named at the end of the LER.

Upon issuance of this determination, loan award may proceed without being subject to further environmental review or public comment, unless information is provided which determines that environmental conditions on the proposed project have changed significantly.

Sincerely,

Handwritten signature of Gregory H. Smith in cursive script.

Gregory H. Smith, Chief
Division of Environmental and Financial Assistance

GHS/DH

c: NEDO - DSW

Sue Farmer, OWDA

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LIMITED ENVIRONMENTAL REVIEW

A. Project Identification

Project Name: Akron Water Pollution Control Station Step Feed Improvements

WPCLF# CS390095-0047

Address: Patrick Gsellman, P.E.
Akron Engineering Bureau
166 South High Street
Akron, OH 44308

B. History and Existing Conditions

Due to historical and ongoing combined sewer overflows and partial treatment bypasses from the Water Pollution Control Station (WPCS) to the Cuyahoga River, Akron is now subject to a federal Consent Decree that requires, among other improvements, increasing the ability of the WPCS to treat peak wet weather flows.

The WPCS has a preliminary treatment capacity of 210 million gallons per day (mgd), primary treatment capacity of 150 mgd, and secondary treatment capacity of 90 mgd. Peak wet weather secondary treatment capacity is 110 mgd. Because Akron has combined sewers (pipes that in dry weather carry sanitary sewage only, and during wet weather carry sanitary flows combined with storm drainage) in much of the city, flows to the WPCS rise dramatically during and after rain. The Consent Decree requires increasing the secondary treatment process capacity from 110 mgd to a minimum of 130 mgd. Akron submitted a work plan in February 2010 to meet that requirement through the proposed Step Feed Phase 1 project.

The secondary treatment process operates in “plug flow” (the primary treatment flow enters the individual secondary treatment aeration tanks (“trains”) at the upstream end and flows through four channels before exiting to the final settling tanks (FSTs, or clarifiers). Each of the six secondary treatment “trains” receives approximately 18.3 mgd of primary effluent during a high flow event for a total capacity of 110 mgd.

Detailed analysis of the treatment process determined the modifications required to achieve the 130 mgd secondary treatment goal and concluded that conversion to “step feed” could provide the required capacity and treatment of wet-weather flows. Step feed directs primary treatment flows into the secondary treatment aeration tanks at multiple points along the tanks (rather than only at the upstream end, as in plug flow).

C. Project Description

Based on the conclusion that step feed operation can achieve the required wet weather treatment capacity, Akron proposes upgrades to the WPCS (Figure 1):

Phase 1 will increase the peak wet weather secondary treatment process capacity from 110 mgd to a minimum of 130 mgd by converting Secondary Unit 6 to operate in either plug flow (during normal flows) or step feed (in wet weather) at 30 mgd and upgrading the current plug flow operation of Units 1-5 at 20 mgd.

Akron will test and evaluate the modified treatment system through one year of simulated wet weather flows and one year of actual wet weather flows

Phase 2 will incorporate the results of the testing and evaluation to modify the full secondary treatment facility for potential wet weather treatment of up to 200 mgd.

Proposed improvements in Phase 1 are:

- modifications to Unit 6 aeration tank piping and internal structures;
- modifications to Unit 6 clarifiers to increase flow rate and hydraulic capacity;
- modifications to the aeration air system including new blowers, piping, and number of diffusers in each aeration basin;
- modifications to sludge pumping to allow Unit 6 to operate independently of Units 1-5;
- remove fibreglass domes from all clarifiers;
- modifications to mechanical equipment in the tanks;
- upgrades to miscellaneous electrical and instrumentation and controls; and
- replacement of roof on North Blower Building.

All work will be in or on existing tanks and contemporary buildings or beneath existing pavement, areas lacking important environmental features.

Phase 2 improvements are assumed to be similar to Phase 1 tank and piping modifications.

D. Estimated Project Costs

Akron will borrow approximately \$24,804,000 for design and construction costs from the WPCLF at the standard interest rate (now 2.85%). During the 20-year loan period, Akron will save approximately \$5,656,000 by using WPCLF dollars at this rate, compared to the market rate of 3.99%.

In exchange for sponsoring the purchase of the Nimisila Creek Wetlands Preserve in this loan through the Ohio Water Resource Restoration Sponsor Program (WRRSP), Akron will receive an interest rate reduction of 0.1%. Additionally, interest that otherwise would be charged to the wastewater loan will be advanced to Akron to pay for the WRRSP project on behalf of the City of New Franklin.

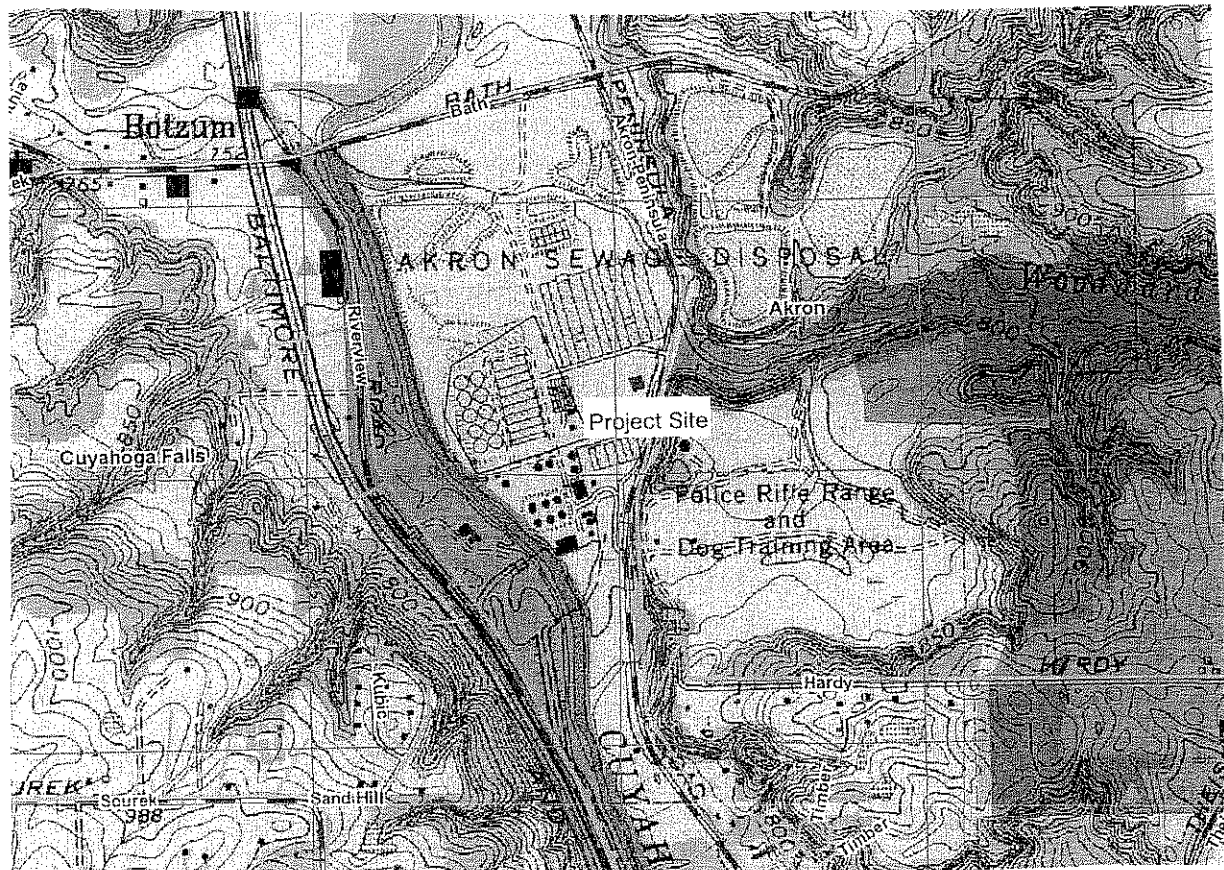


Figure 1 – Project Location

E. Project Schedule

Assuming loan award in October 2011, construction will begin promptly and be completed by late 2013.

F. Public Notification

Akron posted a project fact sheet and request for public comment on its municipal webpage in mid-2011. A local newspaper carried the fact sheet as an article. No comments were submitted. Ohio EPA is unaware of opposition to or controversy about the project.

The Ohio EPA is sending this Limited Environmental Review (LER) decision and Finding of No Significant Impact to interested parties. Information supporting the LER is available from the project contact named below.

G. Planning Information

The proposed project was reviewed by the Ohio Historic Preservation Office and the Ohio EPA. No review agency opposes the project.

H. Conclusion

The proposed modification to the WPCS is a minor upgrading and modification of existing facilities that qualifies for a LER and meets the following additional criteria for a LER:

It has no significant environmental effect; has no effect on high value environmental resources; and does not require extensive specific impact mitigation – All of the work will be in or on existing tanks or buildings or areas of the WPCS previously disturbed by construction. The project involves no vegetation removal or significant excavation and therefore requires no specific mitigation.

It is cost effective and is not controversial – This project requires no rate increase. Akron has instituted a multi-year rate increase to pay for the 20 years of projects required by the federal Consent Decree. The typical residential annual sewer bill now is \$353, which is approximately 1.1% of median household income (MHI; \$31,835 from the 2000 Census). In 2014, the typical bill will be \$406, approximately 1.3% of MHI. A sewer bill less than 1.8% of MHI is considered affordable. These numbers compare favorably to the Ohio average residential sewer bill of \$514, which is 1.1% of state MHI (\$46,618).

Ohio EPA is unaware of opposition to or controversy about this project.

It does not create a new, or relocate an existing, discharge to surface or ground waters; it 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 it will not provide capacity to serve a population substantially greater than the existing population – This project will help minimize the discharge of pollutants while maintaining the WPCS capacity and operations.

The planning activities for the project have identified no potentially significant adverse impacts. The project is expected to have no significant short-term or long-term adverse impacts on the quality of the human environment or on sensitive resources (floodplains, wetlands, prime or unique agricultural lands, aquifer recharge zones, archaeologically or historically significant sites, or threatened or endangered species).

I. For further information, please contact:

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