

DEPT. OF ENVIRONMENTAL QUALITY



## CLEAN WATER STATE REVOLVING LOAN FUND PROGRAM

## CATEGORICAL EXCLUSION

TO: All Interested Citizens, Government Agencies and Public Groups

In accordance with the Nebraska Clean Water State Revolving Fund environmental review process, which is based on the National Environmental Policy Act, an environmental review has been performed on the proposed agency action below:

This information reviews the environmental impact likely from a project. This project is planned to be federally funded wholly or in part through your tax dollars; therefore, you are entitled to take part in its review. If you have concerns about the environmental impact of this project, please provide them at this time. The Nebraska Department of Environmental Quality encourages public input in this decision-making process.

PROJECT NAME: Superior Wastewater Treatment Plant Priority One Improvements

APPLICANT: Superior, Nebraska

COUNTY: Nuckolls

POPULATION: 1957 (2010 census) CWSRF PROJECT NUMBER: C318000

NDEQ ID No.: 57843

AWIN SUSTAINABILITY SCORE: 24 TOTAL PROJECT AMOUNT: \$241,000

ESTIMATED CWSRF LOAN AMOUNT: \$141,000

CWSRF LOAN FORGIVENESS: \$100,000

The City of Superior, Nebraska, is planning repairs and improvements to their trickling filter wastewater treatment plant. These are needed to improve secondary treatment efficiency and the ammonia removal capability of the treatment plant. The plant effluent discharges are regulated by the treatment plant's National Pollutant Discharge Elimination System (NPDES) permit NE0023809. The plant has had difficulty meeting the ammonia nitrogen discharge limitation of 2.36 mg/l for the summer season of June 1 to October 31. The City has applied for financial assistance through the Clean Water State Revolving Fund (CWSRF) loan program to construct this project.

The plant was analyzed for priority one improvements, which could be done in this NPDES discharge permit cycle of 5 years. The Treatment Plant has a design flow of 179,000 gallons per day and receives primarily domestic flow. Priority two improvements were also analyzed for the next NPDES discharge permit cycle starting in January 2021. Priority two improvements would be anticipating total nitrogen and total phosphorus limitations which could be added to the future NPDES permit. These limitations would require extensive treatment plant modifications if added to the future NPDES permit. Priority one improvements are minor in respect and needed for the plant to meet the current NPDES permit. These improvements are summarized as follows:

- 1. Recirculation Pump Flow Metering,
- 2. Rehab Primary Splitter Box,



- 3. Rehab West Primary Clarifier,
- 4. New Mixing for Trickling Filter Influent Wetwell,
- 5. Evaluate High Ammonia in Influent,
- 6. Control Supernatant and Gravity Thickner Flows,
- 7. Additional Trickling Filter Ventilation,
- 8. Trickling Filter Snail Elimination,
- 9. Rehab Final Clarifier Splitter Box,
- 10. Add Motor Actuated Plug Valves on Final Clarifiers,
- 11. Level Final Clarifier Weirs,
- 12. Replace UV Influent Manhole,
- 13. Replace Digester Building Roof,
- 14. Repair Secondary Digester Riser.

The City of Superior has applied for financial assistance through the Clean Water State Revolving Fund (CWSRF) loan program to construct priority one improvements for Superior's Treatment Plant. This project is listed in the CWSRF SFY 2018 Intended Use Plan and ranked at 104 points. Superior is eligible for 50 percent loan forgiveness due to a low Median Household Income of \$34,846 and an AWIN high risk sustainability score of 24. Loan Forgiveness is capped at \$100,000 and is dependent on the availability of funds. The loan forgiveness will be matched by a 20-year CWSRF loan at the current program interest rate of 1.5 percent. In addition to principal and interest payments, an administrative fee of 1.0 percent on the outstanding principal balance would be assessed each year.

Sewer use fees would be pledged to repay the CWSRF loan. Proposed and enacted 2018 residential sewer use rates are a metered rate of \$24.25 base per month plus \$2.32 per 1000 gallons winter water use or approximately \$38.60 per month for 6,000 gallons winter water use. The City of Superior has approximately 859 sewer connections. The sewer rates if needed would only need to be increased \$1.00 per month per user for repayment of the CWSRF loan. The annual CWSRF loan repayment for priority one improvements is approximately \$9,581 and has a 10% coverage requirement.

The proposed project was reviewed for eligibility for a categorical exclusion from National Environmental Policy Act review specified in 40 CFR (Code of Federal Regulations) Part 6.204. The project meets all criteria described in the above reference and the Department has determined that this project is eligible for a categorical exclusion. Consequently, a preliminary decision has been made that a Finding of No Significant Impact will not be prepared. The project, as proposed, is repair and rehabilitation of Superior's existing wastewater treatment facility. Justification for categorical exclusion includes:

- The proposed action is not known or expected to have potentially significant environmental impacts on the quality of the human environment either individually or cumulatively over time;
- The proposed action is not known or expected to significantly affect federally listed threatened or endangered species or their critical habitat;
- The proposed action is not known or expected to significantly affect national natural landmarks or any property with nationally significant historic, architectural, prehistoric archeological or cultural value, including but not limited to, property listed on or eligible for the National Register of Historic Places;
- The proposed action is not known or expected to significantly affect environmentally important natural resource areas as wetlands, floodplains, prime farmland, wild and scenic rivers, and significant fish or wildlife habitat. The treatment plant does lie in the 100 year floodplain of the Republican River and rehabilitation will be flood proofed in as much is applicable;
- The proposed action is not known or expected to have a significant effect on the pattern and type of land use (industrial, commercial, agricultural, recreational, residential) or growth and distribution of population including altering the character of existing residential areas, or may be

consistent with state or local government, or federally-recognized Indian tribe approved land use plans or federal land management plans. The project does not discriminate against any segment of the community's population;

• The proposed action is not known or expected to cause significant public controversy.

The Nebraska Department of Environmental Quality shall revoke the categorical exclusion and shall require a full environmental review if, subsequent to the granting of exclusion, the state determines that the proposed project no longer meets the requirements for a categorical exclusion due to changes in the proposed project; or new evidence reveals that serious local or environmental issues exist; or federal, state, local, or tribal laws are being violated.

This action is taken on the basis of careful review of the application and other supporting data, which are on file in the office of the NDEQ. These are available for public review upon request. Persons having a comment on this categorical exclusion determination are encouraged to submit such comments directly to Tom Fuenning, Review Engineer, of the Technical Assistance Section of NDEQ, who can be reached at (402) 471-4989 or email: tom.fuenning@nebraska.gov.

Signed this \_\_\_\_\_\_ day of \_\_\_\_\_\_\_, 2017.

Director

JM/tsf

Attachments: Distribution List

Map and Schematic

## CATEGORICAL EXCLUSION DISTRIBUTION LIST SUPERIOR, NEBRASKA

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Superior, NE 68978

(Public Information Only not for Public Notice)

## II. BACKGROUND INFORMATION

The present WWTP was placed in operation in 1998. The plant was built in 1959 and expanded in 1978 to provided secondary treatment. In 1998 the plant was upgraded with new Anaerobic Digesters. Since that time, the plant has had 1 major upgrade to improve pumping and replace the rock media with plastic media. That upgrade occurred in 2012. The plant site is shown in Figure 1.

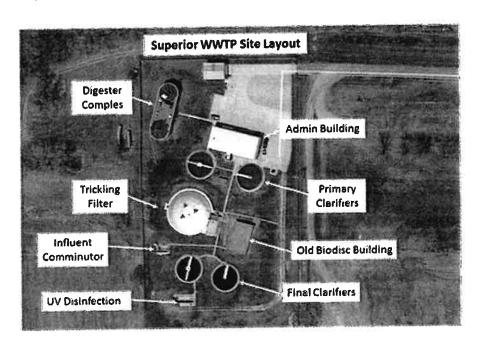


Figure 1 - WWTP Site Plan

The Design Engineer for the original Superior Wastewater Plant was Buel Winter, Mosel of Sioux City, Iowa, and upgraded by Olsson Associates of Lincoln, Nebraska.

The treatment plant is a trickling filter process that is currently designed to treat an average flow of 390,000 gallons per day. In the 1990's the City had an old rotating biological contractor system. Due to treatment problems and new permit requirements, the plant upgrade was required.

The treatment plant has had a history of consistent operation and has met its permit limits until recently. This report will explore current conditions and see what solutions are available to the City for future permit limits for nutrients and compliance with current ammonia limits.

The Superior collection system consists of vitrified clay pipe and is a separate sanitary sewer system. Significant inflow is known to enter the collection system. Some higher flows are experienced during storm events. The City continues to correct some of these inflow problems.

