

**STATE OF MINNESOTA  
MINNESOTA POLLUTION CONTROL AGENCY**

**IN THE MATTER OF THE DECISION  
ON THE NEED FOR AN ENVIRONMENTAL  
IMPACT STATEMENT FOR THE PROPOSED  
BYRON WASTEWATER TREATMENT  
PLANT IMPROVEMENTS  
OLMSTED COUNTY  
BYRON, MINNESOTA**

**FINDINGS OF FACT  
CONCLUSIONS OF LAW  
AND ORDER**

**FINDINGS OF FACT**

Pursuant to Minn. R. 4410.1000 - 4410.1600 (2001), the Minnesota Pollution Control Agency (MPCA) staff has prepared an Environmental Assessment Worksheet (EAW) for the proposed project. Based on the MPCA staff environmental review, comments, and information received during the comment period, and other information in the record of the MPCA, the MPCA hereby makes the following Findings of Fact, Conclusions of Law, and Order:

**FACILITY HISTORY**

Overview

The existing Byron Wastewater Treatment Plant (WWTP) was constructed in 1983 and 1984. It is designed to treat an average flow of 0.52 million gallons per day (MGD) and a peak flow of 1.28 MGD. Wastewater was originally conveyed to the WWTP by two interceptor sewers. A third interceptor sewer was constructed in the summer of 2002.

The WWTP plans indicate that the existing treatment system consists of a bar screen, grit chamber, two primary settling tanks, two roughing trickling filters, two intermediate settling tanks, two aeration basins, two secondary settling tanks, chlorination facilities, anaerobic digester, and approximately 1,150 feet of outfall sewer.

The WWTP has a continuous discharge (SD001, formerly Discharge 010) to an unnamed creek (class 7 water) and is designed to treat an average flow of up to 520,000 gallons per day with 5-day biochemical oxygen demand (CBOD<sub>5</sub>) strength of 182 milligrams per liter (mg/L). The existing WWTP does not have a phosphorous discharge limit.

## **PROPOSED PROJECT DESCRIPTION**

### Proposed Project

Modifications to the existing WWTP will be necessary to meet the new effluent requirements and the future hydraulic and organic loading projections. The proposed modifications include replacing the existing preliminary treatment equipment (including the flow measurement equipment), the mechanical bar screen, and the grit collection system. The project also includes replacing the two existing primary clarifiers with two new clarifiers.

The additional new equipment will include: one additional trickling filter, two intermediate clarifiers, two aeration basins, two final clarifiers, phosphorus removal equipment, a biosolids storage tank, and a second outfall line parallel to the existing outfall. The proposed WWTP will be a class A facility. The modified WWTP will be required to meet a one mg/L phosphorous discharge limit.

### Environmental Concerns

Typical environmental concerns from WWTPs include the potential for noise and dust during the construction phase; odors; erosion and sedimentation; and water quality impacts to surface water.

### Permitting Requirements

Required permits are listed in Paragraph 23 below. Construction for the proposed project will not start until all permits are issued. These permits will mandate that the WWTP operate in compliance with all applicable regulatory requirements.

### Additional Concerns Described in Comment Letters

Two comment letters were received during the public comment period and one comment letter was received after the public comment period. None of the comment letters received identified potential environmental impacts.

## **PROCEDURAL HISTORY**

1. Pursuant to Minn. R. 4410.4300, subp. 18b, an EAW was prepared by MPCA staff on the proposed project. Pursuant to Minn. R. 4410.1500 (2001), the EAW was distributed to the Environmental Quality Board (EQB) mailing list and other interested parties on March 1, 2004.
2. The MPCA notified the public of the availability of the EAW for public comment. A news release was provided to Olmsted County, as well as, other interested parties on March 1, 2004. In addition, the EAW was published in the EQB Monitor on March 1, 2004, and available for review on the MPCA Web site <http://www.pca.state.mn.us/news/eaw/index.html> on March 1, 2004.
3. The public comment period for the EAW began on March 1, 2004, and ended on March 31, 2004. During the 30-day comment period, the MPCA received two comment letters from government agencies and received no comment letters from citizens. One comment letter from a government agency was submitted after the public comment period ended.
4. The MPCA prepared responses to all comments received. Comment letters received have been hereby incorporated by reference as Appendix A to these findings. The MPCA responses to comments received are hereby incorporated by reference as Appendix B to these findings.

**CRITERIA FOR DETERMINING THE POTENTIAL FOR  
SIGNIFICANT ENVIRONMENTAL EFFECTS**

5. Under Minn. R. 4410.1700 (2001), the MPCA must order an Environmental Impact Statement (EIS) for projects that have the potential for significant environmental effects that are reasonably expected to occur. In deciding whether a project has the potential for significant environmental effects, the MPCA must compare the impacts that may be reasonably expected to occur from the project with the criteria set forth in Minn. R. 4410.1700, subp. 7 (2001). These criteria are:
  - A. the type, extent, and reversibility of environmental effects;
  - B. cumulative potential effects of related or anticipated future projects;
  - C. the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority; and
  - D. the extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs.

**THE MPCA FINDINGS WITH RESPECT TO EACH OF THESE CRITERIA  
ARE SET FORTH BELOW**

**Type, Extent, and Reversibility of Environmental Effects**

6. The first criterion that the MPCA must consider, when determining if a project has the potential for significant environmental effects that are reasonably expected to occur, is the "type, extent, and reversibility of environmental effects" Minn. R. 4410.1700, subp. 7.A (2001). The MPCA findings with respect to each of these factors are set forth below.
7. Reasonably expected environmental effects of this project to air quality:
  - A. Odors
  - B. Noise
  - C. Dust
8. The extent of any potential air quality effects that are reasonably expected to occur:
  - A. Odors  
Odors from the existing WWTP have not been an issue and are not expected to be generated as a result of construction or the expansion.
  - B. Noise  
Noise will be generated by heavy equipment and truck traffic during the expansion of the WWTP. Construction activity will be limited as much as possible to standard working hours to

reduce noise disturbance to neighbors. Operation of the completed expansion is not expected be the source of significant noise.

C. Dust

Dust may be generated during construction from truck traffic and from construction activities at the project site, depending upon weather conditions. The contractor will be required to minimize dust from the site and mitigation typically involves the use of water, as needed. As a result, dust should not pose a significant environmental effect within the community during construction of the proposed WWTP expansion. Disturbed areas will be re-vegetated as soon as possible after construction. The operation of the completed WWTP will not generate dust.

9. The reversibility of any potential air quality effects that are reasonably expected to occur:

The MPCA finds that any potential effect that is reasonably likely to occur from this project would be reversible. Any air emissions or noise released to the atmosphere would not be recovered, but further emissions or noise could be stopped, if necessary. However, as discussed above, there is no record evidence indicating that this project is reasonably expected to cause a significant negative effect on air quality.

10. The MPCA finds that the environmental review is adequate to address the concerns because:

All potential impacts to air quality that are reasonably expected to occur from the proposed expansion of this WWTP have been considered during the review process and methods to prevent these impacts have been developed.

11. The MPCA finds that the project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of its air emissions.

12. Reasonably expected environmental effects of this project to water quality:

The proposed WWTP will receive domestic and limited industrial wastewater from the city of Byron (City). The WWTP would be designed to treat an annual average flow of 0.96 MGD with incoming loads as follows: CBOD<sub>5</sub> of 1,632 pound per day and total suspended solids (TSS) of 1,920 pounds per day. The wastewater discharged from the WWTP will be limited to control CBOD<sub>5</sub>, total suspended solids, ammonia, pH, and total phosphorous.

13. The extent of any potential water quality effects that are reasonably expected to occur:

The WWTP is being designed to comply with the effluent limits to be contained in its National Pollutant Discharge Elimination System (NPDES) Permit. Effluent limits, according to the preliminary effluent limits determination, are as follows:

Design Average Wet Weather Flow:	1.40 MGD
Design Average Dry Weather Flow:	0.74 MGD

Carbonaceous Biochemical Oxygen	
Demand (CBOD <sub>5</sub> ):	15 mg/L
TSS:	30 mg/L
Ammonia – (N):	
June 1 – September 30	6.10 mg/L
October 1 – November 30	21.0 mg/L
December 1 – March 31	N/A mg/L
April 1 – May 31	N/A mg/L
pH (Standard Unit):	6.0 – 9.0
Total Phosphorous:	1.0 mg/L

The WWTP discharges to an unnamed creek, flows approximately 2.0 miles into the South Branch Middle Fork Zumbro River, and then to Shady Lake and Zumbro Lake. The unnamed creek has been assigned water use classifications of 7, 3C, 4A, 4B, 5, and 6 under MPCA rules. The South Branch Middle Fork Zumbro River has been assigned water use classifications of 2B, 3B, 4A, 4B, 5, and 6. These multiple classifications include consideration for aquatic life and recreation, industrial consumption, agriculture and wildlife, aesthetic enjoyment and navigation, and other beneficial uses not listed.

14. The reversibility of any potential water quality effects that are reasonably expected to occur:

The MPCA finds that any potential effect that is reasonably likely to occur from this project would be reversible. As discussed above, the expected effects on water quality are minimal. There is no reason to believe that this project is reasonably expected to cause a significant negative effect on water quality.

15. Comments received that expressed concerns regarding potential effects to water quality:

None of the comment letters received expressed a general concern for any potential environmental impacts. As discussed above in Findings 7, 8, and 9, the analysis indicates that the effects on water quality that are reasonably expected to occur are not significant.

16. The MPCA finds that the environmental review is adequate to address the concerns because:

All potential impacts to water quality that are reasonably expected to occur from the proposed project have been considered during the review process and methods to prevent these impacts have been developed.

17. The MPCA finds that the project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of environmental effects reasonably expected to occur as a result of its wastewater discharge.

18. The second criterion that the MPCA must consider, when determining if a project has the potential for significant environmental effects that are reasonably expected to occur, is the "cumulative

potential effects of related or anticipated future projects," Minn. R. 4410.1700, subp. 7.B (2001). The MPCA findings with respect to this criterion are set forth below.

A. Enabled Development

The availability of an expanded wastewater service will allow additional development within the City. An increase in development would result in an increase in traffic, air pollution, stormwater runoff, the generation of solid waste and result in a reduction in the amount of open space and wildlife habitat in the area. Enforcement of local, state, and federal ordinances, regulations and permit terms and conditions will mitigate the potential environmental impacts from enabled development.

B. Stormwater Runoff

As a result of growth and development within the City, there will be an increase in surface-water runoff. As pervious surfaces are replaced by impervious surfaces, the velocity and volume of runoff during storm or snowmelt events will increase. Pollutants may be transported by stormwater to surface water causing degradation or impairment. This will necessitate the implementation of a stormwater management plan and the construction of stormwater detention ponds to reduce or abate degradation of surface waters.

19. The EAW, public comments, and MPCA follow-up evaluation did not disclose any related or anticipated future projects that may interact with this project in such a way as to identify any potential cumulative environmental impacts that are reasonably expected to occur.

20. Public comments concerning cumulative impacts:

Based on MPCA staff experience, available information on the project and information presented by the commentors, the MPCA does not reasonably expect significant cumulative effects from this project.

21. In considering the cumulative potential effects of related or anticipated future projects, the MPCA finds that the reasonably expected effects from this project will not be significant.

**The Extent to Which the Environmental Effects Are Subject To Mitigation by Ongoing Public Regulatory Authority**

22. The third criterion that the MPCA must consider, when determining if a project has the potential for significant environmental effects that are reasonably expected to occur, is "the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority," Minn. R. 4410.1700, subp. 7.C (2001). The MPCA findings with respect to this criterion are set forth below.

23. The following permits or approvals will be required for the project:

<b>Unit of Government</b>	<b>Type of Application</b>	<b>Status</b>
A. MPCA	Plans and Specifications	Submitted
B. MPCA	NPDES Permit for a discharge to receiving waters	Submitted

C. MPCA	NPDES General Stormwater Construction Permit	To be submitted
D. City of Byron	Building Permit	To be submitted

24.

- A. Facility Plan Approval; Plans and Specifications Approval  
 Construction plans and specifications for the project are submitted to the MPCA for technical review and approval. This review is performed to ensure that the WWTP design is consistent with good engineering practice and state and federal criteria.
- B. NPDES/SDS Discharge Permit to Receiving Waters  
 An NPDES Permit will be prepared and issued by the MPCA following a 30-day public comment period. The NPDES Permit authorizes a maximum discharge flow and pollutant loading allowed from the WWTP. Effluent limitations established within the permit ensure that water quality in the receiving water is protected.
- C. NPDES Stormwater Construction Permit  
 A general NPDES Stormwater Construction Permit is required when a project disturbs one or more acres. It provides for the use of Best Management Practices, such as silt fences, bale checks, and prompts re-vegetation to prevent eroded sediment from leaving the construction site. The proposer must have a sediment and erosion control plan that will provide more detail as to the specific measures to be implemented and will also address: phased construction; vehicle tracking of sediment; inspection of erosion control measures implemented; and timeframes in which erosion control measures will be implemented. The general permit also require adequate stormwater treatment capacity be provided to assure that water quality will not be impacted by runoff once the project is constructed.
- D. Grading and Building Permits  
 Building permits and inspections assure that the project will be constructed or installed in accordance with city ordinances and codes.

25. The MPCA finds that ongoing public regulatory authority will address any significant potential environmental effects that were identified as reasonably expected to occur.

**The Extent to Which Environmental Effects can be Anticipated and Controlled as a Result of Other Available Environmental Studies Undertaken by Public Agencies or the Project Proposer, Including Other EISs.**

26. The fourth criterion that the MPCA must consider is "the extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs." Minn. R. 4410.1700, subp. 7.D (2001). The MPCA findings with respect to this criterion are set forth below.
27. The following documents were reviewed by MPCA staff as part of the potential environmental impact analysis for the proposed expansion of the WWTP. This list is not intended to be exhaustive. The MPCA also relies on information provided by the project proposer, commentors, staff experience, and other available information.
  - A. The NPDES Permit application
  - B. The EAW data submittal
  - C. The Byron WWTP file
28. There are no elements of the project that pose the potential for significant environmental effects that cannot be addressed in the project design and permit development processes, or by regional and local plans.
29. Based on the environmental review, previous environmental studies, and MPCA staff expertise on similar projects, the MPCA finds that the environmental effects of the project that are reasonably expected to occur can be anticipated and controlled.

**CONCLUSIONS OF LAW**

30. The MPCA has jurisdiction in determining the need for an EIS for this project. The EAW, the permit development process, the facility planning process, responses prepared by MPCA staff in response to comments on the Byron Wastewater Treatment Plant Improvements EAW, and the evidence in the record are adequate to support a reasoned decision regarding the potential significant environmental effects that are reasonably expected to occur from this project.
31. Areas where the potential for significant environmental effects may have existed have been identified and appropriate mitigation measures have been incorporated into the project design and permits. The project is expected to comply with all MPCA standards.
32. Based on the criteria established in Minn. R. 4410.1700 (2001), there are no potential significant environmental effects reasonably expected to occur from the project.
33. An EIS is not required.
34. Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.

**ORDER**

The Minnesota Pollution Control Agency determines that there are no potential significant environmental effects reasonably expected to occur from the Byron Wastewater Treatment Plant Improvements project and that there is no need for an Environmental Impact Statement.

**IT IS SO ORDERED**

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Sheryl A. Corrigan, Commissioner  
Minnesota Pollution Control Agency

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Date

Minnesota Pollution Control Agency

Byron Wastewater Treatment Plant Improvements  
Environmental Assessment Worksheet (EAW)

RESPONSE TO COMMENTS ON THE EAW

1. **Comments by Dale E. Maul, Minnesota Department of Transportation (MnDOT). Letter received March 29, 2004.**

**Comment 1-1:** MnDOT is currently conducting in partnership with the City of Byron and others, a Transportation Sub-area Study that considers Byron's development relative to long range planning for the US Highway 14 corridor.

**Response:** The comment is noted.

**Comment 1-2:** Forecasts of 20 to 30 year growth suggest over 70,000 new daily trip ends in the Byron area and lend support for the proposed sewer improvements as well as future expansion needs.

**Response:** The comments are noted.

**Comment 1-3:** The improvements as detailed in the proposal will have no significant impacts on MnDOT roadways.

**Response:** The comment is noted.

2. **Comments by Rebecca A. Wooden, Minnesota Department of Natural Resources. Letter received March 31, 2004.**

**Comment 2-1:** From a natural resources management perspective, the proposed project does not have the potential for significant environmental effects and does not require preparation of an Environmental Impact Statement.

**Response:** The comment is noted.

**Comment 2-2:** Additionally, the one milligram per liter phosphorous limit will be beneficial.

**Response:** The comment is noted.

3. **Comments by Britta L. Bloomberg, Minnesota Historical Society. Letter received April 5, 2004**

**Comment 3-1:** There are no properties listed on the National or State Registers of Historic Places and no known or suspected archaeological properties in the area that will be affected by this project. Therefore, in our opinion, the "no" response to question 25a is appropriate.

**Response:** The comment is noted.