

**STATE OF MINNESOTA
MINNESOTA POLLUTION CONTROL AGENCY**

**IN THE MATTER OF THE DECISION
ON THE NEED FOR AN ENVIRONMENTAL
IMPACT STATEMENT FOR THE PROPOSED
DAWSON WASTEWATER TREATMENT PLANT EXPANSION
AND UPGRADE, DAWSON TOWNSHIP
LAC QUI PARLE COUNTY, MINNESOTA**

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

Pursuant to Minn. R. 4410.1000 - 4410.1600 (1999), the Minnesota Pollution Control Agency (MPCA) prepared an Environmental Assessment Worksheet (EAW) for the proposed wastewater treatment plant expansion project. Based on the MPCA 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 current facility was originally constructed in 1973 and has undergone numerous minor upgrades since that time. The city of Dawson has identified a number of shortcomings with the current facility, including failing concrete and inadequate capacity. The current treatment capacity is a peak flow of approximately 290,000 gallons per day (GPD).

Previous Environmental Review

There have been no previous EAWs for this facility.

Permitting History

The original wastewater treatment system was built in the early 1970s. The National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Permit was originally issued on April 30, 1979. The NPDES/SDS Permit has been reissued and modified a number of times, most recently in 1998.

Compliance/Enforcement History

No past compliance actions are believed to affect the proposed project.

PROPOSED PROJECT DESCRIPTION

Proposed Project

The proposed project is to upgrade and expand the municipal wastewater treatment plant (Facility). Two new oxidation ditches plus clarifiers would provide a treatment capacity of 471,000 GPD of wastewater. A proposed phosphorus limit would require the Facility to meet a concentration of one milligram per liter if the total mass of phosphorus discharged exceeds 1,800 pounds per year.

Environmental Concerns

Typical environmental concerns from wastewater treatment facilities include the potential for odors, noise, and dust during the construction phase; erosion and sedimentation; and water quality impacts to surface or ground water.

Permitting Requirements

Required permits are listed in Paragraph 24 below. Construction for the proposed facility will not start until all permits are issued. These permits will mandate that the facility operates in compliance with all applicable regulatory requirements.

PROCEDURAL HISTORY

1. Pursuant to Minn. R. 4410.4300 subp. 18.B., an EAW was prepared by MPCA staff on the proposed project. Pursuant to Minn. R. 4410.1500 (1999), the EAW was distributed to the Environmental Quality Board (EQB) mailing list and other interested parties on March 1, 2002, and is hereby incorporated by reference.
2. The MPCA notified the public of the availability of the EAW for public comment. A news release was provided to interested parties on February 28, 2002. In addition, the EAW was published in the EQB Monitor on March 4, 2002. The EAW was available for review on the MPCA Web site at <http://www.pca.state.mn.us/news/eaw/index.html> on February 27, 2002.
3. The public comment period for the EAW and draft permit began on March 4, 2002, and ended on April 3, 2002. The MPCA received one comment letter from the Minnesota Department of Natural Resources during the 30-day public comment period. One letter, from the Minnesota Historical Society, was received after the comment period.
4. The MPCA prepared responses to all EAW comments received during and after the 30-day public comment period. Comment letters received have been hereby incorporated by reference in Appendix A. The MPCA responses to comments are hereby incorporated by reference in Appendix B.

CRITERIA FOR DETERMINING THE POTENTIAL FOR SIGNIFICANT ENVIRONMENTAL EFFECTS

5. Under Minn. R. 4410.1700, subp. 1 (1999), 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 (1999). 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 (1999). 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; and
 - C. Dust.
8. The extent of any potential air quality effects that are reasonably expected to occur:
- A. Odors
This Facility has not had a history of generating detectable odors from the wastewater treatment. The proposed improvements to the Facility would not result in any more odors than currently experienced, and would likely reduce the minor odors on the Facility itself. The Facility is downwind, based on prevailing wind conditions, from the majority of the city. Therefore, odors are not expected to result in significant impacts.
 - B. Noise
Noise will be generated by heavy equipment and truck traffic during construction. The equipment will typically be operated only during daylight hours. Given that there are no residences in close proximity to the Facility, there should be minimal impacts to people living on neighboring properties. No significant impacts from noise are expected within the city of Dawson or at the wastewater treatment facility site.
 - C. Dust
Dust may be generated during construction from truck traffic on gravel access roads and from construction activities at the site, depending upon weather conditions. This would be mitigated through the use of water, as needed, to minimize the dust. As a result, dust should not pose a significant environmental effect within the community during construction of the waste treatment system.
9. The reversibility of any potential air quality effects that are reasonably expected to occur:
- Any potential air quality effects are expected to be reversible. Any air emissions or noise that are released to the atmosphere would not be recovered. 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 Facility have been considered by MPCA staff 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:

- A. Surface-water runoff;
- B. Ground-water contamination; and
- C. Water quality impacts to Lac Qui Parle Lake.

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

A. Surface-Water Runoff

The construction area contains no steep slopes or highly erodible soils. The proposed project would disturb less than one acre. The project proposer has indicated that erosion control measures on the project would be implemented. Likely controls include the use of silt barriers where the potential exists for erosion during the construction phases and seeding and mulching soils upon completion of the project. After construction is completed, the quantity and quality of surface-water drainage is expected to be similar to the existing Facility. Potential impacts from storm-water runoff at the site are not anticipated to be significant.

B. Ground-Water Contamination

The concrete wastewater treatment tanks would be designed in accordance with standard design practices to minimize the potential for leakage into the soils or ground water and to meet the requirements of the NPDES Permit. Where necessary, tanks would be designed to prevent hydrostatic uplift due to high ground-water conditions. Proposed drintile will lower the water table and act as a dewatering system for the tanks.

The concrete walls of the oxidation ditches would be approximately 3.5 feet above the ground. The wastewater level in the tanks would be about 1.5 feet below the top of the wall, or 2 feet above ground. Any potential spill of wastewater or sludge would present minimal potential for ground-water contamination because of the clayey soils. Preliminary information indicates that ground-water flow from the site is toward the Lac Qui Parle River. No structures of any type or wells are located between the site and the river. The nearest known ground-water well is the municipal well, a distance of approximately 1,200 feet upgradient to the west.

No significant adverse effects to ground water are expected from the treatment system.

C. Water quality impacts to Lac Qui Parle Lake

The proposed NPDES Permit limits are intended to protect the uses of and minimize the impact on the receiving stream and downstream waters such as Lac Qui Parle Lake. Proposed permit limits include a phosphorus intervention limit. This would be a limit of 1 milligram per liter, effective if monitored phosphorus discharges meet or exceed 1,800 pounds per year.

Additionally, the Lac Qui Parle River enters Lac Qui Parle Lake near the outlet of the lake. The proposed project is not expected to significantly affect the lake.

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

The MPCA staff finds that any potential effect that is reasonably likely to occur from this project would not be irreversible. Though not expected to occur, impacts from a release from these facilities will be of finite duration and the environment will ultimately be expected to return to current conditions. There is no reason to believe that this project is reasonably expected to cause a significant negative effect on water quality.

15. 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 expansion of this Facility have been considered by MPCA staff during the review process and a method to prevent these impacts has been developed.

16. The MPCA finds that the project as it is proposed does not have the potential for significant environmental effects on water quality based on the type, extent, and reversibility of environmental effects reasonably expected to occur.

Cumulative Potential Effects of Related or Anticipated Future Projects

17. 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. (1999). The MPCA findings with respect to this criterion are set forth below.
18. 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.
19. Based on MPCA staff experience, available information on the project, including the EAW, the NPDES Permit application, and information presented by the commentors, the MPCA does not reasonably expect significant cumulative effects from this project.
20. 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

21. 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 (1999). The MPCA findings with respect to this criterion are set forth below.

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

<u>Unit of Government</u>	<u>Permit or Approval Required</u>	<u>Status</u>
A. MPCA	Facility Plan Approval	Approved
	Plans and Specification Approval	To be completed
	NPDES Wastewater Treatment Facility Operating Permit	Application submitted
B. City of Dawson	Building Permit	To be submitted
C. Lac Qui Parle – Yellow Bank Watershed District	Floodplain Construction Permit	To be submitted

23. A. MPCA

Facility Plan Approval and Plans and Specification Approval

The plan approvals assure that the Facility meets minimum engineering standards.

NDPES/SDS Wastewater Permit

This permit is prepared by the MPCA and is issued after a 30-day comment period. The NPDES Permit authorizes a maximum discharge flow and pollutant loading from the Facility. Effluent limitations established within the permit ensure that water quality in the receiving water is protected.

B. City of Dawson

Building Permit

The project is subject to regulatory control through the review requirements of the city of Dawson, including permits and inspections. The permit assures that the Facility will be constructed in accordance with the city of Dawson's ordinances and codes.

C. Lac Qui Parle – Yellow Bank Watershed District

The project is subject to regulatory control through the review requirements of the watershed district, including permits and inspections. The permit assures that the Facility will be constructed in accordance with the watershed district's rules.

24. 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.

25. 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 (1999). The MPCA findings with respect to this criterion are set forth below.
26. The following documents were reviewed by MPCA staff as part of the potential environmental impact analysis for the proposed construction of the Dawson Wastewater Treatment Plant. 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.
- EAW data;
 - Facility Plan; and
 - Permit application, related application submittals, and draft permits.
27. 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.
28. Based on the environmental review, previous environmental studies, and the MPCA staff expertise on similar projects, the MPCA finds that the environmental effects of the project that can reasonably be expected to occur can be anticipated and controlled.

CONCLUSIONS OF LAW

29. The MPCA has jurisdiction in determining the need for an EIS for this project. The EAW, the permit development process, responses prepared by MPCA staff in response to comments on the Dawson Wastewater Treatment Plant 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.
30. 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.
31. Based on the criteria established in Minn. R. 4410.1700 (1999), there are no potential significant environmental effects reasonably expected to occur from the project.
32. An EIS is not required.
33. Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.

ORDER

The MPCA determines that there are no potential significant environmental effects reasonably expected to occur from the Dawson Wastewater Treatment Plant Expansion and Upgrade project and that there is no need for an Environmental Impact Statement.

IT IS SO ORDERED

Karen A. Studders, Commissioner
Minnesota Pollution Control Agency

Date

Minnesota Pollution Control Agency

Dawson Wastewater Treatment Plant Expansion and Upgrade
Environmental Assessment Worksheet (EAW)

SUMMARY OF COMMENTS AND RESPONSES TO COMMENTS ON THE EAW

Bill Johnson, Minnesota Department of Natural Resources (DNR)

Comment 1. The DNR would like to clarify that, in addition to what is noted in Item 11, mussels have been documented in the West Fork Lac Qui Parle River, approximately 0.1 mile downstream of the discharge. The DNR does not anticipate adverse effects if project-related construction strictly complies with the appropriate erosion and sedimentation controls. Control measures noted in Item 16 of the EAW should be deployed before construction commences.

Response 1. The Minnesota Pollution Control Agency (MPCA) appreciates the clarification regarding the mussels. The MPCA expects that erosion control measures would be in place prior to commencing construction.

Comment 2. Does the proposed ammonia effluent limit consider the cumulative ammonia load from other permitted discharges into this reach of the West Fork Lac Qui Parle River?

Response 2. Seasonal ammonia limits are determined using a mass balance equation that includes the background (upstream) ammonia concentration (mg/L). Other factors in the calculation are the seven day once-in-ten-year low flow in cubic feet per second (cfs), the average dry weather design flow of Wastewater Treatment Facility (WWTF) (cfs), the allowable ammonia concentration in WWTF effluent (mg/L) and the total ammonia concentration (at mix) that meets water quality standards (mg/L).

There are three permitted dischargers into this reach of the West Fork Lac Qui Parle River. The only major contributor of ammonia to this reach is the city of Dawson's WWTF. The three permitted facilities in this reach and their mode of operation are as follows.

- Ag Processing Inc. – Dawson discharges non-contact cooling water upstream of the city's discharge. Ammonia toxicity is therefore not a concern.
- City of Dawson WWTF operates oxidation ditches with a continuous discharge. As noted in the EAW, seasonal ammonia limits have been assigned.
- AMPI - Dawson is a food (dairy) processor that operates an activated sludge/stabilization pond facility. It has a controlled discharge downstream of the city's discharge. Discharge occurs during discharge window periods of high flow (spring and fall). Process wastewater is mechanically pretreated before being combined with sanitary, cow (condensate of whey evaporate), and roof wastewaters in the ponds. No seasonal ammonia limits have been assigned to this facility.

Comment 3. The DNR is concerned about the potential for a catastrophic failure of the oxidation ditch walls, which could result in partially treated effluent reaching the river. They recommend developing a contingency plan be developed to address how a spill would be contained.

Response 3. The risk of catastrophic failure of concrete tanks is low. When properly installed, concrete in tanks tends to fail gradually rather than suddenly. The city is expected to monitor the structure and conduct appropriate maintenance to ensure the integrity of the tanks. Additionally, the MPCA inspects permitted facilities on an approximately annual schedule. Another aspect is the potential for flood waters to encompass the tanks. The proposed U.S. Army Corps of Engineers dike would address that by directing floodwaters away from the area.

Comment 4. The DNR recommends that the proposed drain tile be monitored periodically during the first two years of operation and annually thereafter, to facilitate the detection of leaks.

Response 4. The permit for this facility has not yet been drafted. The MPCA agrees that monitoring would be beneficial. The frequency and duration will be further evaluated during the permit process.

Comment 5. Figure 3 does not include possible changes if the Corps of Engineers dike is constructed, such as to the outfall line. Any modifications to the outfall should be detailed and evaluated prior to project construction.

Response 5. The proposed dike project is separate from the proposed WWTF expansion. The WWTF expansion proposal does not include any modification to the outfall. Prior to the construction of the dike, the Corps of Engineers and the city of Dawson would together have to ensure the integrity of the outfall line. The MPCA believes there may be several options available to the city. If it should ultimately be found that the outfall line would have to be moved to accommodate the dike, the city would have to apply for a permit modification from the MPCA.

Comment 6. The DNR does not recommend preparation of an environmental impact statement based on natural resource concerns.

Response 6. The comment is noted.

Britta Bloomberg, Minnesota Historical Society

Comment 7. 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.

Response 7. The comment is noted.