

Devils Lake Outlet Permit Reissuance
Permit No. ND-0026247
Response to Comments

The present permit issued to this facility expires June 30, 2008. The reapplication is for an intermittent discharge of surface water diverted from West Bay of Devils Lake (Round Lake) to the Sheyenne River. Included with the reapplication was a request for clarification on select items in the North Dakota Discharge Elimination System (NDPDES) permit. The request included: (1) updating the description of the intake structure screen and gravel filter; (2) allowing for water quality values at the outlet from the previous day be subtracted from the values at Bremen; and (3) considering increases to the sulfate limit. The North Dakota Department of Health allowed the first request relating to the screen and filter. However, the department denied the second and third parts relating to sulfate concentrations in their request.

Both written and oral comments were submitted into the hearing record for department review. All comments in the record were evaluated by department personnel for applicability to the proposed permit reissuance, and a written response was provided.

The department limits its response to comments relevant to new parts of this permit decision. The department's initial permit decision is res judicata, and the doctrine of collateral estoppel applies. That is, issues that have been litigated, or could have been litigated in the initial permit determinations, cannot be re-litigated. In addition, several comments were directed toward social/economical issues of the outlet which go beyond the scope of NDPDES permitting.

Comment 1: Failure to maintain or improve water quality and protect and maintain beneficial uses of the Sheyenne River.

Response: All beneficial uses are maintained. These include protection of fish/aquatic life, recreation and agriculture uses. Municipal water use is protected for Valley City.

Comment 2: Antidegradation review is required for reissuance of the permit for the Devils Lake Outlet. False information was submitted with the application for permit which makes it inappropriate to use on issues like economic benefit and antidegradation. Consequently, reissuance of the permit for the Devils Lake outlet not only must verify compliance with the original permit, but it must follow the same procedures and meet the same requirements as for issuance of a new permit.

Response: Regulated activities that result in a new or expanded source of pollutants to Category I waters require antidegradation review. This permit is not a new or expanded source.

Comment 3: The conditions of the proposed, reissued permit fail to assure that existing uses are fully protected. Because the evidence in the record demonstrates that operation of the Devils Lake outlet under the conditions of the original permit and the reissued permit is expected to increase the total annualized costs to the eight affected municipal water treatment facilities by \$1,782,000.00 to \$3,360,000.00 per year, the revised permit conditions fail to assure that existing uses are fully protected, in violation of the department's own regulations.

Response: The department did not receive comments from any downstream municipalities. This

beneficial use is maintained for municipal use. The sulfate concentrations are within the operating range for the downstream users; no increase in operations cost has been observed due to sulfate. (See response to comment 1 of this docket.)

Comment 4: Antidegradation review is required for reissuance of the permit. The language of the rules is unequivocal: “The department will complete an antidegradation review for all proposed regulated activities.” There is no exception for permits that the department proposes to reissue. Before a proposed activity may be eliminated from “further review,” the department must first determine, through an antidegradation review, that the activity will have no significant permanent effect on the quality or beneficial uses of the those waters or that the effects will be appropriately minimized and temporary. The 2003 permit had Part 8 of the antidegradation review sheet checked “yes” to the following question: “Will the posed activity result in significant degradation?” Therefore, an antidegradation review is required for the reissuance of the Devils Lake outlet permit because, just as with the original permit, operation of the outlet will have significant permanent effects on both the quality and the beneficial uses of the waters of the Sheyenne River, and those effects will not be appropriately minimized under the conditions of the proposed reissued permit.

Response: The current data does not indicate adverse impacts; the sulfate concentration is within the historical range. (Refer to response to comment 2 of this docket.)

Comment 5: This must be considered a reapplication to the Devils Lake Permit. In the Statement of Basis under Antidegradation, you state that “based on the established antidegradation policy and water quality standards, it was determined that a formal review was not required for reissuance of this NDPDES permit. “ This is a blatantly deliberate attempt by the department to confuse the process of reapplication with the mere reissuance of a previously approved NDPDES permit, ND0026247. The department is deliberately disregarding the fact that an antidegradation review is required under North Dakota Administrative Code Chapter 33-16-01, 33-16-02.1 and North Dakota Century Code. The review is required to include a social/economic benefit statement to prove beyond a reasonable degree that this NDPDES permit has a positive benefit for the greater good of all the citizens of North Dakota. The negative cost/benefit ratio is not for the greatest good of the citizens of the state and is a direct harm to the lives and property of citizens of North Dakota. History has proven that the department must not issue the reapplication for the Devils Lake Outlet permit to the State Water Commission.

Response: (Refer to response to comment 2 of this docket.)

Comment 6: There are five drains that enter the outlet channel from adjacent property that add additional flow and quality to the discharge water. These drains are major facility expansions or modifications to the permit and need to be treated as such. Major modifications require the issuance of a public notice, inviting public comment. This has not happened and is a continuing flagrant disregard of the permitting, monitoring and enforcement duties that the department has been entrusted with to ensure that all North Dakota waters are protected from degradation. Therefore, the reapplication to this permit must be immediately denied by the department.

Response: Nonpoint runoff from agricultural land is not regulated by the clean water act. Because these contributions occur upstream of the outlet to the Sheyenne River, the blended waters must be in compliance permit conditions.

Comment 7: The point of compliance needs to be reestablished no more than 100 feet downstream of the insertion point; there are exceedances of the water quality standards taking place in the 12-mile stretch between the insertion point and point of compliance. The Sheyenne River must not, any longer, be allowed to be used by the Department of Health to be illegally degraded for 12-14 miles to the present point of compliance from the point of insertion. The real time monitoring data for the Flora site, outlet terminal structure and point of compliance must be required to be displayed on the USGS website and the State Water Commission website. Until the point of compliance has been relocated upstream of the present location (Bremen) to the aforementioned acceptable locations, the department must deny the reapplication request for the permit.

Response: During the 2003 NDPDES permitting process for the Devils Lake Outlet, the department contracted with the USGS to establish an upstream and downstream gaging station. The best locations to establish gaging stations are bridges that cross the receiving stream. As part of the contract, the USGS was to install continuous real time monitoring at these new stations. Access was not granted at the original downstream site which resulted in the gaging station being installed at the present location (Bremen) after consultation with the department. The state water quality standards allow for mixing in the receiving stream.

Comment 8: If, by some bizarre flawed thinking process, the Department of Health does not approve the request for the potentially illegal reapplication of the NDPDES permit, then the department must only allow the reapplication permit approval for no longer than three years (effective date July 1, 2008; expires June 30, 2011).

Response: NDPDES permits can be written for a period of less than five years; however, no permit can extend beyond five years. It is important to note that a recent determination by EPA regarding water to water transfers may not require the issuance of a NDPDES permit.

Comment 9: If the department does not approve the request for the potentially illegal reapplication of this permit, then the department must make changes to the proposed Whole Effluent Toxicity (WET) requirements to assure, beyond any reasonable doubt, that all of the state's waters are maintained or improved and to protect and maintain all beneficial uses, the Sheyenne River in particular. In order to achieve the State of North Dakota's governor's statement (see original comment letter), all monitoring reporting, regardless of types of monitoring reporting, must have no less than a seven (7) day weekly frequency, with no waivers or modifications allowed. Mandatory, weekly, acute toxicity testing and chronic testing are needed between the point of insertion and the point of compliance with no waivers being allowed for whatever reason. For acute testing, the test needs to use the Creek Heelsplitter and Hornyhead Chub, not the Water Flea and Fathead Minnow. The Department of Health and the State Water Commission continue to say that more studies, evaluations and monitoring need to be conducted while the outlet continues to be operational. This proves once again that they have not seriously been committed to their obligation of due diligence to safeguard all the beneficial uses of the water of the state; therefore, no modifications are justified once these conditions are required in the new permit and this new permit has been granted, if granted.

Response: WET testing is performed on the Devils Lake outlet water according to the established testing method of U.S. EPA. There are no testing methods established for the Creek Heelsplitter and the Hornyhead Chub. WET testing requirements were to be implemented in NDPDES permits for major permits and select industries where the effluent or discharge could

include some contaminant not routinely sampled. The Devils Lake Outlet is a minor permit according to NDPDES rules and minors are usually not required to perform WET testing.

Comment 10: Page 18 of the draft NDPDES permit discusses “severability.” The inclusion of the idea of severability and the language used to define severability is unacceptable for the permit. One broken link in the chain renders the total chain useless. The NDPDES permit must remain as a whole, in order to be a somewhat effective tool in protecting the quality of waters of the state at the time the first standards were established in 1967, or later if indicated improved quality, thereby protecting all the beneficial uses of the waters of the state.

Response: The conditions listed in parts III, IV and V of the permit are the standard conditions that apply to all NPDES permits as specified in 40 CFR 122.41. The preestablished conditions must be incorporated into all discharge permits, either expressly or by reference. The conditions outline the legal, administrative and procedural requirements applicable to all permits. Part II is EPA boiler plate language that must be in all NDPDES permits.

Comment 11: All discharge monitoring reports associated with the operations of the Devils Lake outlet permit, including WET requirements or reports, must be made available to the public and published on the Department of Health website as soon as the department receives them, before reviews and modifications may or may not be made to the required reports by the Department of Health.

Response: Information relating to operation of the Devils Lake Outlet and NDPDES is available on the State Water Commission and the Department of Health websites and upon request. The department will make the changes to provide NDPDES Discharge Monitoring Report data available on its web site. Note that this data is summarized monthly in a report and submitted to the department. State and federal NDPDES rules allow 30 days following the close of a monitoring period for the permittee to submit the DMR and 30 days for the permitting authority to verify and post the data. As a result, DMR data will not be posted on the department’s website for up to 60 days following the close of a monitoring period.

Comment 12: The statement, “The Department of Health intends to reissue the Devils Lake permit.” is misleading; it insinuates that the department has already made up its mind to reissue the permit even before evidence to the contrary has been submitted.

Response: This is standard language for NDPDES permits. The State Water Commission has an active permit, and the five-year permit cycle is expiring. The commission submitted a request to re-issue the permit. As a result of the request, the department must publish public notice regarding its intent to re-issue the NDPDES permit and ask for comments on the draft permit and statement of basis. Following review of all comments, a record of decision is made prior to any permit being issued and/or denied.

Comment 13: The State Water Commission has not done studies to prove that Sheyenne River water quality will not suffer, nor that the river’s ecosystems will not deteriorate. Where are the studies that demonstrate that the 50 species of fish and eight or nine species of mussels in the Sheyenne River will survive in the degraded water from the Devils Lake Outlet? How much is the extinction of a species in the Sheyenne River worth?

Response: Sulfate values are within the historical range. The discharge from the outlet is in

compliance with the state water quality standards for that reach of the river. A condition of the permit was to perform a biological assessment of the Sheyenne River. This assessment was completed to determine baseline conditions and submitted to the department prior to outlet operation. Additional assessments will be performed as needed to compare the results of the original assessment. Based on these assessments, changes to the river's biological condition due to the operation of the outlet and deemed significant will result in changes to the permit.

Comment 14: There are comments relating to segments of the Sheyenne River not meeting their designated uses; why allow more degradation? Fix the problem.

Response: There are three Sheyenne River reaches located at and below the Devils Lake outlet and above Lake Ashtabula that are included on the state's 2006 Section 303(d) list of impaired waters needing Total Maximum Daily Loads. All three of these stream reaches are listed and fully supporting, but threatened for aquatic life use due to "sedimentation/siltation." The Devils Lake outlet permit contains effluent limits which are meant to protect water quality standards, including beneficial uses. Since the Devils Lake permit includes an effluent limit for total suspended solids of 100 mg/L, it is not considered a significant source of sediment to these stream reaches. While the extent of sediment potentially affecting the Sheyenne River has not been determined, it is likely that the predominant sources of sediment affecting the Sheyenne River are from nonpoint sources, such as from cropland, rangeland and stream bank erosion. These sources, as well as solutions necessary to reduce sediment contributions to the Sheyenne River, are beyond the scope of the Devils Lake outlet permit.

Comment 15: There are comments on a 1999 letter to the State Water Commission regarding an outlet from Stump Lake to the Sheyenne River. The letter mentions such an outlet would be high in metals, etc. The concentration of each of the constituents needs to be determined when blended with the Sheyenne River at the point of discharge and several locations downstream in the Sheyenne and Red Rivers. As Devils Lake rises, it becomes one body of water, and Stump Lake becomes part of the whole. Then, how much of these constituents is too much for downstream water users to handle?

Response: The department monitors several locations on the Devils Lake chain of lakes. This monitoring is not required by the permit; however, data is used by the department to ensure beneficial uses are maintained. A condition of the permit requires that trace metals be monitored on a regular basis at the outlet structure and several locations downstream on the Sheyenne and Red Rivers.

Comment 16: Then, there is the fish screen that was poorly designed or built so that minnows got through. Not being able to accept responsibility for its own failure, the paranoid State Water Commission implied that sabotage had been done in an effort to make them look bad.

Response: The fish screen has been repaired and is in service (see Statement of Basis for this permit re-issuance)

Comment 17: The State Water Commission does not provide outlet information to the public on a regular basis; things like: Is the outlet being operated now? How much water is being pumped?

Response: The State Water Commission provides information on the outlet on a regular basis.

(Also, see response to comment 11 of this docket.)

Comment 18: NDPDES Permit # ND - 0026247 should not be re-issued until an anti-degradation analysis is completed. Your department's draft Statement of Basis merely states in one concluding sentence (page 7) that "it was determined that a formal review was not required." However, there is no question that the permit re-issuance is subject to the full scope of your department's permitting requirements, including the anti-degradation standards found in Appendix IV of NDAC 33-16-02.1. The need for a full anti-degradation review is particularly compelling in light of the demonstrable lack of efficacy of the outlet over the past several years, indicating that the cost-benefit calculus would be substantially different today than it was in 2003. Moreover, because the terms of the permit regarding limitations on sulfate discharges have changed from those approved in 2003, and because no anti-degradation review accompanied the permit modification approved in August 2006, we believe it is proper to treat re-issuance as involving a "new or expanded source of pollutants" within the meaning of Appendix IV, necessitating a new cost-benefit balancing.

Response: (See response to comment 2 of this docket.)

OTHER:

The following comments were also submitted on the Devils Lake Outlet permit reissuance. As mentioned above, the department limits its response to comments relevant to new parts of this permit decision. The department's initial permit decision is res judicata, and the doctrine of collateral estoppel applies. That is, issues that have been litigated, or could have been litigated in the initial permit determinations, cannot be re-litigated. In addition, several comments were directed toward social/economical issues of the outlet which go beyond the scope of NDPDES permitting.

Comment: Because the Department of Health is proposing to reissue the NDPDES permit issued for the Devils Lake Outlet on August 26, 2003, with modifications approved on August 17, 2006, information submitted in conjunction with public hearings on the issuance of the original permit and on modification of the permit are relevant and applicable to this permit. Therefore, these documents are incorporated in these comments on the 2008 reissuance of the Devils Lake Outlet permit. (enclosed Gary Pearson letter with attached documents)

Comment: Failure to ensure the propagation and well-being of resident fish and biota. Department of Health fails to address the impact of operation of the Devils Lake Outlet under the proposed reissuance permit on phosphorous and nitrogen levels in the Sheyenne River and Lake Ashtabula and erroneously assumes that nitrogen levels will limit primary production; failure to ensure propagation and well-being of resident fish and biota.

Comment: Failure to protect beneficial uses of the Sheyenne River. Neither the department's Statement of Basis nor the draft permits address the evidence in the record demonstrating the failure of the conditions of the proposed reissued permit to protect and maintain existing and future beneficial uses of the Sheyenne River.

Comment: Despite an overwhelming preponderance of the evidence in the record confirming that the outlet was not necessary, the department relied on the information submitted by the State Engineer in support of the August 30, 2002 application request.

Comment: The department may not issue an invalid permit. The State Water Commission knowingly submitted deliberately incomplete and false information in support of the application (see attachments) in clear violation of North Dakota Century Code and Administrative Code which the department relied upon to justify and draft the Devils Lake permit.

Comment: The preponderance of the evidence of the record demonstrates that the Devils Lake Outlet will provide no significant benefits and therefore is not necessary for important social or economic development (reference to several articles on actual discharge flows vs. what was submitted in the original permit application to justify the permit in attachments).

Comment: Gross misuse or incorrect use of the term “flooding” in the permit and statement of basis. This misrepresents the need for the outlet project. The North Dakota Department of Health is the agency that the public relies upon for factual information in times of crisis. To allow the department to continually and deliberately use the term “flood,” when there is not a flood, can only further erode the public’s confidence in the department and other federal, state, and local officials and agencies.

Comment: Until adequate biota treatment has been constructed by the State Water Commission to protect the waters of the state from the intentional transfer of the known and unknown aquatic invasive species and the aquatic nuisance species that exist in Devils Lake to the Sheyenne River, the Health Department must deny the reapplication request for the permit.

Comment: The Statement of Basis proclaims that the North Dakota has established a Devils Lake Outlet Management Committee to address operating issues associated with the outlet (annual operating plan). There was not a quorum at the 2008 meeting, so there is no operating plan for 2008. Therefore, the department must deny the reapplication request.

Comment: The Corps of Engineers report mentions the 300 milligrams per liter (mg/l) instream sulfate limit which is representative of 2003 permit. Why then did the department allow the sulfate limit to increase up to 450 mg/l which further degrades water quality of the Sheyenne River?

Comment: Reissuing the permit will allow the wasteful and damaging project to continue while not really providing relief of an overflow.

Comment: The permitting process is flawed. The State Water Commission should demonstrate no harm or degradation, and the Health Department needs to verify no degradation. We need to protect the public health and future uses of waters of the state.

Comment: The citizens of North Dakota should not have the burden of proof that contaminating one body of water with inferior quality water from another body of water will cause harm to the receiving waters and to their continued and beneficial uses.

Comment: The 2003 permit Response to Comments talks about the cumulative effects of pollutants on water quality in the river. What about mercury and its effects on the river and Lake Ashtabula? There is no data relating to this.

Comment: The Statement of Basis contains statements that support the outlet, while others are misleading or furnish only part of the story. The Statement of Basis needs to include accurate claims. If it does, the claims made for how much the outlet will be operated ought to be accurate; they are not. The report makes economic conditions around Devils Lake one of the most important reasons for building an outlet. The possibility of an overflow is used as the severe result of the

lake continuing to rise.

Comment: Several comments were raised on operation of the outlet and potential effects of contamination, information in the Water Commission report and whether the Devils Lake basin remains in a wet cycle.

Comment: The State Water Commission and the Department of Health knew that sulfate levels in the Sheyenne River were rising prior to the permit modification. If we continue to be in a wet cycle, why can't the Water Commission remove more water from Devils Lake?

Comment: Economic success is the foundation for the outlet needs, yet the outlet will not come close to meeting those lofty expectations. Since the outlet fails to meet these goals, why operate it and continue to throw away state money?

Comment: Water quality was an important part of the decision to build the outlet. The 2003 permit had a 300 mg/l limit for sulfate to protect the stream; why allow the limit to go to 450? In the renewal process, the State Water Commission requested more than 450 mg/l, while the Safe Drinking Water Act has a 250 mg/l sulfate limit.

Comment: The State Water Commission lacks openness and transparency. Rather than an open system, they act in secrecy and frequently give the public one side to an issue.

Comment: We need to get back to the three-pronged approach to deal with high (excess) water in the Devils Lake basin.

Comment: The State Water Commission cannot be trusted to carry out its role in keeping waters of the state from harm. They overstated the need and effectiveness of an outlet while ignoring negative impacts to downstream users.

Comment: The original claim was that an outlet would remove 4 inches from the lake per year -- an impossibility. Totals for the past three years indicate that outlet operation removed less than 1/10 of an inch from the lake.

Comment: Why renew the permit for a failing project?

Comment: A recent article on diverting Missouri River water to Apple Creek in *The Bismarck Tribune* (May 13, 2008) illustrates the mentality of those who support all water projects, whether there is a need for them or not. Several questions like the need, who pays, who benefits, effective use, etc. were not answered.

Comment: The outlet fails to meet the stated needs of the project; we need to get back to the "three-legged stool" approach and storage of water in wetlands.

Comment: The actual benefits of the outlet are far outweighed by its costs. The degradation of water quality resulting from outlet operation is not justified under Section 61-28 of the North Dakota Century Code and your department's implementing regulations, NDAC Article 33-16.. Thus, the only proper course for your department is to deny the re-issuance of the permit.

Comment: NDPDES Permit # ND - 0026247 should not be re-issued until a comprehensive environmental impact statement is prepared that includes complete consideration of the effects of the outlet on the transboundary environment in Manitoba, including impacts on Lake Winnipeg, the world's 10th largest freshwater lake. This assessment should be based upon, among other things,

a thorough, scientifically credible survey of Devils Lake biota and should include an analysis of the impacts to Manitoba from total dissolved solids, sulfate, nitrogen and phosphorus, plus biological organisms including, but not limited to, cyanophytes (blue-green algae), fish parasites and fish pathogens.

Comment: NDPDES Permit # ND - 0026247 should not be re-issued until clauses are inserted that will ensure water quality objectives established at the international boundary are not exceeded as a result of operation of the outlet from Devils Lake.

Comment: NDPDES Permit # ND - 0026247 should not be re-issued, and further operation of the outlet should not occur until the advanced treatment system agreed to by governments on August 5, 2005, is installed and operating to meet performance standards agreed to during meetings convened by the Council on Environmental Quality in Washington, D.C. in early 2006.

Comment: Because operation of the outlet for Devils Lake will provide an additional source of nitrogen and phosphorus to the transboundary environment, NDPDES Permit # ND - 0026247 should not be re-issued unless it contains effluent discharge limits for nutrients. Otherwise, allowing an additional anthropogenic discharge of nutrients would be inconsistent with the request provided to former Secretary of State Powell from Commissioner Schornak of the United States section of the International Joint Commission on November 29, 2004.