Contents

Attachment 1: Water Appropriation Permit Amendment

DEPARTMENT OF NATURAL RESOURCES

ENBRIDGE LINE 3 REPLACEMENT PROJECT

Water Appropriation Permit Amendment

No. 2018 – 3420

(Construction Dewatering)

FINDINGS OF FACT, CONCLUSIONS AND ORDER

Water Appropriation Permit No. 2018-3420

Enbridge Line 3 Replacement Project

June 4th, 2021

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

In the Matter of the Amendment to Water Appropriation Permit No. 2018-3420

FINDINGS OF FACT CONCLUSIONS OF LAW, AND ORDER OF COMMISSIONER

After review of the amendment request, due investigation of relevant information, and consideration of comments, and based on the information and statements contained in the permit applications submitted by Enbridge Energy, Limited Partnership ("Enbridge"), the applicant's description of work proposed to be undertaken, and supplemental information in the administrative record contained within the MNDNR Permitting and Reporting System ("MPARS") or otherwise available to the Minnesota Department of Natural Resources, the Commissioner of the Minnesota Department of Natural Resources ("DNR") makes the following:

FINDINGS OF FACT

I. EXECUTIVE SUMMARY

1. Pursuant to the requirements of Minn. Stat. § 103G.271, Enbridge applied for and was issued four separate water appropriation permits as part of its proposed Line 3 Replacement Pipeline Project ("Project"). The permits issued seek to appropriate water for (1) hydrostatic testing and horizontal directional drilling, (2) trench and construction dewatering, (3) dust suppression, and (4) construction dewatering near the Gully 30 calcareous fen. These Findings of Fact only address Enbridge's water appropriation permit amendment for trench and construction dewatering ("Amendment"). The other three water appropriation applications and initial construction dewatering application were addressed in separate findings and have been issued permits.

2. The Project is intended to address mechanical integrity deficiencies on the existing Line 3 pipeline. The Project proposes to install approximately 337 miles of new 36-inch diameter pipe and associated facilities from the North Dakota-Minnesota border to the Minnesota-Wisconsin boarder. Enbridge's proposed pipeline route would generally follow the existing Line 3 pipeline from the North Dakota-Minnesota border in Kittson County to Enbridge's terminal facility in Clearbrook, Minnesota. From the terminal in Clearbrook, the pipeline would proceed south and generally follow the existing Minnesota Pipe Line Company'sright-of-way to Hubbard, Minnesota. From Hubbard, the route would proceed east, following existing electric transmission line and railroad rights-of-way and traversing greenfield areas untilcrossing the Minnesota-Wisconsin border approximately five miles east-southeast of Wrenshall, Minnesota. The route would end at the existing Enbridge terminal in Superior, Wisconsin.

3. The Project has undergone significant review from the Public Utilities Commission ("PUC"). On April 24, 2015, Enbridge filed separate applications for a certificate of need ("CN") and routing permit ("RP") for the Project. The PUC authorized the Department of Commerce, Energy Environmental Review and Analysis Unit ("EERA") to prepare a combined environmental impact statement ("EIS"). PUC referred the CN, RP, and EIS adequacyto the Office of Administrative Hearings for contested-case proceedings. Following the contested-case proceedings, and following the submittal of a revised Final EIS ("FEIS") by EERA, the PUC eventually found the revised FEIS to be adequate, and granted the CN and RP contingent on certain modifications and conditions. The Minnesota Court of Appeals reversed the FEIS order for its failure to address the potential impacts to the Lake Superior watershed and remanded to the PUC for further proceedings. On remand, the PUC requested that EERA submit a second revised FEIS that included an analysis of the potential impact to the Lake Superior watershed. On May 1, 2020, after receiving public comments and hosting public meetings, PUCissued an order finding the second revised FEIS adequate and granting the CN and RP subject to certain modifications and conditions.

4. The permit amendment Enbridge seeks in this proceeding relates solely to the appropriation of water for construction dewatering of the pipeline corridor. Enbridge was issued permit no. 2018-3420 on December 8, 2020 for a total of 510.5 million gallons of water and are requesting to increase that volume through this amendment for a total volume of 4,982,768,568 gallons. A multitude of other permits and regulatory requirements will also apply to the Project prior to and during construction. Enbridge has completed 185.6 miles of installation out of the 330 miles total in Minnesota (56%), and has completed 136 waterbody crossings out of the total 227 waterbody crossings (60%). According to the amendment request memo from May 12, 2021, as of June 1, 2021 Enbridge will have appropriated 479,173,822 million gallons through trench dewatering.

II. AMENDMENT REQUEST AND COMMENT PROCESS

A. Enbridge Submits Amendment Request for Groundwater Appropriation for Trench and Construction Dewatering.

5. Enbridge proposes to appropriate groundwater for trench and construction dewatering for the remaining 144.5 miles to be constructed. Because the already completed and additionally proposed appropriation is in excess of one million gallons a year, a DNR water appropriation permit is required. See Minn. Stat. § 103G.271, subd. 4.

6. On November 8, 2020 Enbridge's permit application submittal was considered final and complete including all the relevant plans such as the EPP (including attachments) and Invasive Species Management Plan. DNR's decision on Water Appropriation Permit No. 2018-3420 (the "Initial Permit") was based on the November 8, 2020 submittal and Enbridge was issued Permit No. 2018-3420 for a total appropriation volume of 510.5 million gallons. Enbridge submitted a permit amendment request on January 26, 2021. Enbridge submitted a $150 check covering the amendment

permitting fee in accordance with the administrative rule for permit amendments. On May 12, 2021, Enbridge submitted a revised Amendment request based on comments received from MPCA and DNR staff during the Request for Comments Period described below. DNR's decision on Water Appropriation Amendment Permit No. 2018-3420 (the "Permit") is based on the May 12, 2021 revised submittal.

7. The Amendment is for an increase of the initial permitted volume from 510.5 million gallons up to 4.98 billion gallons. Enbridge proposes to use pumps and well point systems to appropriate water from along the pipeline corridor for construction dewatering activities including dewatering of the pipeline trench, dewatering the excavation area for the above ground facilities (i.e. valves sites and pump stations) and appropriation of water from the groundwater trench to use as buoyancy water in the push-pull pipe installation processes. The request for an increased volume of water is due to the encountering of more groundwater than originally anticipated. The original application estimated water volumes based on what was pumping during the Alberta Clipper project. A large portion of the Line 3 replacement pipeline is going through a new alignment area that is wetland and peatland dominated, and the company has converted some dewatering locations from the traditional sump pump dewatering to a well point systems. Well point dewatering produces a cleaner water and makes it easier to manage in regards to construction stormwater discharge requirements, but also appropriates larger volumes of water than traditional sump pump systems.
Enbridge proposes that the groundwater will be pumped from the trenches with portable pumps at a maximum of 800 gallons per minute. If using a well-point system because traditional dewatering techniques are not feasible, the maximum pumping rate for the well-point system is 1,500 gallons per minute. To be consistent with any National Pollutant Discharge Elimination System ("NPDES")/State Disposal System ("SDS") permit issued by MPCA, the appropriation and discharges for well-point systems will be limited to a maximum of 1,500 gallons per minute (avg. 1,200 gallons per minute). This is a condition on the DNR water appropriation amended Permit. There are 23 groundwater installations listed in the Amendment. The Amendment request includes a Pipeline Maintenance Station ("PLM") at Hill City that is required to be constructed by the PUC route permit. These installations are areas of trench or other construction excavations where Enbridge anticipates construction dewatering to be necessary; the initial Permit authorization denoted by the wording of original estimate followed by requested Amendment revised estimate volume are listed below. *See* Revised Amendment Request Memo, May 12, 2021, Table 5.

- Installation #1: Pipeline trench from Minnesota/North Dakota border to Donaldson pump station, Kittson County (12.6 miles) – original estimate: 1,843,296/revised estimate: 31,448 gallons
- Installation #2: Donaldson pump station, Kittson County (0.10 miles)– original estimate:10,000,000/revised estimate: 829,726 gallons
- Installation #3: Pipeline trench from Donaldson pump station to Viking pump station, Kittson & Marshall Counties (33.6 miles) – original estimate: 6,098,000/revised estimate:

1,466,134 gallons

- Installation #4: Viking pump station, Marshall County (0.10 miles) – original estimate: 21,000,000 ;revised estimate: 870,179 gallons
- Installation #5: Pipeline trench from Viking pump station to Plummer pump station, Marshall, Pennington & Red Lake Counties (28.8 miles) – original estimate: 12,541,134/revised estimate: 3,667,555 gallons
- Installation #6: Plummer pump station, Red Lake County (0.10 miles) – original estimate: 10,000,000/revised estimate: 1,065,538 gallons
- Installation #7: Pipeline trench from Plummer pump station to end of Construction Spread 1, Red Lake and Polk Counties, (19.1 miles) – original estimate: 27,557,933/revised estimate: 5,475,038 gallons
- Installation #8: Pipeline trench from end of Construction Spread 1 to Clearbrook Terminal, Polk & Clearwater Counties, (13.1 miles) – original estimate: 5,733,794/revised estimate: 9,063,781 gallons
- Installation #9: Clearbrook pump station, Clearwater County (0.10 miles) – original estimate: 15,000,000/revised estimate 24,856,814 gallons
- Installation #10: Pipeline trench from Clearbrook pump station to Hubbard County line, Clearwater County (36.4 miles) – original estimate: 22,876,623/revised estimate: 784,197,013 gallons
- Installation #11: Pipeline trench from Hubbard County line to Two Inlets pump station, Hubbard County (13.3 miles) – original estimate: 7,572,080 /revised estimate: 34,416,969 gallons
- Installation #12: Two Inlets pump station, Hubbard County (0.10 miles) – original estimate: 10,000,000/revised estimate: 896,473 gallons
- Installation #13: Pipeline trench from Two Inlets pump station to end of Construction Spread 2, Hubbard County (9.0 miles) – original estimate: 8,974,616 /revised estimate: 42,203,185 gallons
- Installation #14:Pipeline trench from end of Construction Spread 2 to Backus pump station, Hubbard, Cass & Wadena Counties (41.5 miles) – original estimate: 23,921,037 /revised estimate: 2,837,033,847 gallons
- Installation #15: Backus pump station, Cass County (0.10 miles) – original estimate: 45,000,000 /revised estimate: 44,965,514 gallons
- Installation #16: Pipeline trench from Backus pump station to end of Construction Spread 3, Cass & Crow Wing Counties (31.3 miles) – original estimate: 19,251,396 /revised estimate: 244,752,992 gallons
- Installation #17: Pipeline trench from end of Construction Spread 3 to Swatara pump station, Cass & Aitkin Counties (6.9 miles) – original estimate: 11,475,494 /revised estimate: 3,570,484 gallons
- Installation #18: Swatara pump station, Aitkin County (0.10 miles) – original estimate: 30,000,000 /revised estimate: 4,077,316 gallons

- Installation #19: Pipeline trench from Swatara pump station to end of Construction Spread 4, Aitkin & St. Louis Counties (37.5 miles) – original estimate: 105,766,839 /revised estimate: 128,663,927 gallons
- Installation #20: Pipeline trench from end of Construction Spread 4 to North Gowan pump station, St. Louis County (9.6 miles) – original estimate: 38,895,327 /revised estimate: 230,024,353 gallons
- Installation #21: North Gowan pump station, St. Louis County (0.10 miles) – briginal estimate: 21,000,000 /revised estimate: 1,685,052 gallons
- Installation #22: Pipeline trench from North Gowan pump station to Minnesota/Wisconsin border, St. Louis & Carlton Counties (34.1 miles) – original estimate: 56,033,241 /revised estimate: 577,093,383 gallons
- Installation #23: Hill City PLM Station, Aitkin County - 1,861,846 gallons

8. Enbridge proposes to reuse water from construction dewatering for dust suppression and for invasive species control under Enbridge's Invasive and Noxious Species Management Plan, which is part of the EPP.

9. The total approved appropriation request permitted on December 8, 2020 is 510.5 million gallons of groundwater per year for construction dewatering activities associated with the pipeline construction. The appropriation Amendment requests 4,982,768,568 gallons of groundwater, this request is 4,472,227,758 gallons more than was approved in the original permit. Of this amount 1,861,846 gallons is for construction dewatering at one PLM station and 79,246,612 gallons of groundwater for construction dewatering at eight pump station facilities. The approved pumping rate for the construction dewatering spreads is up to 800 gallons per minute (range 400 gpm to 800 gpm); and the approved pumping rate at other locations using well point systems such as road bores, utility crossings, and valve excavations is 1,500 gallons per minute. Water removed from the construction trench will not be directly discharged to a surface water. Water will be discharged from the construction trench into a geotextile fabric and/or filter bag and then out into a well vegetated upland area in accordance with the EPP, unless in the case of pump stations, where the water will be discharged into an on-site storm water pond. In accordance with the EPP, if the storm water pond is not prepared at the time of construction, the pump station discharges will be released into a geotextile fabric and/or filter bag surrounded by a straw bale or hay bale structure and releasedinto a well-vegetated upland area in accordance to the EPP.

10. Minn. Stat. § 103G.301, subd. 6 and Minn. R. 6115.0660, subp. 3(D) require an applicant to serve copies of the application and supporting material on the mayor of the city, secretary of the board of supervisors of the soil and water conservation district, or the secretary of the board of managers of the watershed district if the proposed project is within or affects a watershed district or soil and water conservation district or a city. This requirement was waived because MPARS, the DNR online permitting and reporting system, automatically sends electronic

notification and relevant documents to the appropriate entities during the application and evaluation process.

11. The Amendment proposes an appropriation of up to 4,982,768,568 gallons of groundwater to dewater the construction trench along the entire pipeline corridor. Dewatering is a process designed to remove accumulated water in trench areas that can interfere with construction. The Amendment proposes to dewater the trench by utilizing portable pumps and well-point systems and discharging the water from the trench into a geotextile filter bag in a well-vegetated upland location or, when uplands are not accessible, into a straw or hay bale dewatering structure. On average, construction dewatering will occur over a period of three days or less, except where special construction techniques will occur, such as tie-ins, road bores, horizontal direction drills ("HDD") or mainline valve installations. For pump stations and PLM facility, the water will be discharged into a storm water pond whenever feasible. If the storm water pond has not been stabilized or is not operable, water will be discharged to a filtering device such as a geotextile filter bag in a well-vegetated upland area. Discharge of water used for buoyancy control would be regulated by a federal NPDES/SDS Permit. Information on site-specific characteristics on discharge and dewatering structures can be found in Attachment B, Section 5.1 of the EPP. *See* Initial Application, Supplemental Information, Section 6.2 and Attachment B, Section 5.1 of the EPP.

B. The Amendment Was Circulated for Comment from Government Entities

12. On March 11, 2021, the DNR requested comments on the Amendment request through MPARS from thirteen local soil and water conservation districts ("SWCD"), three watershed districts, and thirteen counties. In addition, the DNR sent out a request for comments to State and Federal agencies such as the USCOE, Board of Water and Soil Resources (BWSR), MPCA and DNR staff (EWR, Wildlife, Fisheries). *See* Minn. Stat. § 103G.301, subd. 7.

13. No comments were received from the thirteen SWCD's, the three watershed districts, the thirteen counties, the USCOE, or BWSR. Comments were received by MPCA staff and DNR fisheries and will be addressed below.

14. On May 14, 2021 the DNR issued an e-mail notification to Tribal Natural Resource Directors staff to notify them of the proposed Amendment request and an invitation to an informational meeting with a question and answer session on the proposed Amendment. DNR held this meeting on May 27, 2021. Comments and questions were received by tribal staff and summarized below.

15. Minn. R. 6115.0670, subp. 2(A)(8) (directing DNR's consideration of comments in review of applications for water appropriation permits). Comments relevant to the Amendment of Permit No. 2018-3420 are addressed below.

i. Comments by MPCA and DNR Response.

16. Comments were received from the MPCA during the request for comment period from March 11, 2021, to April 10, 2021.

a. MPCA comments addressed how the additional water proposed for appropriation would be managed so that the discharge of that water would not create adverse impacts to nearby resources. The comments contained three general areas of interest; 1) Avoid inundation of small isolated depressional wetlands and other sensitive waters. 2) There have been some instances during project dewatering activities that resulted in failure of dewatering treatment systems. What is being done differently to prevent these failures in the future given the large increase in water appropriated? 3) Consider revisions to the Stormwater Pollution Prevention Plan (SWPPP) to commit to additional perimeter control on discharge locations that have the potential to discharge to surface water.
b. In response to the MPCA comment on avoiding inundation of small isolated wetlands Enbridge provided a GIS shapefile showing the locations of the dewatering structures and efforts to avoid those wetlands. DNR met with Enbridge and MPCA to discuss this effort and made additional recommendations for additional analysis and efforts to avoid impacting these wetlands. Enbridge provided a June 3, 2021 letter with the subject "Supplemental Information for an Individual Water Appropriation Permit Amendment for Construction Dewatering Reference No. 2018-3420" that describes the effort and process of siting construction dewatering structures to address this issue.
c. In response to preventing failure of dewatering structures Enbridge has implemented additional training for construction contractors, clarified continuous monitoring requirements and additional documentation of this requirement.
d. Enbridge revised the SWPPP (Revision 4 dated May 28, 2021) that is required as part of the MPCA construction stormwater permit that commits to the additional perimeter controls for those areas where discharged water could reach surface water.

ii. Comments from May 27, 2021 meeting with Tribal Natural Resource Staff and DNR Response.

17. Comments were received during DNR informational question and answer session with Tribal Resource Staff May 27, 2021.

a. Tribal Natural Resource Staff asked about the infiltration rates in the areas where water will be discharged. ***DNR Response:*** DNR asked MPCA staff about the infiltration rates as it relates to their stormwater discharge permit and MPCA provided a response indicating that there was not an analysis conducted on discharge infiltration rates, additionally the MPCA included a description of permit requirements that discharges shall not create

naissance conditions. MPCA also required the SWPP to be revised to address the increased discharges and to require additional parameter controls; avoidance of isolated depressional wetland areas; and the company provided the DNR a memo addressing MPCA concerns.

b. Tribal Natural Resource Directors asked for a copy of the Environmental Impact Statement to ensure that it is in compliance with 40 CFR 1508.1, because the proposed Amendment to the permit is a significant difference in comparison to the original permit. ***DNR Response:*** DNR provided a link to the Environmental Impact Statement found on the PUC website; based on DNR review of the document the proposed Amendment request is not out of compliance with the document.

c. Tribal Natural Resource Directors asked for a copy of a pipeline spread map in order to have a better understanding of the areas of increased water appropriations in relation to tribal lands. ***DNR Response***: DNR provided the current spread map that the company has previously provided.

iii. Internal Review Comments and DNR Considerations.

18. As part of the DNR review of the Amendment, the following topics were identified as issues that needed to be addressed.

a. Groundwater appropriations for dewatering will be from surficial aquifers; amended volume is significant and infiltration BMPs must be robust; concerns for cumulative effects of moving this volume of water. ***DNR consideration:*** Enbridge is required to monitor all discharges under relevant MPCA permits and the EPP. All water appropriated will be groundwater. Except for the reuse activities approved herein, all groundwater will be discharged at well-vegetated upland locations or on-site storm water ponds at pumping stations. Enbridge will maintain logs of the daily water volume use totals for each water source and will provide logs to the DNR. The volumes will be recorded using a timing device in the trenches and flow meters at pump stations as per a condition of the Permit. Per the Environmental Monitor Control Plan (EMCP), Enbridge and the relevant agencies will have environmental inspectors on site to monitor all construction dewatering activities. The inspectors will inspect the work areas and ensure that all permit conditions and activities listed in the relevant plans are being followed. All disturbed areas along the dewatering locations and discharge locations will be reseeded if needed according to Appendix C of the EPP. Final restoration and monitoring activities would occur until final stabilization is achieved at each construction dewatering site, as regulated by the construction stormwater general permit and Revised May 2021 SWPPP, approved by MPCA.

III. ANALYSIS OF STATUTORY AND REGULATORY REQUIREMENTS

19. The purpose of Minnesota Rules 6115.0600 to 6115.0810 is to provide for the orderly and consistent review of water appropriation permits in order to conserve and utilize the water resources of the state in the public interest. *See also* Minn. Stat. § 103G.101, § 103G.255. In the application of these parts, DNR is guided by the policies and requirements declared in Minnesota Statutes, chapter 103G.

A. Required Content of Application

20. All water appropriation permit applications must provide the information identified in Minn. Stat. § 103G.301, subd. 1 and Minn. R. 6115.0660. Unless otherwise waived by the DNR, applications for the appropriation of groundwater must include the information required by Minn. Stat. § 103G.287, subd. 1(a).

21. The initial application materials contains maps, plans, and the Amendment materials provide specifications for changes from the initial application describing the proposed appropriation of waters, as required by Minn. Stat. § 103G.301, subd. 1(a)(1). *See id*. § 103G.301, subd. 1(a).

22. The Amendment details the appropriations and changes to be made along with waters of the state affected by the proposed appropriations. *See* Minn. Stat. § 103G.301, subd. 1(b). Dewatering of the construction trench is needed to allow for safe working conditions and safe installation of the pipes. Open trenches can fill will water from surficial groundwater and/or precipitation. Dewatering of the trench is not anticipated to change the water and land resources as the water removed from the trench will be allowed to infiltrate into the surrounding groundwater. Unavoidable detrimental effects of the dewatering are minimal as the water will be allowed to infiltrate back into the groundwater. There are no alternatives to dewatering the trench because not dewatering would result in a major safety issue. Enbridge will employ conservation measures such as discharging water into a filtration bag to lessen sediment flowing out on to the ground surface and minimizing the amount of water pumped from the trenches to only that needed to complete the pipeline installation.

23. Enbridge properly submitted an Amendment request to increase appropriation volumes and included an additional installation for the appropriation of groundwater for trench construction dewatering and construction of facilities as part of the mainline construction. All 23 water appropriation locations for construction dewatering will be considered under the Permit. *See* Minn. R. 6115.0660, subp. 1.

24. Though Enbridge did not submit separate applications for each aquifer from which groundwater is proposed to be appropriated, Enbridge complied with Minn. R. 6115.0660, subp. 1 by submitting all information for each of the 23 water appropriation locations that would be required in

separate applications. All 23 water appropriation locations are requested under the Amendment and any decision on this Amendment will address all 23 locations. *See* Minn. R. 6115.0660, subp. 1.

25. As required by Minn. R. 6115.0660, subp. 2., the applicant has demonstrated evidence of ownership or a license to use the land overlying the groundwater source from which water will be appropriated. The initial application states that Enbridge will obtain landowner approval for water appropriation activities within the construction workspace as part of the landowner easement negotiations process prior to construction and prior to a decision by MNDNR on the application for a License to Cross Public lands. As of the October 2020 submittal of the initial application, 100% of private landowners had completed the easement negotiations with Enbridge. Enbridge submitted an affidavit certifying that it has ownership or control of, or a license to use, the land overlaying the groundwater source or abutting the surface water sources from which water will be appropriated, as required by Minn. R. 6115.0660.

26. The Amendment was completed on water appropriation application forms through MPARS. Minn. R. 6115.0660, subp. 3(A). Enbridge has paid all applicable fees associated with the Amendment. Minn. Stat. § 103G.301, subd. 2; Minn. R. 6115.0060, subp. 1, Minn. R. 6115.0660, subp. 3(B); *see also* Minn. Stat. § 103G.315, subd. 12. The initial application contains aerial photographs, maps, and other descriptive data sufficient to show the location of area of proposed water use, the location of the proposed points of appropriations, the outline of the property owned or controlled by Enbridge in proximity to the areas of use. *See* Minn. R. 6115.0660, subp. 3(C)(1)-(3). Although the appropriation is for groundwater, the construction dewatering will be taking the surficial groundwater from the trench or shallow dewatering from surficial aquifers via well point installations. It is not for deeper water appropriations. Thus Minn. R. 6115.0660 subp. 3(C)(4) is waived.

27. As required by Minn. Stat. § 103G.287, subd. 1(a)(1), (4) and Minn. R. 6115.0660, subp. 3(H), the initial application materials and Amendment does not contain detailed information regarding the hydrogeology and hydrology or hydrologic studies of the aquifers that will form the source of water for the requested appropriation. The project did not provide aquifer testing or test hole logs as the project is not long term and is not appropriating from deeper aquifers. All water being removed is from the trench during the construction of the pipeline is surficial water (8 feet deep) or slightly deeper from shallow well points. The DNR waived the requirements of this statute and rule as the water appropriations will be from surficial aquifers and will be temporary in time and will have limited impacts to hydrology. *See* Minn. Stat. § 103G.287, subd. 1(5)(b).

28. As required by Minn. Stat. § 103G.287, subd. 1(a)(2), the initial application details the maximum daily, seasonal, and annual pumping rates and volumes for the groundwater appropriations requested by Enbridge. The amendment request included revised dewatering estimates based on dewatering activities that occurred under the original authorization. These estimates took into account precipitation and increased water appropriated from well point dewatering systems.

29. As required by Minn. Stat. § 103G.287, subd. 1(a)(3), the initial application submittal on November 8th, 2020 that applies to the Amendment contains information on groundwater reuse, and it is anticipated that no water treatment will be necessary for any proposed reuse of water.

30. As required by Minn. R. 6115.0660, subp. 3(F), the initial application that is also applicable to the Amendment contains details on Enbridge's water management strategy.

31. As outlined above, the Amendment is complete because all necessary and applicable information for evaluation has been provided by Enbridge or is otherwise available to the DNR. Sufficient hydrologic data are available to allow the DNR to adequately determine the effects of the proposed Amendment. *See* Minn. R. 6115.0670, subp. 3(C)(3). The information available to the DNR is adequate to determine whether the proposed appropriation volume and use of water is sustainable and protective of ecosystems, water quality, and the ability of future generations to meet their own needs.

B. Consideration of Factors in Minn. R. 6115.0670, subp. 2(A).

32. Minn. R. 6115.0670, subp. 2(A) details factors that the DNR must consider, if applicable, when considering an application for a water appropriation permit. The DNR's consideration of each of the applicable factors is set forth in greater detail below.

33. Minn. R. 6115.0670, subp. 2(A)(1): This rule requires the DNR to consider "the location and nature of the area involved and the type of appropriation and its impact on the availability, distribution, and condition of water and related land resources in the area involved." The DNR's review of the initial application and the Amendment and all supporting information in the record regarding the proposed location and nature of the area associated with the proposed appropriation shows that the appropriation is unlikely to impact the availability, distribution, and condition of water and related land resources in the area involved. Environmental impacts are not expected from temporary lowering of the water table as the water appropriation is from trench dewatering at eight feet deep and/or shallow well points installed within surficial groundwater aquifers and will only remove water that accumulates in the trench (i.e. precipitation and surficial groundwater). Enbridge is required to record and report all water removed from the trench to the appropriate agencies. All water removed from the trench will be allowed to soak back into the surrounding ground, infiltrating back into the surficial groundwater. Monitoring requirements are related to volumes of water removed from the trench during construction. Enbridge will maintain logs of daily use totals at each water source and will provide logs for periodic reporting as required by applicable agencies.The volume of water pumped will be monitored using a timing device in the construction dewatering trenches and flow meters at pump station facility dewatering locations as approved by condition of the Permit.

Dewatering activities will be conducted as described in the Construction Stormwater general permit and the revised May 2021 SWPPP, approved by MPCA and as described in the June 3, 2021 letter

"Supplemental Information for an Individual Water Appropriation Permit Amendment for Construction Dewatering Reference No. 2018-3420". These activities include continuous on-site monitoring of dewatering activities as well as any other relevant requirement included in the EPP for the project.

34. Minn. R. 6115.0670, subp. 2(A)(2): This rule requires the DNR to consider "the hydrology and hydraulics of the water resources involved and the capability of the resources to sustain the proposed appropriation based on existing and probable future use." The Amendment and supporting information in the record detail the hydrology and hydraulics of the water resources involved. After review, the DNR concludes that the evidence in the record shows the capability of the resources to sustain the proposed appropriations based on existing and probable future use in the area. All water removed from the trench for construction of the pipeline will be taken from surficial aquifers and not deep confined aquifers.

35. Minn. R. 6115.0670, subp. 2(A)(3): This rule requires the DNR to consider "the probable effects on the environment including anticipated changes in the resources, unavoidable detrimental effects, and alternatives to the proposed appropriation." The initial application that is still applicable to the Amendment, details the temporary impacts during the pipeline construction dewatering and alternative options not selected. After review, the DNR concludes that the evidence in the initial application materials in the record shows that the anticipated volume changes identified in the Amendment to the resource will be temporary in nature because dewatering typically occurs in a period of three days or less. The water will be pumped out of the trench and/or shallow surficial groundwater aquifer well points and into a filtering device such as a geotextile filter bag discharging into a well-vegetated upland area or when uplands are not accessible either because of site conditions and/or distance, to a straw or hay bale dewatering structure which will allow infiltration back into the ground near the site or reused if quantities are available. All pump station dewatering will be discharged into a storm water pond located on site or, if one is not on site, discharged into a filtering device such as a geotextile filter bag for eventual discharge into a well-vegetated upland area. PLM station dewatering will be conducted via well points similarly to the pump station facilities. There are no alternatives to construction dewatering. Without construction dewatering, there would be a significant safety issue as working in the wet trench can cause slips, falls, and collapsing of the trench.

36. Minn. R. 6115.0670, subp. 2(A)(4): This rule requires the DNR to consider "the relationship, consistency, and compliance with existing federal, state, and local laws, rules, legal requirements, and water management plans." As detailed herein, activities associated with the Project are subject to oversight under numerous state and federal permitting programs. The Permit is conditioned on a requirement that Enbridge obtain and maintain all additional permitting requirements imposed by applicable federal, state, or local law. The Permit is further conditioned

upon Enbridge having "all required discharge authorizations from local, state, or federal government units." The DNR did not receive any comments from local, state or federal government units on the proposed water appropriation not detailed above for construction dewatering, but to the best of DNR's knowledge, Enbridge's proposed appropriations are consistent with state, regional, and local water and related land resources management plans. *See* Minn. Stat. § 103G.271, subd. 2.

37. Minn. R. 6115.0670, subp. 2(A)(5): This rule requires the DNR to consider "the public health, safety, and welfare served or impacted by the proposed appropriation." As discussed herein, the proposed groundwater use is sustainable and will not harm ecosystems, degrade water, or reduce water levels beyond the reach of public water supply. The proposed use will only cause temporary impacts in groundwater resources and the initial application referenced in the Amendment document includes measures to minimize physical damage to the ecosystem through the use of BMPs and monitoring provisions.

38. Minn. R. 6115.0670, subp. 2(A)(6): This rule requires the DNR to consider "the quantity, quality, and timing of any waters returned after use and the impact on the receiving waters involved." Any appropriation of water under the Permit is conditioned upon Enbridge having all required discharge authorizations. Discharge quality must meet applicable effluent limits and surface water quality standards, and violations of such requirements are subject to the regulatory jurisdiction of the MPCA. All water removed from the trenches during construction will be allowed to infiltrate back into the surficial groundwater aquifer after discharges into the geotextile filter bag, except for water placed in storm water ponds at pump stations. No water will be transported off site unless it is reused for buoyancy control, dust suppression activities, or decontamination of equipment for invasive and noxious species. Water will be discharged immediately from the trenches and allowed to infiltrate back into the aquifer in the surrounding areas. DNR does not anticipate that the quantity, quality or timing of the waters returned after use (infiltration) will have any impacts on any receiving waters as the company has made efforts to avoid discharges into susceptible wetlands and sensitive water and these discharges will need to comply with the revised SWPPP under the construction stormwater permit and the 401 water quality certification.

39. Minn. R. 6115.0670, subp. 2(A)(7): This rule requires the DNR to consider "the efficiency of use and intended application of water conservation practices." The initial application materials are applicable to the Amendment and explains that, subject to DNR approval, Enbridge may reuse water pumped from the pipeline trench and pump station facilities to support fugitive dust suppression activities as noted in the application and additionally states that the water may be reused to support decontamination of equipment, as described in Enbridge's Invasive and Noxious Species Management Plan, which was included as Appendix B of Enbridge's EPP. The initial application notes that water may also be reused for buoyancy control purposes**.** If the water is not reused, it will be discharged per the BMP's in the EPP.

40. Minn. R. 6115.0670, subp. 2(A)(8): This rule requires the DNR to consider "the comments of local and regional units of government, federal, and state agencies, private persons, and other affected or interested parties." DNR did not receive any comments from local, state or federal agencies on the Amendment with exception of the MPCA. No comments received from private persons directly relate to the Amendment. The MPCA, DNR comments and comments from tribal governments are discussed above.

41. Minn. R. 6115.0670, subp. 2(A)(9): This rule is inapplicable to the DNR's consideration of the Amendment because Enbridge does not propose any diversion of any waters to any place outside of the state.

42. Minn. R. 6115.0670, subp. 2(A)(10): This rule requires the DNR to consider "the economic benefits of the proposed appropriation based on supporting data when supplied by the applicant." Enbridge did not provide any economic benefit data in the initial application or Amendment, but the FEIS does address this issue. The DNR relies on this analysis in its consideration of the initial application and Amendment.

43. As outlined above, DNR has considered each of the factors identified in Minn. R. 6115.0670, subp. 2(A).

C. Consideration of the Proposed Appropriation Under Minn. R. 6115.0670, subp.2(D).

44. Minn. R. 6115.0670, subp. 2(D) details factors that the DNR must consider, if applicable, when considering an application for a water appropriation permit for appropriation of groundwater. The DNR's consideration of each of the applicable factors is set forth in greater detail below.

45. Minn. R. 6115.0670, subps. 2(D)(1), (2), (4), and (5): These rules require the DNR to consider the "type and thickness of the aquifer," "the subsurface area of the aquifer," "existing water levels in the aquifer and projected water levels due to the proposed appropriation," and "other hydrologic and hydraulic characteristics of the aquifer involved." The Amendment proposes to use portable pumps at a depth of eight feet deep, and up to ten feet deep for well points. It is proposed that the groundwater will be pumped from the surficial aquifer at rates up to 800 gallons per minute on the trench, up to 1,500 gallons per minute at specialized locations such as valve sites. DNR has considered the above factors in evaluating the proposed appropriation and determined that water appropriated at the 23 sites is surficial water and the excavation where the water appropriation will be occurring is not deep enough to where it would penetrate confined

aquifers. The proposed appropriation will not have long-term effects on water levels in the surficial aquifer.

46. Minn. R. 6115.0670, subps. 2(D)(3) and (6): These rules require the DNR to consider the "area of influence of the proposed well(s)" and "probable interference with neighboring wells." Based on the information provided in the Amendment and initial application materials, the depth of the trench is eight feet deep and the pumping will be appropriating surficial groundwater. There is expected to be no impact to wells along the pipeline corridor as the proposed depth of the trench should not impact any confined aquifers, where domestic and municipal water supplies are usually located. Most wells are set deeper than the proposed dewatering trench and the pipeline corridor is generally not located close to communities or private homes.

47. As outlined above, the DNR has considered each of the factors identified in Minn. R. 6115.0670, subp. 2(D).

D. Consideration of Additional Requirements and Conditions For Dewatering Under Minn. R. 6115.0710.

48. Minn. R. 6115.0710 details additional requirements and conditions for water appropriation permits for dewatering, i.e., for the purpose of removing excess water. *See* Minn. R. 6115.0670, subp. 5. The Amendment involves dewatering.

49. An applicant for an appropriation permit involving dewatering "must show there is a reasonable necessity for such dewatering and the proposal is practical." Minn. R. 6115.0710(A). Enbridge has demonstrated that there is a need to dewater the trench for pipeline construction to help facilitate safe working conditions for Enbridge and reduce the risk for impacts that could rupture the pipeline such as rocks. Dewatering of the trench will help strengthen the trench walls and prevent the risk for wall slumping/failures.

50. An applicant for an appropriation permit involving dewatering "must show that the excess water can be discharged without adversely affecting the public interest in the receiving waters, and that the carrying capacity of the outlet to which the waters are discharged is adequate." Minn. R. 6115.0710(B). Enbridge has provided diagrams related to the discharge for the trench dewatering. The discharge locations associated with the pipeline trench dewatering are within the same general area as the appropriation locations. There will be no direct discharges to surface waters from the groundwater dewatering activities with the exception of water that is reused for buoyancy control. The initial application materials applicable to this Amendment states that all

groundwater will be infiltrated back to the groundwater source except for any water that is reused. See Section 5.1 of the EPP and Attachment C and D from the Initial Application, Supplemental Information for the site- specific information on discharge and dewatering locations. Dewatering activities will be conducted as described in the Construction Stormwater general permit and the revised May 2021 SWPPP, approved by MPCA and as described in the June 3, 2021 letter "Supplemental Information for an Individual Water Appropriation Permit Amendment for Construction Dewatering Reference No. 2018-3420". These activities include continuous on-site monitoring of dewatering activities.

51. Enbridge's proposed dewatering under the Amendment, is subject to the conditions therein, is not prohibited by any existing law. *See* Minn. R. 6115.0710(C).

52. As outlined above, the DNR has considered each of the factors identified in Minn. R. 6115.0710.

E. Consideration of Factors in Minn. R. 6115.0750 and 6115.0770.

53. The Amendment is for a temporary, one-time appropriation of groundwater, for not more than 12 months. *See* Minn. R. 6115.0750, subp. 2.

54. Enbridge will measure and keep monthly and annual records of the quantity of water used or appropriated at the point of taking for each installation under the Permit. *See* Minn. R. 6115.0750, subp. 3(A).

55. Enbridge will instrument each installation for appropriating water with a flow meter or timing device on trench pumps and flow meters at well points and pump stations to measure the quantity of water appropriated within ten percent of the actual amount of withdrawal. *See* Minn. R. 6115.0750, subp. 3(B).

56. Enbridge will be required to monitor water volumes at each spread. *See* Minn. R. 6115.0750, subp. 3(C).

57. Enbridge will report water use based on the calendar year by February 15 of the following year on forms provided by the commissioner (through MPARS) as well as pay the water appropriation use fees. *See* Minn. R. 6115.0750, subp. 4.

58. Enbridge is requesting an amendment to the original permit asking for an increase in water volumes for the construction dewatering. The request is a major modification (increase) in water withdrawn. The request came in on the appropriate forms (via MPARs) and has been reviewed as a new application using the original information provided by the company and new information submitted during the amendment review. *See* Minn. R. 6115.0750, subp. 5.

59. Enbridge has provided a detailed description for its proposed water use indicating that water will only be utilized as needed, monitoring will be conducted to prevent negative impacts to aquatic organisms and the water appropriated will be allowed to infiltrate following its discharge. This demonstrates the best available means and practices for assuring wise use and development of waters of the state in the most practical and feasible manner possible to promote the efficient use of waters. *See* Minn. R. 6115.0770.

F. The Proposed Appropriation Satisfies Minn. Stat. § 103G.287

60. Minn. Stat. § 103G.287, subd. 2. provides that "groundwater appropriations that will have negative impacts to surface waters are subject to the applicable provisions in section 103G.285." The DNR has analyzed the potential impacts of the proposed groundwater appropriation on surface waters. Negative impacts to surface waters resulting from the proposed appropriation are not anticipated. The water removed will be surficial groundwater from the trench. All water removed from the trench will be allowed to infiltrate back into the ground or be reused in other activities such as push-pull pipeline buoyancy, dust suppression or decontamination for invasive species. Impacts will be temporary in nature.

61. Under Minn. Stat. § 103G.287, subd. 3, the DNR is authorized to establish water appropriation limits to protect groundwater resources. In establishing such limits, the DNR must "consider the sustainability of the groundwater resource, including the current and projected water levels, water quality, whether the use protects ecosystems, and the ability of future generations to meet their own needs." DNR has concluded that protection limits are not necessary because the Project only involves a temporary appropriation from surficial and not confined aquifers. Ecosystems will be protected as Enbridge will only be temporarily pumping the water that fills in the construction trench, water will be discharged into a nearby well vegetated location and allowed to infiltrate back into the groundwater.

62. Under Minn. Stat. § 103G.287, subd. 4(a), the commissioner may designate groundwater management areas and limit total annual water appropriations and uses within a designated area to ensure sustainable use of groundwater that protects ecosystems, water quality, and the ability of future generations to meet their own needs. Water appropriations and uses within a designated management area must be consistent with a groundwater management area plan approved by the commissioner that addresses water conservation requirements and water allocation priorities established in section 103G.261. The Amendment will be dewatering the construction trench through the Straight River Groundwater Management area. The Straight River Groundwater Management Area Plan limits appropriations from confined aquifers; the Amendment only proposes appropriations from surficial aquifers and is therefore consistent with the plan.

63. Under Minn. Stat. § 103G.287, subd. 5, the DNR "may issue water-use permits for appropriation from groundwater only if the [DNR] determines that the groundwater use is sustainable to supply the needs of future generations and the proposed use will not harm ecosystems, degrade water, or reduce water levels beyond the reach of public water supply and private domestic wells . . ." Based upon the Amendment and initial application materials, DNR has determined that the proposed groundwater appropriations are sustainable to supply the needs of future generations. The appropriation of groundwater, under the conditions set forth in the Amendment and detailed in Section 5.1 of the EPP and Attachment C and D from the Initial Application, the revised May 2021 SWPPP, approved by MPCA and as described in the June 3, 2021 letter "Supplemental Information for an Individual Water Appropriation Permit Amendment for Construction Dewatering Reference No. 2018-3420" will not harm ecosystems, degrade water, or reduce water levels beyond the reach of public water supplies and private domestic wells as the appropriation will be temporary and will only remove surficial groundwater from a small area for the construction of the pipeline and pump station facilities. Further, except for water that is reused, water will be returned (infiltrated) back to the groundwater source.

64. As outlined above, the DNR has reviewed the Amendment for compliance with Minn. Stat. § 103G.287 and determines that the Permit satisfies the applicable statutory requirements.

G. The Proposed Appropriation Satisfies Minn. Stat. § 103G.293.

65. Under Minn. Stat. § 103G.293, water appropriation permits "must provide conditions on water appropriation consistent with the drought response plan" established by the DNR. The Permit contains a condition requiring compliance with the statewide drought plan.

H. The Proposed Appropriation Satisfies Minn. R. 6115.0670, subp. 3.

66. Issuing a permit on the proposed appropriation would not violate any of the limits imposed under Minn. R. 6115.0670, subp. 3(A). Subpart 3(A)(1) is inapplicable because the proposed appropriation does not involve an out-of-state diversion of waters. As detailed herein, the quantity of available waters of the state in the area involved are adequate to provide the amounts of water proposed to be appropriated. Minn. R. 6115.0670, subp. 3(A)(2). As detailed herein, and based upon the Amendment and initial application materials, the proposed appropriation is reasonable, practical, and will adequately protect public safety and promote the public welfare. Minn. R. 6115.0670, subp. 3(A)(3). The Amendment is consistent with state, regional, and local water and related land resources management plans. Minn. R. 6115.0670, subp. 3(A)(4). There is no unresolved conflict between competing users for the waters involved. Minn. R. 6115.0670, subp. 3(A)(5).

67. Minn. R. 6115.0670, subp. 3(B) applies to approvals of a "surface water appropriation application." This subpart is inapplicable as the proposed appropriation is for groundwater only.

68. As required by Minn. R. 6115.0670, subp. 3(C)(1), the amounts and timing of the proposed appropriation is limited to the safe yield of the aquifer to the maximum extent feasible and practical. This subpart is inapplicable as the proposed appropriation is from surficial groundwater and not confined aquifers.

69. After the analysis and review of the record detailed herein, the DNR has not found substantial evidence establishing a direct relationship of ground and surface waters exists such that the appropriation would have an adverse impact on surface waters through reduction offlows under Minn. R. 6115.0670, subp. 3(C)(2).

70. After the analysis and review of the record detailed herein, the DNR concludes that sufficient hydrologic data are available to allow the DNR to determine the effects of the proposed appropriation in accordance with Minn. R. 6155.0670, subp. 3(C)(3).

71. As outlined above, DNR has considered the Amendment under Minn. R. 6115.0670, subp. 3 and approval of the Amendment satisfies the applicable regulatory requirements.

I. The Proposed Appropriation Satisfies Minn. Stat. § 103G.223.

72. Minnesota Statutes § 103G.223 only permits water appropriations that cause temporary reductions in groundwater resources affecting a calcareous fen:

> (a) Calcareous fens, as identified by the commissioner by written order published in the State Register, may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, unless the commissioner, under an approved management plan, decides some alteration is necessary or as provided in paragraph (b). Identifications made by the commissioner are not subject to the rulemaking provisions of chapter 14 and section 14.386 does not apply.
>
> (b) The commissioner may allow water appropriations that result in temporary reductions in groundwater resources on a seasonal basis under an approved calcareous fen management plan.

Minn. Stat. § 103G.223.

73. In a separate findings of fact, conclusions and order, DNR has approved Enbridge's request for no effect concurrence for several calcareous fens located near the pipeline route, including the Chester 24 calcareous fen. The approved CFMP includes a condition requiring monitoring of water levels in piezometers near the Chester 24 fen. DNR staff received a monitoring report on May 26, 2021. The initial monitoring report indicated that the construction and appropriation activity has not has a long-term impact on the Fen; water levels are recovering with spring conditions and majority of the pipeline has been constructed through this area. DNR staff are confident that the additional requested volume in the Amendment, duration and location of the dewatering will not impact the Chester 24 fen, but will continue to obtain additional information to inform the groundwater model for the area and any future decisions. DNR has not set a protective groundwater elevation that would require Enbridge to cease dewatering. If monitoring indicates that water levels have not returned to pre- construction levels as a result of the Project, a Calcareous Fen Management Plan will be required for the Chester 24 fen that includes additional monitoring and required corrective procedures.
The Permit is consistent with Minn. Stat. § 103G.223 because DNR does not anticipate any reduction in groundwater resources at the Chester 24 fen, and in the unlikely event that impacts would occur, any reduction in groundwater resources would be temporary.

J. The Proposed Appropriation Satisfies Minn. Stat. § 103G.801.

74. All appropriations located with the Great Lakes -- St. Lawrence River basin will comply the Great Lakes – St. Lawrence River Basin Water Resources Compact codified at Minn. Stat. § 103G.801. The Permit requires that all water from water appropriation installation locations located within the Great Lakes – St. Lawrence River basin must be limited for use within the watershed and allowed to infiltrate into the ground surface. *See* Minn. Stat. § 103G.801.

K. The Proposed Appropriation Satisfies the Prohibition on State Actions Affectingthe Environment.

75. The Minnesota Environmental Policy Act ("MEPA") prohibits State actions that cause pollution, impairment or destruction:

> No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution, impairment, or destruction of air, water, land, or other natural resources located within the state, so long as there is a feasible and prudent alternative consistent with the reasonable

> requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, and destruction.

Minn. Stat. § 116D.04, subd. 6.

76. "Pollution, impairment or destruction" is defined by Minnesota law as:

> conduct . . . which violates, or is likely to violate, any environmental quality standard, limitation, rule, order, license, stipulation agreement, or permit of the state or any instrumentality, agency, or political subdivision thereof which was issued prior to the date the alleged violation occurred or is likely to occur or any conduct which materially adversely affects or is likely to materially adversely affectthe environment.

Minn. Stat. § 116B.02, subd. 5.

77. In reviewing the administrative record, including the FEIS, the Amendment and the applicable initial application, materials the DNR considered the quality and severity of any adverse effects of the Project on groundwater, including any potential long-term adverse effects to that resource, the types of resource at issue, the potential significant consequential effects of the proposed appropriation on other natural resources, and the direct and consequential impacts of the proposed appropriation on the environment.

78. As detailed herein, the proposed appropriation under the Amendment, subject tothe conditions of the water appropriation permit, will comply with all applicable state environmental protection standards, including the requirements of Minnesota Statutes chapter 103G and Minnesota Rules chapter 6115 governing water appropriations.

79. The potential effects on natural resources resulting from the Project and project alternatives were comprehensively analyzed within the Amendment and initial application materials. Enbridge will monitor and report the volume of water removed along the pipeline corridor to the DNR as part of the Permit.

80. The Project will be subject to other state and federal requirements and must comply with all applicable environmental protection standards, including the requirements of thepermit and the requirements of an NPDES/SDS permit under the regulatory authority of the MPCA. Wetland mitigation for unavoidable wetland impacts will be required under an approved wetland replacement plan and under a federal wetlands permit issued by the USCOE. Wetland monitoring will be required

under these state and federal wetlands requirements. Water quality monitoring for discharges will be required by the MPCA.

81. Compliance with these regulatory requirements serves to ensure that the proposed appropriation of water under the Permit will not result in pollution, impairment, or destruction of natural resources.

82. As outlined above, the DNR has considered the proposed appropriation under the Permit in accordance with MEPA, and determines that the proposed appropriation satisfies the applicable statutory requirements.

Based upon the above Findings of Fact, the DNR makes the following:

CONCLUSIONS

1. In order to "conserve and use water resources of the state in the best interests of its people and to promote the public health, safety, and welfare," it is the regulatory policy of theState to "control the appropriation and use of waters of the state." Minn. Stat. § 103A.201, subd.1The Legislature delegated the DNR the authority to develop a water resources conservation program for the state that includes the "conservation, allocation, and development of waters of the state for the best interests of the people." Minn. Stat. § 103G.101, subd. 1. Similarly, the Legislature directed the DNR to adopt rules for the allocation of waters based on statutory waterallocation priorities. Minn. Stat. § 103G.261.

2. The DNR has the authority to issue water appropriation permits in accordance with its general authority to administer "the use, allocation, and control of waters of the state."*See* Minn. Stat. § 103G.255(1).

3. The DNR has the discretion to waive a hearing on a water appropriation permit application and order a permit to be issued or denied without a hearing. Minn. Stat. § 103G.311, subd. 4.

4. Minn. Stat. § 103G.315, subd. 2 requires that the DNR make findings of fact onissues necessary for determination of the application considered. Orders by the DNR must be based upon findings of fact made on substantial evidence. *Id*.

5. Enbridge's proposed appropriation of waters of the state requires a waterappropriation permit. Minn. Stat. § 103G.271, subd. 1, 4; Minn. R. 6115.0620.

6. The DNR has the authority to impose conditions on any water appropriation permit it issues. Minn. Stat. § 103G.315, subd. 1; Minn. R. 6115.0670, subp. 3.

7. If the DNR concludes that the plans of an applicant for a water appropriation permit are reasonable, practical, and will adequately protect public safety and promote the public welfare, then the DNR must grant the permit. Minn. Stat. § 103G.315, subd. 3.

8. The Amendment is complete and Enbridge has provided all information required for review under applicable statutes and rules. *See* Minn. Stat. §§ 103G.287, subd. 1(a), 103G.301, subd. 1, Minn. R. 6115.0660.

9. Any application information required under Minn. Stat. § 103G.287, subd. 1. not discussed herein is waived on the grounds that the information provided with the Amendment and applicable details discussed in the initial application materials is adequate to determine whether the proposed appropriation of water is sustainable and will protect ecosystems, water quality, and the ability of future generations to meet their own needs.*See* Minn. Stat. § 103G.287, subd. 1(b).

10. Any information required by Minn. R. 6115.0660, .0670 and .0710 not discussedherein is waived as unnecessary or inapplicable. *See* Minn. R. 6115.0660, subp. 4; Minn. R. 6115.0670, subp. 4.

11. As detailed in the factual findings above, the DNR has reviewed and analyzed therecord before the agency in connection with its consideration of applicable factors. *See* Minn. R.6115.0670, subp. 2.

12. As detailed herein, Enbridge's proposed groundwater use is sustainable to supply the needs of future generations and is subject to all applicable permitting and regulatory requirements. When appropriated in accordance with these requirements, and in compliance with the conditions of the permit, the proposed appropriations will not harm ecosystems, degrade water, or reduce water levels beyond the reach of public water supply and private domestic wells. *See* Minn. Stat. § 103G.287, subd. 5.

13. Enbridge's proposed reuse of groundwater to support: (1) buoyancy control in thepush-pull installation process; (2) the fugitive dust suppression activities described in water appropriation permit no. 2018-3421; and (3) the decontamination of equipment described in Enbridge's Invasive and Noxious Species Management Plan is approved.

14. Enbridge has shown that there is a reasonable necessity for dewatering and that its dewatering proposals are practical. Minn. R. 6115.0710(A). The proposed dewatering will be temporary. Enbridge has shown that the excess water can be discharged without adversely affecting the public interest, receiving waters or groundwater. Minn. R. 6115.0710(B). The proposed dewatering, in accordance with the conditions contained therein is not prohibited by any existing law. *See* Minn. R. 6115.0710(C).

15. Enbridge has met its burden of proving by substantial evidence that the proposed project is reasonable, practical, and will adequately protect public safety and promote the public welfare. Minn. Stat. § 103G.315, subds. 3, 6(a).

16. The DNR concludes that the appropriation and use of water under the water appropriation permit, subject to the conditions contained therein, is reasonable, practical, and will adequately protect public safety and promote the public welfare. *See* Minn. R. 6115.0670, subp.3. (A)(3). Accordingly, the Amendment must be granted. *See* Minn. Stat. § 103G.315, subds. 3, 5. The conditions, terms, and reservations included in the Permit are reasonably necessary for the safety and welfare of the people of the state. Minn. Stat. § 103G.315, subd. 6(b).

17. Appropriations under the permit, subject to the terms and conditions therein, will not result in pollution, impairment, or destruction of natural resources. *See* Minn. Stat. § 116B.02, subd. 5.

18. Any Findings of Fact that might properly be termed Conclusions and any Conclusions that might properly be termed Findings of Fact are hereby adopted as such.

Based upon the foregoing Findings of Fact and Conclusions, the DNR now enters the following:

ORDER

1. The DNR hereby waives any contested case hearing on the Amendment pursuant to Minnesota Statutes § 103G.311, subd. 4.

2. Based upon all the files, records, and proceedings in this matter and upon the DNR's Findings of Fact and Conclusions, Water Appropriation Amendment to Permit No. 2018-3420 is hereby issued to Enbridge subject to the conditions set forth in the Permit.

3. The applicant or the applicable municipality, watershed district or soil and water conservation district may file a demand for a hearing on the Amendment in accordance with Minnesota Statute § 103G.311, subd. 5 and Minnesota Rule 6115.0670, subp. 3, within 30 days after mailing or electronic transmission of notice of this Order.

DNR Authorized Signature ***wet or e-signature:***

// /s/ Randall Doneen //
Approved and adopted this 4th day of June 2021

EWR CAR SECTION MANAGER
STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

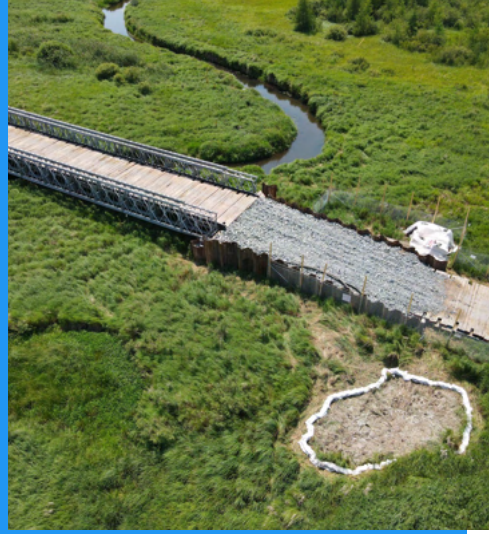
Attachment 2: Drone Records of Frac Outs of Drilling Mud


Enbridge LINE 3
Facts & Footage of Frac-outs & Violations

Presented by
Ron Turney

Media Team Member of Indigenous Environmental Network

Member of the White Earth Nation



Quick RECAP:

Inspection of the July 20th Frac-out on the Mississippi.

- As we walked to the main spill from July 20th, a Sr. Enbridge Official points out 2 previous frac-outs along the easement and that the drill is 60 ft below the river.
- Sr. Enbridge official LIES and says the drill mud is harmless. Farmers love it and makes their crops grow!
- Sr. Enbridge official also states that the release is cleaned up.
- Lower Right image shows the fence they threw sandbags over and the spill in the background.

NOTE THESE DETAILS! AS THIS IS WHAT WE WERE TOLD DURING OUR INSPECTION BY ENBRIDGE AND THE ENVIRONMENTAL MONITOR

Mississippi Frac-outs Timeline & What We Know

START

July 19th 1:40 PM

Daily Mississippi Flyover with frac-out highlighted

This screenshot is taken from my aerial footage, it shows the frac-out drill mud in the marsh 1 day before Enbridge notices and responds.

July 20th 4:00 PM

Rights of the Mississippi Press Conference

This event was along the banks of the Mississippi at the frac-out location.

I was taking pictures and noticed the workers in the background acting strange. I took a few pictures and found out they were reacting to the frac-out.

July 20th Frac-out: Enbridge workers notice spill 1 day later and begin cleanup during a press conference along the banks of the Mississippi.

IMAGE DESCRIPTIONS:

TOP LEFT: DNR Scientist speaks about the Mississippi River, remarks were made about the river's COLD temperature for the time of year and that it'd be caused by the drill going thru the aquifer.

TOP RIGHT: Enbridge worker notices spill and is calling another co-worker over to his location.

BOTTOM LEFT: Enbridge worker sweeping drilling mud into a vacuum line.

BOTTOM RIGHT: Enbridge cleanup crew trying to contain spill with 2 loads of sandbags, vacuum truck and hose.

Enbridge put a page on their website with a statement of frac-outs along with a list of 9 locations. Then it was gone the next day. MPCA also has taken down their tweets and posts that were trying to discredit Water Protectors.

July 21st 8:10 AM

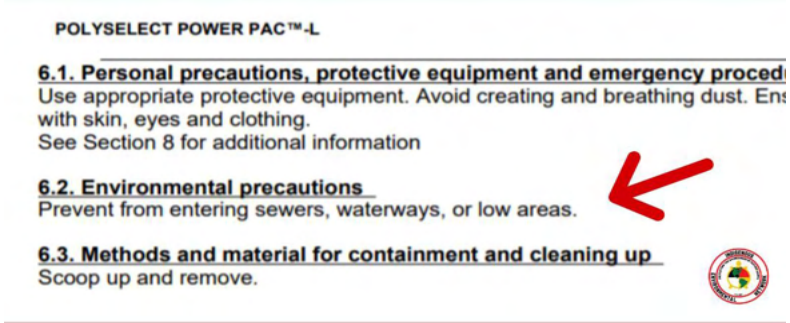
Enbridge issues statement of frac-outs to minimizes the issue, saying it's non-toxic and echoes the Willow River incident.

MPCA tweets and sides with Enbridge and says Water Protectors are spreading misinformation.

July 22nd 11:47 AM

Our sample from the Mississippi frac-out 2 days earlier is confirmed to contain the harmful additive Polyselect POWERPAC-L by Melissa Kuskie of the MPCA by email.

They haven't cleaned it up to specifications! The puddle is still there running off into the river every time it rains. There's also drill mud under the surface 60 ft below the river.



POLYSELECT POWER PAC™-L

6.1. Personal precautions, protective equipment and emergency proced
Use appropriate protective equipment. Avoid creating and breathing dust. Ens
with skin, eyes and clothing.
See Section 8 for additional information

6.2. Environmental precautions
Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up
Scoop up and remove.

July 23rd 8:10 AM

Enbridge takes down their post about frac-outs on their website and we immediately see misinformation ads about the frac-out, on Line 3 PR pages like "Minnesotans for Line 3", etc.

MPCA tweet discrediting Water Protectors disappears from their feed.

MPCA Confirms 'Frac Out' Spill at Fire Light Camp Site Contains Hazardous, Combustible Additive Plus Two Additional Spills

LINE 3 NEWS 2021.07.22 | THURSDAY

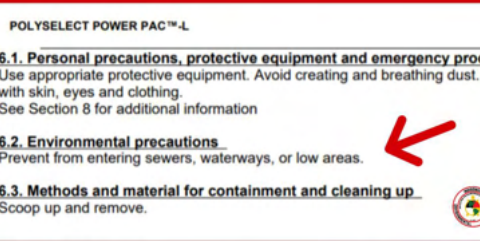
Enbridge claimed that a 'small amount of drilling mud reached the surface' during a horizontal directional drill.

HOWEVER...

Confirmation was received this morning from MPCA that the additive used at the Mississippi River crossing was POLYSELECT POWER PAC™-L, manufactured by Halliburton.

Per Halliburton's Safety Data Sheet, POLYSELECT POWERPAC™-L is 60-100% polysaccharide, 'may form combustible dust concentrations in air,' and presents a risk for 'eye, skin, and respiratory irritation.'

More alaming, the environmental precautions section explicitly states 'prevent from entering sewers, waterways, or low areas.' For clean up, materials are to be scooped up and removed.



Per a Senior Enbridge representative, there are two confirmed ADDITIONAL spills along the easement at the same site. The representative also stated that their drill is located 60 feet below the river.

Does this mean that the POLYSELECT POWER PAC™-L is also 60 feet below the river, in three confirmed spots, and has not been scooped up and removed?

July 22nd: Melissa Kuskie of MPCA confirms our sample contained Haliburtons PolySelect POWERPAC-L additive which is harmful and combustible. The Safety Data Sheet says it should be kept away from waterways and clean up requires SCOOP UP and REMOVAL.

They left a puddle, as you witnessed the previous day on your inspection.

July 30th 5:35 PM

New Frac-Out at Mississippi River - Fourth I've witnessed

The Enbridge workers respond to another frac-out. They use a few sandbags to "plug" hole and cover it back up with the easement wood.

August 3 5:10 PM

Large Chemical Sheen found on tributary behind easement downhill from East Drill pad

This entire area is covered with an oily residue, even in the standing marsh near the tributary.

Large chemical sheen on tributary downhill from drill

These images show the tributary and the chemical sheen. Aerial footage from the other side of the main river, the water is clean and clear of any sheen.

As I've presented there's already 4 confirmed frac-outs at this Mississippi River crossing. 3 of which went unreported!

Now this tributary is full of a chemical and we've been trying to get it tested.

IMAGE DESCRIPTIONS:

TOP LEFT: Tributary full of chemical sheen on top of water.

TOP RIGHT: Image shows small tributary to the east of main river, just downhill from the drill to the top right of the image. Affected area is highlighted.

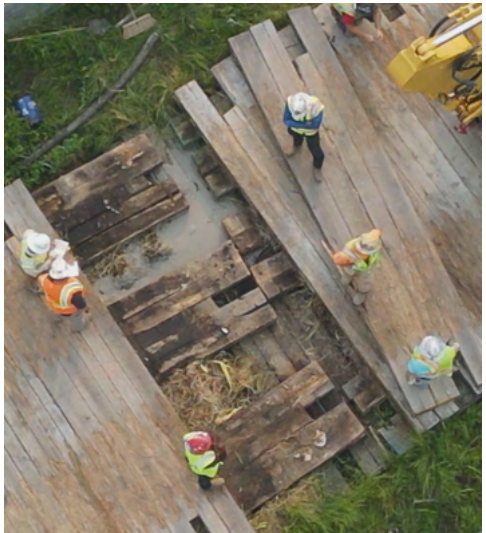
BOTTOM LEFT: Tributary about ½ mile upriver from the bridge, full of chemical sheen leaking into the main river.

BOTTOM RIGHT: Another image of the small tributary full of chemical runoff, possibly from the multiple frac-outs at this location.

Drilling fluid releases during Line 3 construction

Date	HDD Name (MP)	Volume of Release	Distance to Nearest Surface Water
6/8/21	Snake River (MP 843.2)	20 gallons	560 feet from wetland (w-155n40w12-b; W-176.0)
6/16/21	Straight River (MP 974.2)	Not estimated; flowed back into the drilling mud pit	1,850 feet from Straight River
6/25/21	Mississippi River HDD (MP 1069.7)	6,000-9,000 gallons	Occurred within wetland (w-51n24w27-d; W-1540.0)
6/25/21	Red River HDD (MP 801.8)	50 gallons	Occurred within wetland (w-160n50w9-a; W-39.0)
6/28/21	Red River HDD (MP 801.8)	400 gallons	Occurred within wetland (w-160n50w9-a; W-39.0)
7/6/21	Willow River HDD (MP 1066.5)	80 gallons	Occurred on western bank of Willow River (s-51n24w31-b; S-265.0)
7/15/21	East Savanna River HDD (MP 1085.9)	15-25 gallons	Occurred within wetland (w-51n21w20-a; W-1751.0)
7/16/21	Middle River (MP 836.0)	15 gallons	150 feet from wetland (w-156n46w7-c; W-124.0)
7/16/21	Middle River (MP 836.0)	50 gallons	100 feet from wetland (w-156n46w7-c; W-124.0)
7/16/21	Red Lake River HDD (MP 864.3)	80 gallons	375 feet from wetland (w-153n43w32-aa; W-305.0)
7/17/21	Willow River HDD (MP 1066.5)	40 gallons	250 feet from wetland (w-51n24w31-a; W-1527.0)
7/17/21	East Savanna River HDD (MP 1085.9)	10-15 gallons	Occurred within wetland (w-51n21w20-a; W-1751.0)
7/18/21	Clearwater River HDD (MP 875.4)	20 gallons	400 feet from wetland (w-151n42w4-a; W-355.0)
7/18/21	Clearwater River HDD (MP 875.4)	20-30 gallons	150 feet from wetland (w-151n42w9-a; W-359.0)
7/19/21	Red Lake River HDD (MP 864.3)	1,200 gallons	Approximately 5-10 feet from wetland (W-153n43w29-j; W-298.0); release migrated into this wetland
7/19/21	Pine River HDD (MP 1017.4)	60-100 gallons	Approximately 620 feet from wetland (CA0040W; W-1047.0)
7/20/21	Mississippi River HDD (MP 941.0)	10 gallons	Occurred within wetland (CLC5098a1W; W-687.0)
7/20/21	Mississippi River HDD (MP 941.0)	100 gallons	Occurred within wetland (CLC5098a1W; W-687.0)
7/20/21	Middle River (MP 836.0)	200 gallons	550 feet from Middle River
7/20/21	Middle River (MP 836.0)	50 gallons	550 feet from Middle River
7/21/21	Willow River HDD (MP 1066.5)	50 gallons	Occurred within wetland (w-51n24w31-a; W-1527.0)
7/26/21	East Savanna River HDD (MP 1085.9)	10 gallons	Occurred within wetland (w-51n21w22-a; W-1755.0)
7/28/21	Clearwater River (MP 922.2)	20 gallons	550 feet from wetland (CLC5040_000RRa1W; W-579.0)
7/28/21	Clearwater River (MP 922.2)	15 gallons	550 feet from wetland (CLC5040_000RRa1W; W-579.0)
7/30/21	Mississippi River (MP 941)	50 gallons	Occurred within wetland (CLC5098a1W; W-687.0)
7/31/21	East Savanna River HDD (MP 1085.9)	480 gallons	Occurred within wetland (w-51n21w22-a; W-1755.0)
8/5/21	East Savanna River HDD (MP 1085.9)	50 gallons	Occurred within wetland (w-51n21w22-a; W-1755.0)
8/5/21	East Savanna River HDD (MP 1085.9)	900 gallons	Occurred within wetland (w-51n21w22-a; W-1755.0)

?



ISSUE: #1
Not Reporting Frac-Outs

These images show the July 30th or 4th frac-out, but on July 21st, during the USACE inspection we were shown the 2 frac-outs, shown in top right image surrounded by sandbags. These 3 frac-outs are NOT on the MPCA's list of 28 frac-outs by the Line 3 project as of 8/10/21.

You've seen and witnessed the two previous frac-outs seen here, yet they went unreported by Enbridge to the MPCA according to their data.

How many more frac-outs have gone unreported?

IMAGE DESCRIPTIONS:

TOP LEFT: Enbridge cleanup crew tries to contain drill mud.

TOP RIGHT: Enbridge workers use 3 sandbags and "stomp" on them to "plug" the hole where the drill mud came out.

BOTTOM LEFT: MPCA drill mud release data released 8/10/11. It does NOT list the 3 additional frac-outs at this Mississippi crossing.

BOTTOM RIGHT: Middle left of image is Sr. Enbridge official, in orange, from July 21st inspection along with environmental monitor next to him. This spill is NOT in the report to the left either!

Drilling fluid releases during Line 3 construction

Date	HDD Name (MP)	Volume of Release	Distance to Nearest Surface Water
6/8/21	Snake River (MP 843.2)	20 gallons	560 feet from wetland (w-155n46w12-b; W-176.0)
6/16/21	Straight River (MP 974.2)	Not estimated; flowed back into the drilling mud pit	1,850 feet from Straight River
6/25/21	Mississippi River HDD (MP 1069.7)	6,000-9,000 gallons	Occurred within wetland (w-51n24w27-d; W-1540.0)
6/25/21	Red River HDD (MP 801.8)	50 gallons	Occurred within wetland (w-160n50w9-a; W-39.0)
6/28/21	Red River HDD (MP 801.8)	400 gallons	Occurred within wetland (w-160n50w9-a; W-39.0)
7/6/21	Willow River HDD (MP 1066.5)	80 gallons	Occurred on western bank of Willow River (s-51n24w31-b; S-265.0)
7/15/21	East Savanna River HDD (MP 1085.9)	15-25 gallons	Occurred within wetland (w-51n21w20-a; W-1751.0)
7/16/21	Middle River (MP 836.0)	15 gallons	150 feet from wetland (w-156n46w7-c; W-124.0)
7/16/21	Middle River (MP 836.0)	50 gallons	100 feet from wetland (w-156n46w7-c; W-124.0)
7/16/21	Red Lake River HDD (MP 864.3)	80 gallons	375 feet from wetland (w-153n43w32-aa; W-305.0)

MPCA published this data 8/10/21 about Enbridge's reported frac-out locations to MPCA along with volume of release and location. Highlighted is 6/25/21 release at Palisade.

NRI, Public Water	N/A	HDD	N/A	Fishery (MN) - No in-channel work from April 1 - June 30	N/A	T51N, R24W, S31, SWNE	46.865021	-93.430846
N/A	N/A	Dry Crossing	Open Cut	N/A	Span	T51N, R24W, S32, NWNW	46.867939	-93.421145
N/A	N/A	Dry Crossing	Open Cut	N/A	Span in-stream support	T51N, R24W, S29, SWSW	46.869217	-93.416892
N/A	N/A	Dry Crossing	Open Cut	N/A	Span in-stream support	T51N, R24W, S28, NWSE	46.873036	-93.389371
Canoe Route, Section 10, 303d Impaired, Public Water, ORVW	Mercury in fish; TSS	HDD	N/A	PWI Cool/ Warm Water Fishery (MN) - No in-channel work from April 1 - June 30	N/A	T51N, R24W, S27	46.873365	-93.365226
Public Water, Trout Stream	N/A	Modified Dry Crossing	N/A	PWI COLDWATER FISHERY - No in-channel work from September 15 - May 15	Span in-stream support	T51N, R24W, S26, NESE	46.873065	-93.339421
N/A	N/A	Dry Crossing	Open Cut	N/A	Span	T51N, R23W, S29, NWSE	46.873165	-93.27926
Public Water	N/A	Modified Dry Crossing	N/A	PWI Cool/ Warm Water Fishery (MN) - No in-channel work from April 1 -	Span	T51N, R23W, S27, SENW	46.877805	-93.245103

Line 3 Waterbody Crossing Table with the location of the release highlighted from the image above 6/25/21 showing the Fishery restriction.

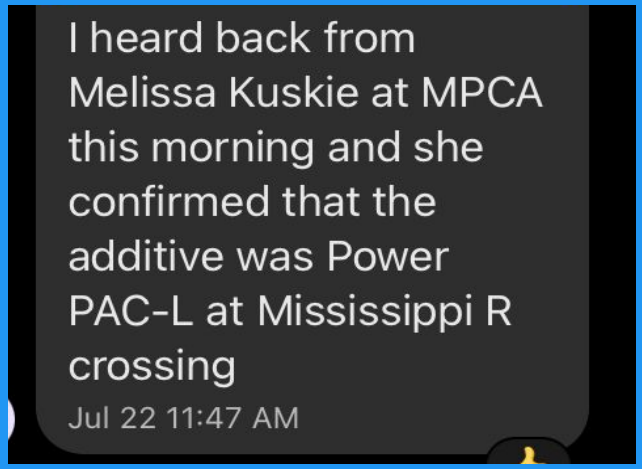
ISSUE #2:
Drilling During Restricted Dates.

The Mississippi crossing near Grand Rapids has a Fishery restriction stating "No-channel work from April 1-June 30", so how can there be a frac-out of 6000-9000 gallons on June 25th at this location?

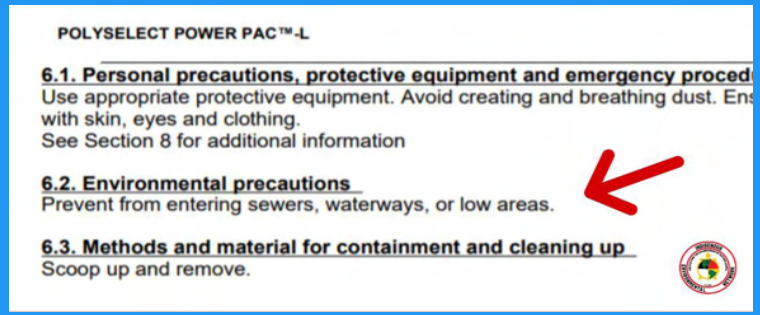
Footage shows they drilled during the restriction along with their reported release to the MPCA.

There is video footage online of Enbridge drilling/working at night on June 23rd at 3:30AM at this location.

This is an ORVW, "Outstanding Resource Valued Waterway" designated waterway, which should have stronger protections.



Our sample from the July 20th frac-out near the Headwaters of the Mississippi was sent to Melissa Kuskie at MPCA, July 22nd it was confirmed to contain PowerPAC-L. Info below is a screenshot of the additives spec sheet.


POLYSELECT POWER PAC™-L

6.1. Personal precautions, protective equipment and emergency proced
Use appropriate protective equipment. Avoid creating and breathing dust. Ens
with skin, eyes and clothing.
See Section 8 for additional information

6.2. Environmental precautions
Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up
Scoop up and remove.

ISSUE #3:
Using a Harmful Additive under a Waterway with Knowledge

The Mississippi crossing near the Headwaters suffered from a frac-out on July 20th. Water Protectors obtained a sample and sent it to Melissa Kuskie at Minnesota Pollution Control Agency. On July 22nd, we received confirmation from her by email that it did indeed contain a harmful additive.

This is an ORVW, "Outstanding Resource Valued Waterway" designated waterway, which should have stronger protections.

Does stronger protections equal harsher punishments for violations and loss of their permit?

ISSUE #4
Improper Clean Up

A Sr. Enbridge official says this is cleaned up during our inspection on July 21st, it still looks the same!

The drill is 60 ft deep at this location and released mud with a harmful additive. There are also 3 additional frac-outs at this location that likely contain the same additive. They are unreported and covered up with “fresh marsh” that lifts up like sod grass.

Check below them and I bet you find a spill they tried to cover up. How much spilled?

The additive Safety Spec Sheet says proper cleanup is to “SCOOP UP AND REMOVE”

Minnesota Pollution Control Agency @MnPCA · Jul 21

A lot of misinformation is being shared on social about potential frac-outs, especially re: Shell River & Mississippi Headwaters. 9 construction sites have had inadvertent releases of drilling fluid, but Willow River is the only crossing where drilling fluid entered the waterway.

7 11 2

Minnesota Pollution Control Agency @MnPCA · Jul 21

All others occurred near drilling locations. The release of drilling mud is not uncommon near drill entry or exit points. We required Enbridge to include detailed plans on these potential incidents in its permit application and have plans in place to clean up any spills.

1 4 1

Minnesota Pollution Control Agency @MnPCA · Jul 21

We also required Enbridge to install curtains on numerous other river crossings to minimize impacts in the event of any additional in-water releases.

2 1 1

Minnesota Pollution Control Agency @MnPCA · Jul 21

These incidents remain under investigation. Once we concluded our investigation of these releases, additional information will be publicly available.

ISSUE #5

Negligent Oversight by MPCA

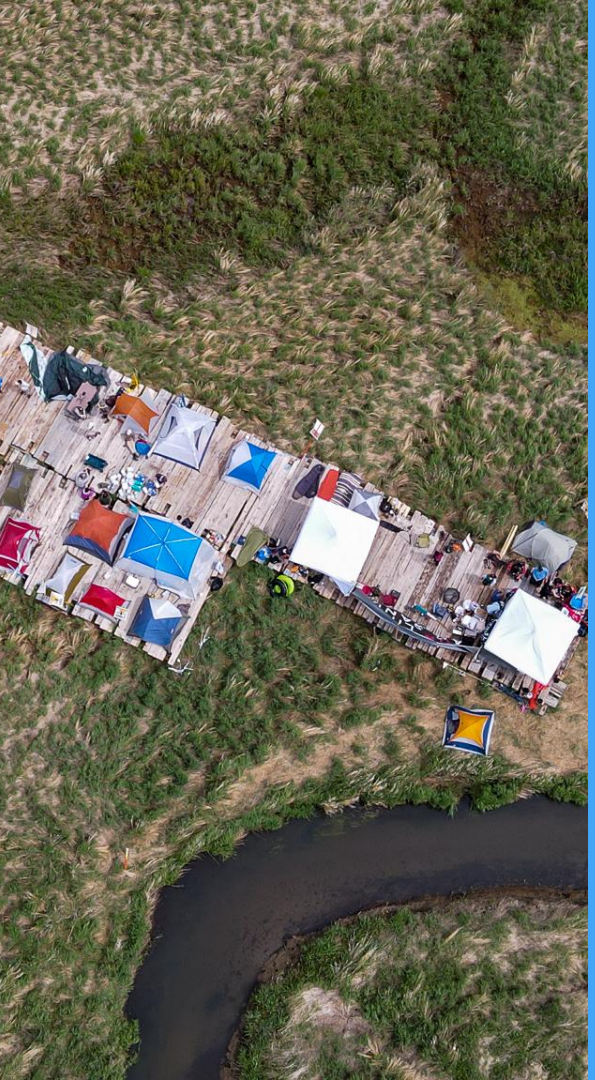
These are the tweets by the MPCA the day of the USACE inspection of the frac-out near the Headwaters of the Mississippi.

1st Tweet: Says Willow River ONLY crossing where drill fluid entered a waterway. The data sheet says there were spills into wetlands at the Mississippi, Red Lake River, East Savannah River, and Red River.

2nd Tweet: They clearly didn't check the location of the July 20th frac-out, or even knew about the previous ones we saw during the inspection.

They attempt to discredit Water Protectors and jump on Enbridge's side. The following day the sample was confirmed hazardous by the MPCA lab.

MPCA didn't deploy testers for numerous days.



Our Asks:

An aerial image of Camp Firelight on June 8th, which came to life after 1000's of Water Protectors and Allies marched to this location to prevent the destruction of our nation's greatest river just 8 miles from the headwaters. We prayed and honored her and tried to warn everyone of this disaster waiting to happen.

Just weeks later, our worst fears became a reality with the frac-out on July 20th and finding out about many more at this location that went unreported.

We call on you to end this destruction!

Miigwech!

1. **IMMEDIATELY REVOKE THE ENBRIDGE LINE 3 PROJECT'S 404 & 401 PERMITS**
2. **INVESTIGATE ENBRIDGE NON-REPORTING OF FRAC-OUT INCIDENTS AND OTHER VIOLATIONS LIKE DRILLING DURING FISHERY RESTRICTIONS AND USING HARMFUL ADDITIVES NEAR WATERWAYS.**
3. **TEST THE 4 UNREPORTED FRAC-OUT LOCATIONS ASAP FOR HARMFUL ADDITIVES**
4. **A NEW EIS WITH TRIBAL CONSENT FOR THE 500M GALLON WATER PERMIT THAT WAS MODIFIED FOR 5 BILLION GALLONS**

Attachment 3: Ruptured Aquifer Summary and Detailed Report

Jeffrey S. Broberg, LPG, MA

Minnesota Licensed Professional Geologist

11596 Person Drive, St. Charles, MN 55972

Elbabroberg1@gmail.com c 507-273-4961

September 22, 2021

Frank Bibeau

Honor the Earth

PO Box 63, 607 Main Ave.

Calloway, MN, 56521

FOR IMMEDIATE RELEASE

RE: Enbridge violated water protection rules again while MNDNR stands by.

Dear Mr. Bibeau:

Environmental and water resource protections fail without sincere prevention efforts, without clear plans that follow the rules, without the early detection of problems, or transparent acts.

Can you imagine a massive pipeline project designed to move millions of barrels of tar sands crude where the pipeline fails to follow approved construction plans? Or can you imagine a project subject to detailed State and Federal Environmental Permits that violates the terms of the permits then fails to disclose its intentional violations until all the work is done? Or can you imagine a State regulator who trusts the Contractor enough not to review inspection records for five months and misses severe and possibly irreversible environmental damage? These scenarios are now the latest chapter of the story of Enbridge Line 3 and MNDNR oversight.

Last January, Enbridge, its contractors, consultants, and "independent" inspectors minimized severe problems and took advantage of Minnesota's lack of timely regulatory oversight. The Minnesota Department of Natural Resources did not learn of the severe aquifer issues for many months and did not take action to stop the problems for eight months.

Following the recent disclosures of unreported “frac outs” releasing drilling mud to the Clearwater and Mississippi Headwaters and the June surprise of Line 3’s 50-fold increase in water use in an extreme drought, we find Minnesota’s groundwater is being impaired by Line 3 while we watch. Once again, the environment has suffered, and we and Minnesota’s water-dependent ecosystems must settle for our regulators granting forgiveness to Enbridge because they failed to protect our water resources.

Enbridge contractors ruptured a sensitive and timeless artesian aquifer on land in mid-winter. Clearbrook’s artesian aquifers form springs in the Lost River headwaters of Assiniboine ceded territory (1889 Chippewa Treaty). The springs never freeze, and pure, cold, clear water flows the medicine of life to the surface year-round.

Last January, the ruptured aquifer welled up with water along in the deep trench of the petroleum pipeline, and the aquifer started to lose its natural flow in the springs, and the is losing the flow into the rare calcareous fens. The uncontrolled groundwater flow and the pipeline springs have continued unabated for eight months.

The loss of pure groundwater has now totaled 24.2 million gallons, 106,000 gallons a day, enough to sustain multiple springs and many acres of groundwater-dependent wetlands and extreme drought. On September 16, the Minnesota Department of Natural Resources (MNDNR) finally issued a Restoration Order to fix the rupture within 30 days and restore the drought-stricken fen, hoping to restore all the nearby springs to keep the clean water out of the pipeline trench.

Upwelling hydraulic forces and geologic factors make restoring a ruptured aquifer complex uncertain, and Enbridge or the MNDNR seem never to address the cultural value attached to the water from the ancient natural artesian springs.

After a multi-year history of regulatory permit failures from the MNDNR and MPCA, the stage was set for another disaster when Enbridge willfully ignored design documents, regulatory warnings and ignored permit conditions at the Clearbrook pipeline crossings. The next six months left a legacy of inspectors failing to report alarming water and quicksand hazards, leaving regulators unaware of another Line 3 water disaster. The litany of regulatory failures and unabated environmental problems draws us to conclude that the Line 3 pipeline should have never been permitted. Line 3 construction has already proven to be a clear and present danger to the future of our water resources.

Enbridge, the Independent Environmental Monitors, and the MNDNR have proven not to be trustworthy stewards of our water. Considering the litany of failures and lack of transparency, the only reasonable outcome is to stop all activity except inspections and corrective actions. Because of the history of regulatory default, all Line 3 construction and pipeline activation activity should be seized under the control of the Court.

The Nature and Hazards of Confined Artesian Aquifers at Clearbrook Terminal

In the headwaters of Silver Creek/Lost River/Clearwater River Watersheds, deeply buried bedrock are draped by alternating layers of impervious glacial till and highly permeable beds of glacial sands and gravel that give rise to artesian springs. The Line 3 route at Clearbrook is on the northern margins of Minnesota's Groundwater Province 4, with ground moraines of glacial till and where buried sands and gravels from artesian aquifers and sustain fens, springs, wetland seeps, lakes, and streams.

A review of the water well records from the Minnesota Well Index and geotechnical borings along Line 3 shows the Line 3 route has a 35-to-50-foot layer of impervious, clay-rich glacial till at the surface over a thick layer of sand and gravel. The sands and gravels are highly productive artesian aquifers. To control the upwelling pressure, thirty- and fifty-foot-deep wells in the immediate area are drilled with heavy drilling mud. Deep excavations or wells drilled without heavy mud are often lost during construction when the water pressure pushes to the surface and quickly turns the wellbore into quicksand as the water moves upward to the surface. Entire Townships around Clearbrook demonstrates upwelling hydraulic pressure where the surrounding lands are known for artesian wells, springs, groundwater-supported wetlands, and calcareous fens.

Deep excavations that rupture the seal formed by the 30-foot thick glacial till rapidly become a construction hazard. Artisan water appears to boil to the surface and liquify the surrounding soils into mud and quicksand. The breach of powerful artesian forces threatens to swallow heavy equipment and become an immediate and uncontrollable hazard. A new unnatural "boiling sand" spring formed in the pipeline trench.

On January 21, the Enbridge contractors excavated within ten feet of the top of the Clearbrook Artesian Aquifer. The over pressured aquifer ruptured near the existing pipelines, and uncontrollable water rushed to the surface. The Contractor

lost all ability to contain the water, and project managers faced a significant problem.

To install the pipeline, Enbridge contractors needed an 18-foot-deep bore pit. The Contractor installed a 28-foot-deep steel sheet pile wall to control the artesian flow, a 110-foot wall on either side of the pipeline route, and a steel plate on the east end where the boring would tunnel under the existing hot pipes. With five dewatering wells, they could lower the water level in the walled-off trench and install the Line 3 connection to the Clearbrook terminal. But once they stopped dewatering, the soils between the sheet piles again turned to quicksand, and a large boiling sand spring appeared. Once they pulled the sheet pile, a new aquifer rupture occurred 60 feet west of the original rupture—the difficulty of stopping the uncontrolled flow magnified.

Water appropriation and water quality discharge standards were violated, and the prospect of quickly restoring the sealed cap over the artesian aquifer diminished by the day. In my 35 years of Minnesota groundwater management experience, the uncontrolled artesian flow has repeatedly proven to be among the most challenging construction hazards to solve.

Irregular Design, Permitting, Construction, Inspection, and Reporting

During the Line 3 water appropriations permitting, the MNDNR raised concerns about groundwater-supported wetlands and artesian aquifers, especially the risk on rare calcareous fens located just east of the Clearbrook terminal. In November 2020, the MNDNR reviewed the local construction plans and issued a "No Effect Concurrence" to Enbridge for the Clearbrook area fens. Enbridge gave assurances that the groundwater flows sustaining the fens would be protected because the approved design called for an 8- to 10-foot-deep bore pit, 20 to 28 feet above the top of the pressured aquifer.

In less than 50 days, Enbridge Project Managers and contractors faced the prospect that the designed bore pit at the Clearbrook Terminal was not deep enough to allow boring beneath two existing pipelines. Line 3 had to make a "hot crossing" beneath two high-pressure pipelines, and they needed a 16 to 18-foot bore pit in a 50-foot-long trench box. Reality-based field decisions overrode the approved design plans and permits. The 18-foot-deep trench immediately ruptured the artesian aquifer as it approached the east end of the trench near the hot crossings.

Rather than reporting the aquifer breach, the massive water appropriations, and the muddy water discharge to the surrounding stream and wetlands, Independent Environmental Monitors (IEM's) overlooked the design changes and permit violations. The Monitors did not report any changed conditions other than "difficult dewatering."

Enbridge's failure to report the aquifer breach violated their water appropriation permits, water discharge permits, and wetland permits.

The approved Environmental Monitor Control Plan (EMCP) required the IEM's to notify the State Agencies of "Modified Construction Activities" and Modification to Permit Requirements." The failure to report and revise permits violated the letter and intent of the EMPC and violated multiple environmental permits. (Section 6.0, pg. 15 of EMPC. Section 6.1, pg. 15-16 of EMPC)

Attached as Exhibit 1, a timeline for the ruptured aquifer, the 28 reported frac-outs, and the amended water appropriations is a chronological compilation of unauthorized Enbridge activities and MNDNR inactivity. The chronology demonstrates obfuscation by both the company and their "Independent" monitors keeping information from State Agencies while allowing continuing uncontrolled water appropriation and shows just how slow the MNDNR was to respond.

The history of the aquifer rupture, frac-outs, and excessive water appropriations in the drought reveals an intentional and blatant disregard for the permits and protecting Minnesota waters.

Permitting and Regulatory Failures:

Enbridge and MNDNR Disconnection Puts and Aquifers at Risk

The core principles of environmental and water resource protection are prevention guided by accurate plans, design and permit compliance, and early detection and reporting of problems. All three principals failed at the Clearbrook terminal, Line 3 aquifer rupture, frac-outs, and water appropriation amendments. The MNDNR was faced with a massive undertaking and failed.

MNDNR permit conditions for water use, MPCA permits for water discharge, and Corps of Engineer permits for wetlands were designed based on accurate design and operation standards submitted in advance by the applicant. These factors are meaningless if permit conditions are not understood, ignored, or intentionally violated by the Permit holder. Permits and regulatory tools and are

just as useless if regulators fail to make the permits and rules understandable to both permit holders and inspectors. If contractors look away from permit conditions, the regulators are in the dark. If the regulations are either unaware or waived permits, there can be no enforcement and no deterrence against future violations. The actions of both Enbridge, their "Independent Monitors," and the MNDNR produce mistrust that can only be resolved with an effective and independent third-party review. The independent monitors need proper knowledge and rules to assess the environmental damage and restoration needs. The Clearbrook artesian aquifer breach demonstrates that we should distrust all the actors because every level of permit and regulatory failure has occurred.

The hydrologic conditions at Clearbrook Terminal were well understood after decades of local groundwater investigations and Line 3 geotechnical borings. MNDNR, MPCA, and Enbridge say they know the risks to groundwater-dependent wetlands and calcareous fens, but that knowledge has never translated to adequate protections.

Line 3 developers requested routine and moderate dewatering permits that never addressed the likely uncontrolled flow with deep excavations or the need for larger volumes of water with frequent frac-outs. The result is hundreds of thousand gallons a day disgorging from Clerbrook's shallow artesian aquifer or pumped into the ground when doing the pipeline borings.

While MNDNR understood the aquifer and fen risks, they granted a "no impact concurrence" for the fen because only shallow excavations were envisioned. It is unclear whether the MNDNR reviewed the artesian character of the Clearbrook artesian aquifer with Enbridge and the Independent Environmental Monitors failing to advise contractors on preventing an uncontrolled aquifer disaster.

At the same time, Enbridge Project Managers and contractors should have known the necessity of deeper excavation to cross existing pipelines. They should have known and anticipated the artesian pressure from the Clearbrook aquifer. The deep bore pit plans were not in the Enbridge design review documents. While permit writers and hydrologists relied on the design documents, prevention failed again when contractors changed plans without considering the known artesian risks.

Prevention requires high situational awareness and accurate reporting; contractors, inspectors, and regulators need to be constantly apprised of onsite

conditions, especially in high-risk settings, and they must report related problems. The approved Environmental Monitoring Plan requires Inspectors to routinely upload Inspection records to a password-protected portal that regulators can review. Failures occur whenever inspection reports are not timely, when they are not accurate, when the inspection reports obfuscate the facts, and when regulators fail to do a timely review. The same problems occurred when the aquifer ruptured, frac-outs, and 50-fold expansion in water appropriations during a drought. The institutional measures to prevent and minimize environmental impact failed with the aquifer rupture.

Digging deep pits in artesian settings and near groundwater-dependent ecosystems was the first compliance failure that went unreported. Poor project design calling for bore pits to cross actively flowing pipelines set up the disappointment that could have been prevented. Appropriate well-designed modifications that protect the environment. Many consultants, contractors, and the MNDNR have experience controlling subsurface flow. Onsite drillers controlled the flow with heavy drilling mud designed to contain the pressure, and excavators either dewater the risky area in advance, surcharge the flow or create a grouted seal over the top of artesian aquifers. Appropriate modifications can only be approved if the Permitted party discloses the changes required in the permit; here, permit compliance failed.

When the water came welling up and created quicksand in the pipeline trench, the Contractor abandoned the deep bore pit effort in fear of losing their equipment. The failure to report the problem was a severe violation where the blame is shared by Enbridge, the Contractor, the Independent Environmental Monitors, and the MNDNR regulators. The Contractor trying to avoid stop-work orders or design delays first made a hasty decision and then felt compelled to hide the problem from regulators for months. The environmental monitors failed their regulatory responsibility to identify and report the aquifer breach forcing a nine-month delay in restoring the aquifer.

As a geologist with pipeline construction experience, I can envision the Contractor hoping the artesian pressure would rapidly decline as it often does in minor confined aquifers with limited volume. But hope is not a regulatory compliance strategy, proven when dealing with a large regional aquifer with over 25 feet of head pressure.

Other serious violations occurred at Coldbrook, which are regulated by the MPCA and the Corp of Engineers. Discharge of silt and mud into streams and wetlands violates Construction Site Stormwater Permits and wetland protections. Failure to timely notify the pollution is a violation itself; continuing the work compounds the violations.

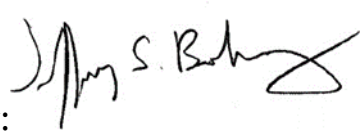
In addition serious violations have assaulted our aquifers with the frac-outs and 5 billion gallons of water appropriations during a drought.

Conclusion: Failed Promises Destroy Trust

Eight months of large volume flows from a ruptured regional aquifer are now exceeding 100,000 gallons per day, depleting the aquifer, reducing the hydraulic head threatening groundwater-dependent ecosystems. Frac-outs have a yet undefined risk to aquifers and surface water resources, and massive water withdrawals during extreme drought may impact both aquifers and surface waters. The attached chronology was compiled from Permit history, the MNDNR timeline in the Clearbrook Restoration Order, the Clearbrook Remedial Action Plan, the frac-outs, and amended Water Appropriation Permits. As an experienced environmental risk manager, I see the public documents as sanitized versions of a severe violation and a complete failure to protect our water resources.

Enbridge, their contractors and consultants, the Independent Environmental Monitors, and the MNDNR regulators failed to meet their obligations and created an ongoing risk. Even with the failures, there are only minor consequences related to the actual costs of fixing the problem; there are no penalties for over five months of evasion and no deterrence that makes it risky to violate the law.

The only fix to the abuses is for a Court or a Regulator to put a hard stop to all activities except independent inspection, remote sensing for upwelling water from aquifer ruptures and frac-outs, and disclosing all irregular design changes. Our water resources are at risk; no other actions should be allowed. Once the total damages have been restored, heavy fines and penalties must be levied for every unreported infraction.

Sincerely: 

Jeffrey S. Broberg, LPG, MA, Minnesota Licensed Professional Geologist #13009

CC: Steve Morse and Sara Wolff, Minnesota Environmental Partnership

References:

MNDNR Restoration and Replacement Order

Barr Engineering Remedial Action Plan

Enbridge Environmental Monitoring Plan

Minnesota Well Index well logs

Enbridge Dewatering Permit 2018-****

Exhibit 1:

Chronology of Violation and Regulatory Failure

Derived from MNDNR Violation History and Barr Flow Remediation Plan

Dec. 2019: Approval of Environmental Monitor Control Plan. Enbridge Energy Limited partnership – Line 3 Replacement Project.

December 28, 2020: MNDNR issued Water Appropriations Permit 2018-3420 to Enbridge for 510,000,000 Gallons.

November 12, 2020, MNDNR issued Enbridge "No Effect Concurrence" for excavation 8-10 feet deep that would have an impact on the hydrology of fen

January 21, 2021: Enbridge abandons plans for shallow excavation due to existing pipelines and dug to 18 feet and ruptured artesian aquifer creating uncontrolled flow.

January 26, 2021: IEM noted "unmanageable dewatering conditions" and the need for SWPPP to direct new flow across the roadway

February 2, 2021: Borehole excavation or entry pit encountered "excessive GW infiltration."

February 8, 2021: 110-foot sheet pile wall installed within wetland dewatered with five wells, installed 50-foot long trench box in bore pit for "hot crossing" of existing pipelines.

Trench water discharged to dewatering bags and dewatering structures

Enbridge installed Line 3 "hot crossing" of two pipelines in dewatered sheet pile and trench box area

Uncontrolled flow area expands with the removal of the sheet pile wall

February 20, 2021. IEM notes "turbid water discharge for five well points."

Discussed with the lead inspector, environmental monitor, and ERM technical director

March 13, 2021. IEM documented sediment flow to wetlands and discussed with EI Team

March 15, 2021. IEM and Lead Env Inspector conducted site review and documented 2" of clay

March 16, 2021, Enbridge "issued an unacceptable report for improper dewatering structure" No cleanup and continued pumping

"Following months," according to MNDNR, Enbridge cleaned sediment from wetland but did not resolve uncontrolled flow

Failure to identify the problem as uncontrolled flow or aquifer rupture

No notifications of Level 2 modifications or need for amended permits

June 4, 2021: MNDNR issues Amended Water Appropriations Permit #2018-3420 for 4,982,768,568 gallons, 9.8 times larger than the original permit request.

June 15, 2021, MNDNR staff discussed the potential for uncontrolled flow

June 16, 2021, MNDNR email to Enbridge requesting information on uncontrolled flow and restoration plan

On June 17, 2021, MNDNR noticed Enbridge not recommencing work at Clearbrook hot crossing until the uncontrolled flow plan was approved. (Note that the line segments were already completed by the time DNR sent notice.)

June 2021: Five unreported Frac-outs

July 7, 2021, Merjent disclosed 3.8 million gallons of uncontrolled flow since January and disclosed 45 ftX12 ft X18' excavation and sheet pile installation

response to 6-16 DNR request described as "findings of fact #13."

July 8, 2021, Lead IEM and MNDNRr reviewed and summarized inspection reports to date and discovered the initial January 26 report and disclosure of completion of pipeline boring but no backfill due to uncontrolled flow.

July 8, 2021, Enbridge submitted Groundwater Investigation Plan to MNDNR for comment and review

Enbridge reported a second surface emergence of uncontrolled flow from outside the former sheet pile area 60 feet northwest of the original uncontrolled flow.

Enbridge reported uncontrolled overland flow at ground level elevation 1339. Surface flow is 28 feet above the artesian aquifer.

Uncontrolled flow created the risk of bank sloughing, road overtopping, and water quality concerns from the release of turbid water

Enbridge reported uncontrolled flow reached a nearby stream

Uncontrolled flow extends from Milepost 909.1 to 910

July 12, 2021, Enbridge submitted the revised GW Investigation Plan

On July 14, 2021, DNR informed Enbridge to deny the request to continue work in the area until the uncontrolled flow plan was approved.

July 27-Aug 4, 2021 Drilling 6 borings in area of uncontrolled flow. two borings penetrated the artesian aquifer

July 2021: 19 unreported frac-outs

August 1-4: Two unreported Frac-outs

Aug 5-Aug 21, 2021: water level monitoring

August 9: MNDNR reveals 28 unreported frac-outs from June 1 to August 4.

August 15, 2021, Draft Remedial Action Plan for ruptured aquifer submitted to MNDNR

Aug 17-18, **2021**Enbridge/Barr Final Remedial Action Plan report on an uncontrolled flow mitigation plan

RAP shows fens are supported by upwelling artesian water

Uncontrolled flow is upgradient of fens

RAP proposes installing high-volume wells in the artesian aquifer to stop the flow at the surface and reduce upward pressure in the aquifer allowing grout injection into the ground to stop the flow

September 6, 2021. uncontrolled flow reported to be 24,200,000 gallons from January 21 to September 5, 227 days, (Avg flow of 106,608 gallons/day from an area measuring 1400 to 1650 square feet)

September 16, 2021, MNDNR Restoration and Replacement Order

By October 16, 2021, complete all work to stop the uncontrolled flow

Notify MNDNR Commissioner within 24 hours of completion

By October 16, 2021, Enbridge, to report a revised estimate of water loss from March 19 to September 16, must continue groundwater monitoring following cessation of flow.

By October 16, 2021, submit Draft Calcareous Fen Management Plan for MNDNR review and approval

By October 16, 2021. Submit $250,000 in mitigation funds to MNDN for independent monitoring of calcareous fens

By October 16, 2021, Submit $300,000 in mitigation funds to MNDNR for initial mitigation of direct loss of groundwater resources

By October 16, 2021. End of the appeal period.

By November 1, 2021, Submit $2,750,000 on “one or more single order instruction escrows for the benefit of MNDNR to use at its sole discretion to provide funds to perform restoration actions” for fens and compensatory mitigation with conditions for withdrawal

The order provides for the addition of escrow funds if necessary

By December 1, 2021. Enbridge must demonstrate that it has visually reinspection all locations across the entirety of Line 3 where Enbridge deviated from planned or permitted construction trench depths. Must identify additional unidentified breaches of artesian aquifers.

Monitor for uncontrolled flow for 12 months after cessation of uncontrolled flow

Attachment 4: Pleadings for Manoomin vs DNR

EXHIBITS

EXHIBIT A

Waters Report

What Happens When the Water Goes Down?

July 16, 2021

TO: White Earth Reservation Business Committee;
Monica Hedstrom-Director of Natural Resources;
White Earth Band of Ojibwe

FROM: *Keezer, Renee L., Pesticide Coordinator*
White Earth Department of Natural Resources
B.S. Environmental Science: Environmental Health & Toxicology Emphasis
B.A. Indigenous Studies

RE: **Minnesota Department of Natural Resources**
Amended Water Appropriation Permit #2018-3420
5 billion gallons of water for Enbridge Line 3
Summary and Comments

An email was sent out by Randall Doneen from the Department of Natural Resources on May 14, 2021, regarding a need to issue a new dewatering permit to Enbridge for the Line 3 construction project. The amount of the previous permit was 510.5 million gallons was going to be exceeded in June and Enbridge needed a new permit that allowed them to remove an additional 4,472 million gallons from groundwater sources (unconfined aquifers). That is an additional 4.5 billion gallons. We had a meeting on May 27, 2021, to discuss the new permit and any concerns that we might have.

I asked if this was an amendment to the permit or a new permit. Randall Doneen stated it was a new permit. The new dewatering permit was issued on June 4th, 2021. During that meeting, Randall Doneen told me and others on the call that we would meet again on June 7, 2021, to discuss our concerns. On May 28, 2021, Randall Doneen sent an email that they were going to give a decision on the permit by the end of the week of June 4th.The concerns Charlie Lippert from Mille Lacs voiced in the meeting on May 27th were disregarded by the MPCA even though they were legitimate concerns regarding the infiltration rates of the increased amounts of water they will be displacing.

The MPCA was given a 30-day comment period from March 11, 2021-April 10, 2021. The DNR was aware of the need for a new dewatering permit and had an adequate amount of time to engage with and consult the tribes, but they did not. We were given less than 30 days to submit comment from the time of notification to the time the permit was issued. It was three weeks from the first notification sent on May 14th to the issuance of the permit. The meeting with There was only eight days from the time we had a meeting to the time the permit was issued. This does not seem like an adequate comment period or consultation. I am not aware of the DNR policy or guidance is on the coordination and consultation with Minnesota Tribal Nations.

On June 25th, 2021, the White Earth Tribal Council, White Earth legal representation, and myself, attended a meeting with the DNR Commissioner Sarah Strommen and several other DNR employees including Randall Doneen. The DNR agreed that there was not adequate consultation or comment period given to the White Earth and other tribes. There were no efforts made to rectify the lack of consultation. A summary of the response given was that the DNR will try to do better in the future to consult the tribes.

When there is a rapid decrease of water, there are several significant ecological impacts. These impacts have been exacerbated by the current severe drought that we are in. More than half the State of Minnesota is in severe drought. Around 4% of the State is in extreme drought. Some of these areas are directly on the Line 3 pipeline route. These areas are in Red Lake County, Marshall County, Polk County, Beltrami County, Clearwater County, and Hubbard County (NOAA, 2021). With decreased water from lack of precipitation, evaporation, and transpiration, lakes and ponds are shallower leading to increased temperatures in water. This causes a decrease in the dissolved oxygen levels. Minnesota lakes and waterways are deoxygenating at a higher rate than the oceans (Jane, 2021). Deoxygenation causes an increase in fish and vegetation die-offs (DNR, Hot weather likely contributing to fish die-offs, 2021). The decomposition of the fish and plants and warmer water causes the amounts of bacteria that do not use oxygen to increase. These bacteria release methane, a greenhouse gas. The warmer temperatures of lakes and ponds leads to an increase in instances of algae blooms (eutrophication) (Marohn, 2021). Minnesota is currently seeing algae blooms

earlier this year compared to non-drought years. These algae blooms are toxic to people, pets, and wildlife and makes less lakes available for recreation use, thus negatively impacting our economy, environment, wildlife, and human health.

The dewatering during a drought brings concerns over loss of specific yield. Specific yield is the volume of water available in the sediment of the ground (Johnson, 1967). The infiltration rates are decreased due to days of the topsoil being hardened in the heat and sun. This decreased the ability of the water to infiltrate the soil. The amounts of water being pulled from the groundwater reserves will not be able to infiltrate at the rate it is pulled during a normal season. Much of the water removed during the dewatering will run-off into the surface waters. Without precipitation and infiltration, the spaces between the porous sediment may decrease and not be able to expand to allow water into the spaces when precipitation does occur.

Lowered surface waters and low amounts of precipitation, increases the concentration of contaminants such as pesticides from non-point sources even though the amount of pesticide use has not increased. Pesticide drift of runoff is the most common way pesticides enter waterways. Aquatic organisms including fish and their food sources, are at increased risk of exposure and contamination. (Program, 2021). Agricultural regions are irrigating their crops due to the drought. The chemicals that are running off into surface waters and groundwater recharge areas in higher than typical concentrations. This is due to the same volume of chemicals being used but less water to dilute it. Pesticide effectiveness is decreased during drought due to the absence of moisture in the soil. Plants are not able to absorb the pesticides without the water to help them grow. Microbial breakdown and hydrolysis is diminished during droughts. There is less biological degradation to convert the pesticides into less toxic analytes. Multiple applications of pesticides during drought can cause a buildup of concentration and contribute to increased environmental contamination.

Groundwater dewatering in Northern Minnesota decreases the amount of water that is available to plants, surface waters, and sensitive wetlands. Many of our lakes are recharged through springs from the groundwater as are numerous other surface waters such as rivers, streams, and creeks. In October 2020, MPR released a story about a water permit for a hog farm that would require 15 million gallons of water annually from groundwater sources (Gunderson, 2020). The permit was held up due to the need for a hydrologic assessment for possible negative impacts to a calcareous fen that was a few miles away. The DNR identified it as having “potentially significant resource impacts. The science behind the concerns of the impacts to the neighboring wetlands is sound. Why was this scientific approach not taken regarding the Line 3 dewatering permits? The amount of water siphoned from the unconfined aquifers for this project is over 300 times the amount requested for the hog farm. The DNR states that the

dewatering is not going to have any significant impacts to the wetlands that the pipeline is going through however, hydrological science has shown that the dewatering will have negative impacts. These impacts are observable in the rice lakes and other surface waters and wetlands in the region. The water levels in the Lower Rice Lake on the White Earth Reservation are so low that it will be difficult if not impossible to harvest wild rice year. The science has been ignored for this project. How will 15 million gallons impact a wetland that is within three miles of the farm, but 5 billion gallons will not impact wetlands that the water is being directly extracted from?

Q90 is a number that is a way to measure drought conditions based on stream flow. The value indicates that 90% of the time, stream flow has been greater than that value. In other words, the stream flow has only been that level or below 10% of the time. Once the stream flow levels are below the Q90 value, it is considered a protected low flow level in Minnesota and is used for suspending water appropriation permits (DNR, Measuring Hydrology, 2021). As of 07/11/2021, approximately 25% of the state is at minimum flows where the flows in the rivers and streams are below the annual Q90 protection levels. An additional approximate of 25% of the State of Minnesota is in low flows where the monthly Q75 exceedance levels have been matched (DNR, 2021). This is the worst drought in Minnesota in 127 years.

Despite the severe and extreme drought conditions, Enbridge is still pulling surface waters from the Mississippi River (surface water) at the Mississippi River Crossing #1 on Great River Road. Q90 has been reached yet Enbridge gets an exception to the rule for surface water and ground water permits. Trees in the region are showing signs of drought stress. It is mid-July and quaking aspens are losing their leaves. Fruit bearing plants such as blueberries are not producing this year due to the lack of water. The steady lowering of the water table from the dewatering and the drought has made ground water less accessible for trees and plants. This has impacts on the wildlife as well. Continuing to extract ground water and surface water has the potential to lead to significant losses of biodiversity in plants, animals, and fish and could lead to a potential collapse in various ecosystems throughout the region.

Other impacts that have not been discussed or addressed is the potential for widespread contamination in the event of a leak or spill. The regions where dewatering is necessary to construct the line leaves the entire region at risk of contamination. If the water table does return to normal after completion of the project, this pipeline will be completely submerged in the groundwater of the aquifers. A spill or leak would permanently impair the water. There is no feasible way to clean-up this type of contamination as is seen at the Pinewood crude oil spill research site near Bemidji, MN, where there is 17-22 inches of oil in the aquifer from a pipeline rupturing in 1979. It was one of the largest pipeline spills in Minnesota. There is no way to remediate the contamination. We are only able to monitor the underground movement of the oil. The

contamination and damage from a spill along the new route would be severely degrade the environment and to the quality of life of people that are dependent on the water for their wells. The Minnesota tourist economy would be negatively impacted as well.

The lack of science-based decision making in this permitting process is alarming but not as much as the complete disregard to the Traditional Ecological Knowledge (TEK) and Treaty Rights regarding the water and wild rice. These rights are not confined to the borders of the reservation, but to the borders of the ceded territory. The members of the Minnesota Chippewa Tribe retain rights to the resources including the water. Every aspect of Ojibwe history and life is tied to the water and rice. Spiritual, cultural, physical, and economic. It is a foundation of their identity as a Nation of people. For years, members of the Minnesota Chippewa Tribe have been stating the negative impacts that this project will have on the water and wild rice. The wild rice is the reason the Ojibwe migrated to this region hundreds of years ago. It is a part of the Ojibwe prophesies. To go to where the food grows on the water. The Ojibwe are here specifically to protect the water and wild rice.

The Minnesota Department of Natural Resources has shown that the science does matter with regards to management of the resources. Perhaps the DNR needs to be reminded that the State of Minnesota would not exist without the treaties and that the Treaties do not give the Ojibwe rights to the land and resources, those rights have always been retained as they are the inherent Sovereigns but grants rights to the non-indigenous people to occupy the land and utilize the resources. Article 6 of the United States constitution states "All Debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation. This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding. The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.". Every elected official and police officer has sworn to uphold the constitution and in doing so, have sworn to uphold the treaties.

The blatant disregard to Tribes' rights and concerns, the hydrological science, and current environmental status with the drought and heatwaves due to the changing climate from petroleum use and extraction, shows that the economic influence of a foreign corporation takes precedence over the adequate protection and management of the environment.

References

DNR, M. (2021, June 21). Hot weather likely contributing to fish die-offs. Retrieved from MN Department of Natural Resources: https://www.dnr.state.mn.us/news/2021/06/21/hot-weather-likely-contributing-fish-die-offs

DNR, M. (2021). Measuring Hydrology. Retrieved from MN Department of Natural Resources: https://www.dnr.state.mn.us/whaf/about/5-component/hydro_measure.html

DNR, M. (2021). Minnesota Weekly Stream Flow Report 07/11/2021. Retrieved from https://files.dnr.state.mn.us/waters/surfacewater_section/stream_hydro/2021data/sfr071121map.pdf

Gunderson, D. (2020, October 6). In western Minnesota water dispute, it's elite hogs vs. rare fen. Gary, Minnesota. Retrieved from https://www.mprnews.org/story/2020/10/06/in-western-minnesota-water-dispute-its-elite-hogs-vs-rare-fen

Jane, S. H. (2021). *Widespread deoxygenation of temperate lakes*. Nature (594), 66-70. DOI: https://doi.org/10.1038/s41586-021-03550-y

Johnson, A. (1967). *Specific yield: compilation of specific yields for various materials*. Water Supply Paper 1662-D. USGS Publications Warehouse. DOI: https://doi.org/10.3133/wsp1662D

Marohn, K. (2021, June 19). *Hot weather fuels early algae blooms on Minnesota Lakes.* Brainerd, MN. Retrieved from https://www.mprnews.org/story/2021/06/19/hot-weather-fuels-early-algae-blooms-on-minnesota-lakes

NOAA, N. I. (2021, 07 15). Drought.gov. Retrieved from Current Conditions for Minnesota: https://www.drought.gov/states/minnesota

Program, P. (2021). *Pesticide Advisory: Increased dangers of pesticide use during hot and dry weather conditions.* Oregon Department of Agriculture. Retrieved from https://www.oregon.gov/oda/programs/Pesticides/Documents/2021/DroughtAdvisory070621.pdf

EXHIBIT B

Minnesota Department of Natural Resources
500 Lafayette Road Saint Paul, Minnesota 55155-4037
Office of the Commissioner
651-259-5555

MNDNR

February 5, 2016

Ms. Beverly Jones Heydinger
Chair
Minnesota Public Utilities Commission
121 7th Place East
Suite 350
St. Paul, MN 55101-2147

Re: In re Application of Enbridge Energy
MPUC Docket No. PL-9/CN-14-916

Dear Chair Heydinger:

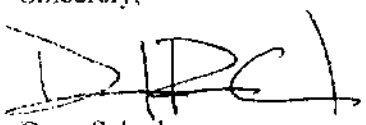
I am writing regarding a recent petition made by the White Earth Band of Ojibwe (Band) to intervene in the above-captioned proceedings. The Petition was premised in part on a claim made by the Band that it has off reservation hunting, fishing and gathering rights (usufructuary rights) in the 1855 ceded territory.

The Minnesota Department of Natural Resources (DNR) is not a party in the above referenced proceeding and, in light of DNR's role in assisting in the preparation of environmental review documents for this proposed project, the DNR has opted not to intervene in these proceedings as a party. The DNR is, however, concerned about any ruling the Public Utilities Commission (PUC) might make regarding the Band's claim that it has usufructuary rights in the 1855 ceded territory in the context of addressing the Band's request to intervene in these proceedings. A PUC decision to permit the Band to intervene in these proceeding premised on claimed usufructuary rights could have legal implications reaching well beyond these proceedings. The DNR, therefore, requests that if the PUC permits the Band to intervene it

do so using its discretionary authority without addressing the Band's claim that it has usufructuary rights in the 1855 ceded territory.

Thank you in advance for your attention to this matter.

Sincerely,



Dave Schad
Deputy Commissioner
Minnesota Department of Natural Resources

cc: Sherry Enzler, General Counsel
Jamie Schrenzel, Environmental Review

23.0005 02-02-16 Ltr.HydingerreWEBand

EXHIBIT C

WHITE EARTH RESERVATION

VICE CHAIR & DISTRICT III Eugene "Umsy" Tibbetts SECRETARY-TREASURER Leonard Alan Roy
DISTRICT I Raymond Auginaush, Sr. DISTRICT II Kathy Goodwin

May 17, 2019

SENT VIA EMAIL TO:
commissioner.dnr@state.mn.us

Sarah Strommen, Commissioner
Minnesota Department of Natural Resources
Attn: Line 3 Pipeline Replacement Applications
500 Lafayette Road
St. Paul, MN 55155

Re: **Comments on Enbridge Line 3 Replacement** environmental impacts to Chippewa Treaty Protected Resources and Cultural Properties

Dear Commissioner Strommen,

Please find attached a copy of the January 25, 2019 letter from Chairman Terry Tibbetts (with attachments) to Governor Walz regarding: Chippewas of the Mississippi *Rights of Manoomin* and co-management to protect common, environmental resources. The Chairman's letter shows courtesy copies to yourself, Minnesota Pollution Control Agency Commissioner Laura Bishop and Attorney General Keith Ellison. The important message in the letter gives notice that "we challenge the State of Minnesota's unilateral authority to grant Section 401 Clean Water Act permits for Enbridge's Line 3R pipeline activities, without our consent, and request full hearing, with contested case proceedings, if Minnesota plans to exercise primary jurisdiction."

Since that time Chairman Tibbetts passed on March 17, the DNR has provided a 60-day comment period ending today, but the DNR has not acknowledged or responded to the Chairman's letter. The DNR website shows Enbridge is seeking Public Waters Work Permits as part of the overall State of Minnesota 401 clean water act permitting process. Websites show that neither the DNR nor MPCA has accepted Enbridge's Line 3 applications as complete. It also appears MPCA will be doing a more thorough public process.

The White Earth Band of Ojibwe understands that the bulk of the waters of the United States, the other party to the Chippewa treaties, have predominantly become public waters of Minnesota, under Section 401 review of the Clean Water Act by the

DNR and MPCA and which Minnesota public waters are where most of the wild rice grows. Consequently the White Earth Band of Ojibwe cannot ignore that *Climate change affects lakes, walleye in complex ways*[1] and that years later an *Ojibwe leader says Mille Lacs walleye have not recovered yet*[2]. The White Earth Band of Ojibwe understands that any increase in tar sands extraction will only speed up climate change and compound environmental and aquatic problems in Minnesota, and when walleye fishing people can't fish Mille Lacs, they usually shift further north to Big Sandy, Pokegama, Big Winnie, Cass Lake and Leech Lake, which are all original 1855 reservations.

As part of the Line 3 environmental review process the White Earth Band of Ojibwe helped develop and has adopted the Minnesota Chippewa Tribe's Anishinabe Cumulative Impacts Assessment as the White Earth Band's environmental risk and evaluation tool for the meaningful assessment of the short and long term impact of the abandonment of the existing Line 3 pipeline, as well as the impacts from tar sands extraction, greenhouse gases, climate change and additional, future pipeline abandonment from the decreased demand for crude oil. The White Earth Band of Ojibwe did FIND that the Minnesota Chippewa Tribe's Anishinabe Cumulative Impacts Assessment is superior to the EIS that has been approved by the Minnesota PUC in examining the cumulative impacts from the proposed Line 3 project upon surface waters, groundwater, fish, wildlife, waterfowl, wild rice, plants, as well as the broader environmental consequences resulting from the proposed Line 3 project, which necessarily requires prohibiting the Line 3 Pipeline Replacement, new route corridor for the replacement pipeline across the 1855 ceded territory in violation of White Earth Band of Ojibwe and 1855 Treaty Authority established codes, laws and customs required consent as co-owners.

For the Chippewas of the Mississippi, clean water is inextricably linked to the self-sufficiency, economic development and security of present and future generations of northern Minnesota's tribal communities. The upper Mississippi watershed, from the Headwaters adjacent to White Earth Reservation through the various 1855 reservations and ceded territories through Brainerd and St. Cloud, needs to be understood as one, long, continuous, first in time, priority quality water property rights for the Chippewas of the Mississippi to enjoy and protect in perpetuity.

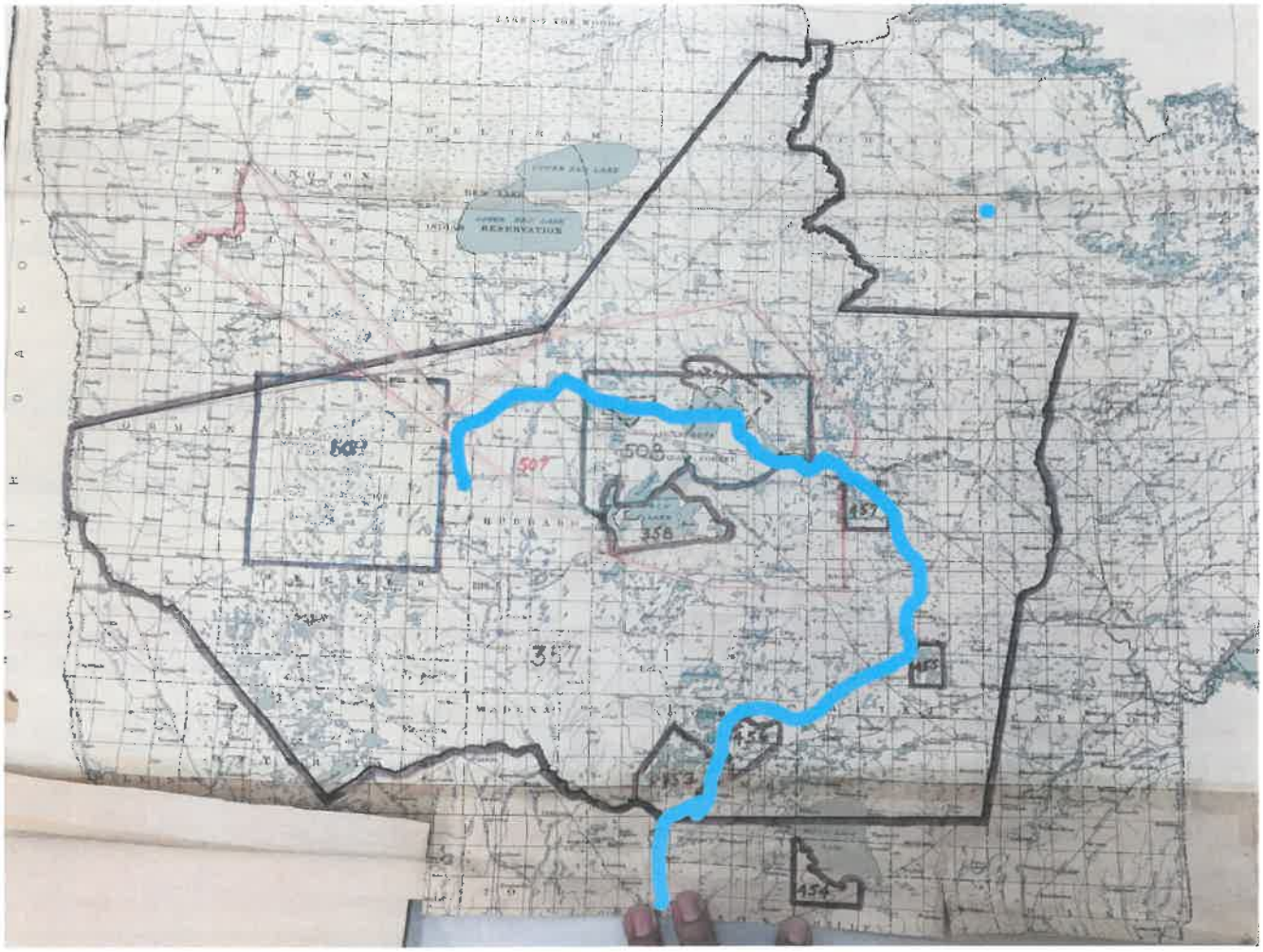
The White Earth Band of Ojibwe in exercise of original, retained jurisdiction and sovereignty of the thousands of treaty beneficiaries and the jurisdiction of the federally recognized reservation with tribal regulatory authorities for the reserved, priority, water quality

---

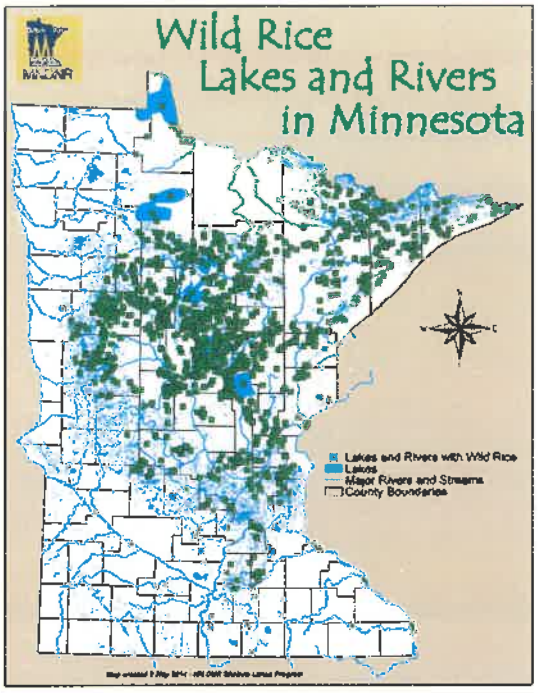
[1] See *Climate change affects lakes, walleye in complex ways*, by Elizabeth Dunbar on Minnesota Public Radio, Sept. 9, 2015 at https://www.mprnews.org/story/2015/09/09/walleye-climate-change

[2] See *Ojibwe leader says Mille Lacs walleye have not recovered yet* by Tony Kennedy Star Tribune OCTOBER 1, 2017 at http://www.startribune.com/ojibwe-leader-says-mille-lacs-walleye-have-not-recovered-yet/448842053/

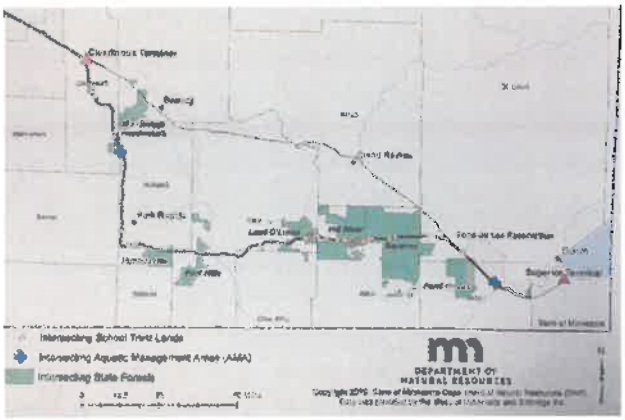
property rights and *Rights of Manoomin* now requires that the Minnesota Department of Natural Resources fulfill its legal obligation under federal laws to honor and respect the White Earth Band's and *Chippewas' of the Mississippi* rights to parity recognition of usufructuary property rights in the 1855 treaty ceded territory, same as the 1837 and 1854, and more importantly include all of the "off reservation" interconnected waters quality property rights as describe and provided for in the Winter's Doctrine for the upper Mississippi River in Minnesota, for the same environmental protection treatment and as "on reservation" for the Line 3 Clean Water Act permitting under Section 401 with appropriate consultation and *required consent* of the *Chippewas of the Mississippi*.



Of particular, direct, environmental concern is that the preferred pipeline route crosses some of the most important wild rice waters, streams, rivers, lakes and aquifers.



According to the DNR Line 3 Route Map, multiple state forests will be crossed as well, which after federal lands are the primary, off-reservation public lands and waters where tribal members' usufructuary property rights to hunt, fish, trap and gather will be directly impacted by the new pipeline route corridor.



The White Earth Band understands that the federal law, Public Law 83-280 (18 U.S.C. § 1162, 28 U.S.C. § 1360) does not authorize state regulation of the use of such property [including water rights] in a manner inconsistent with any Federal treaty, agreement, or statute or with any regulation made pursuant thereto; or shall deprive any Indian or any Indian tribe, band, or community of any right, privilege, or immunity afforded under Federal treaty, agreement, or statute with respect to hunting, trapping, or fishing or the control, licensing, or regulation thereof.

Consequently, the White Earth Band of Ojibwe requires written confirmation by the State of Minnesota, DNR and MPCA that separate, free and prior, informed consent (as required by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)) is required by and from the Chippewas of the Mississippi as co-owner, for this Line 3 pipeline project, as original owners of the undivided, one-half interest in the ceded territories' natural resources and waters that unite them, within the State of Minnesota regarding eminent domain over public waters and lands within the 1855 ceded territory.

Further consultation will be necessary. If you have any questions or need of further information about Rights of Manoomin and consent, please call on me at 218-935-2488 and/or Frank Bibeau, attorney at law representing White Earth for consultation on Line 3 and 1855 treaty rights at 218-760-1258 or frankbibeau@gmail.com.

Sincerely,

Monica M Hedstrom

Monica M Hedstrom, Director
Natural Resources

Attachment: Chairman Tibbett's Jan. 25, 2019 letter to Governor Walz

cc: Laura Bishop, Minnesota Pollution Control Agency Commissioner
Keith Ellison, Minnesota Attorney General
Eugene "Umsy" Tibbetts, acting Chairman, White Earth
Alan Roy, Secretary/Treasurer, White Earth
Ray Auginaush, Sr., District 1 White Earth
Kathy Goodwin, District 2, White Earth
Randy Goodwin, Executive Director, White Earth
Frank Bibeau, Executive Director 1855 Treaty Authority

EXHIBIT D

April 10, 2020

Commissioner Laura Bishop
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Submitted online at http://401wqc.mpca.commentinput.com/

Re: Clean Water Act Section 401 Permitting for Enbridge Line 3 Project
Tribal Water Rights and Environmental Jurisdiction Comments

Commissioner Bishop:

These comments are submitted on behalf of the **Red Lake Band of Chippewa Indians** and **White Earth Band of Ojibwe**, in addition to the *Joint Comments* filed on behalf of Friends of the Headwaters, Sierra Club, and Honor the Earth, with the Red Lake Band of Chippewa Indians and White Earth Band of Ojibwe.

The purpose of these comments are to raise concerns regarding federally and treaty protected Chippewa Tribal *Water Rights* and Environmental *Jurisdiction*, which ultimately require free, prior, informed consent before the Minnesota Pollution Control Agency may grant a regulatory easement or permit across water resources in which the state and Tribes have a common property interests, but individual rights. Consequently, because the MPCA's Line 3 water quality permitting violates federal laws protecting important Chippewa *water rights*, the Red Lake Band of Chippewa Indians and White Earth Band of Ojibwe formally request a full hearing, with contested case proceedings on the record for this matter.

If you have any questions or need of further assistance with regard to these matters please call on Mr. Joseph Plumer or myself. Mii gwitch.

/s/ Joseph Plumer
Joseph Plumer, Attorney
Red Lake Band of Chippewa Indians
9352 North Grace Lake Road
Bemidji, MN 56601
Telephone: (218) 556-3824
Email: jplumer@paulbunyan.net

/s/ Frank Bibeau
Frank Bibeau, Attorney
White Earth Band of Ojibwe
51124 County Road 118
Deer River, MN 56636
Telephone: (218) 760-1258
Email: frankbibeau@gmail.com

Chippewas' Tribal Water Rights and Environmental Jurisdiction Comments to MPCA from Red Lake Band of Chippewa Indians and the White Earth Band of Ojibwe for Line 3 CWA permitting

I. THE CLEAN WATER ACT (CWA) DOES NOT APPLY TO INDIAN TRIBES BECAUSE CONGRESS DID NOT INDICATE A CLEAR AND PLAIN INTENT FOR THE ACT TO APPLY TO INDIAN TRIBES AS EVIDENCED BY THE PLAIN LANGAUGE, LEGISLATIVE HISTORY, AND SURROUNDING CIRCUMSTANCES OF THE ACT

Limitations on tribal self-government and inherent tribal sovereign authority cannot be implied; any limitation must be expressly stated or otherwise made clear from surrounding circumstances and legislative history. In this case, the MPCA may not apply the provisions of the Clean Water Act (CWA) to the impacted Indian tribes without a clear and plain intent by Congress. Without a clear and plain intent by Congress for the CWA to apply to Indian tribes, the Minnesota Pollution Control Agency (MPCA) may not properly impose the requirements of these laws if they impact the tribes' rights of self-governance.

A. Longstanding Federal Indian Law Principles Require a Clear and Plain Intent by Congress to Limit Tribes of Their Inherent Sovereign Authority

"For nearly two centuries now, [the Supreme Court] has recognized Indian tribes as 'distinct, independent political communities,' qualified to exercise many of the powers and prerogatives of self-government[.]" *Plains Commerce Bank v. Long Family Land & Cattle Co.*, 554 U.S. 316, 327 (2008) (citations omitted). "Although no longer 'possessed of the full attributes of sovereignty,' [Indian tribes] remain a 'separate people, with the power of regulating their internal and social relations.'" *Santa Clara Pueblo v. Martinez*, 436 U.S. 49, 55 (1978) (citations omitted). Inherent in an Indian tribe's sovereignty is the tribe's power to "make their own substantive law in internal matters and to enforce that law in their own forums." *Id.* at 55–56 (1978) (citations omitted). An Indian tribe's "general authority, as [a] sovereign" includes the

power "to control economic activity within its jurisdiction[.]" *Merrion v. Jicarilla Apache Tribe*, 455 U.S. 130, 137 (1982). The Supreme Court recognizes the unique nature of Indian tribes in the United States, and does not view tribes as private organizations. *United States v. Mazurie*, 419 U.S. 544, 557 (1975) (stating that the Supreme Court's decisions "establish the proposition that Indian tribes within 'Indian country' are a good deal more than 'private, voluntary organizations'").

As dependent sovereigns, Indian tribes are subject to Congress' plenary authority. *United States v. Lara*, 541 U.S. 193, 200 (2004) ("[T]he Constitution grants Congress broad general powers to legislate in respect to Indian tribes, powers that we have consistently described as 'plenary and exclusive.'") (citations omitted). The Supreme Court has repeatedly recognized that Congress is the branch of government best-equipped "to weigh and accommodate the competing policy concerns" when deciding whether to limit the inherent sovereignty or treaty rights of Indian tribes. *Michigan v. Bay Mills Indian Cmty.*, 134 S. Ct. 2024, 2037–38 (2014) (citation omitted). But "unless and until Congress acts, the tribes retain their historic sovereign authority." *Id.* at 2030. Additionally, "courts will not lightly assume that Congress in fact intends to undermine Indian self-government." *Id.* at 2032.

The Supreme Court has long held that courts may construe a federal statute as impairing tribal sovereignty only if Congress clearly expresses its intent to reach that result. *See, e.g.*, *Merrion v. Jicarilla Apache Tribe*, 455 U.S. 130, 149–52 (1982); *see also Santa Clara Pueblo v. Martinez*, 436 U.S. 49, 60 (1978) ("[A] proper respect both for tribal sovereignty itself and for the plenary authority of Congress in this area cautions that we tread lightly in the absence of clear indications of legislative history."); *Cohen's Handbook of Federal Indian Law* § 2.01[1], at

110 (Nell Jessup Newton ed., 2012) ("Judicial deference to the paramount authority of Congress in matters concerning Indian policy remains a central and indispensable principle of the field of Indian law."). A clear and plain intent may be demonstrated by an "express declaration" in the statute, by the "legislative history," and by "surrounding circumstances." *United States v. Dion*, 476 U.S. 734, 739 (1986).

Respect for tribal self-government is reflected in two canons of construction. First, "statutes are to be construed liberally in favor of the Indians, with ambiguous provisions interpreted to their benefit[.]" *Montana v. Blackfeet Tribe of Indians*, 471 U.S. 759, 766 (1985). Second, when Indian tribes are concerned, courts are to "tread lightly in the absence of clear indications of legislative intent." *Merrion*, 455 U.S. at 149.

Here, the application of the CWA, which is silent on the subject of Indian tribes, would be inconsistent with longstanding federal Indian law principles. These principles include the settled Indian law canon of construction that requires construing silence in favor of Indian tribes and the principle that Congress may limit tribal self-government, but only when it expresses a clear and plain intent to do so. Inherent in the inherent sovereignty of Indian tribes is the power to make its own substantive law in internal matters and to enforce that law in their own forum. Because the CWA does not expressly include Indian tribes in the text of the statutes or the legislative history of the laws, the presumption is that Indian tribes' inherent sovereign authority continues to exist in the areas of environmental and water quality. This means that the impacted tribes may adopt and enforce their own environmental protection and water quality standards in their own forums based on their inherent sovereign authority.

Additionally, the MPCA must defer to Congress' paramount authority in matters concerning Indian policy to respect the unique relationship between Indian tribes and the United States. The MPCA must also defer to the inherent sovereign authority of the impacted tribes to adopt and enforce their own environmental protection and water quality regulations in their own forums. Accordingly, in the absence of a clear and plain intent by Congress for the CWA to apply to Indian tribes, the MPCA may not properly assert jurisdiction over the impacted tribes.

II. THE CWA DOES NOT APPLY TO THE IMPACTED TRIBES BECAUSE THE ENVIRONMENTAL PROTECTION AND WATER QUALITY REGULATIONS ARE REGARDED AS STRICTLY INTERNAL MATTERS UNDER EIGHTH CIRCUIT PRECEDENT

A. The United States Supreme Court's Decision in *Tuscarora* is the Starting Point to Determine Whether Federal Laws of General Applicability Apply to Indian Tribes

The United States Supreme Court's decision in *Fed. Power Comm'n v. Tuscarora Indian Nation*, 362 U.S. 99, 116 (1960), concluded that it is "now well settled by many decisions of this Court that a general statute in terms applying to all persons includes Indians and their property interests." However, the Supreme Court's statement in *Tuscarora* was not part of the Court's holding or necessary to it because there was ample evidence supported by congressional intent to apply the particular statute at issue to the off-reservation land owned by the Tuscarora Indian Nation in fee simple.[1]

[1] *See NLRB v. Little River Band of Ottawa Indians Tribal Gov't*, 788 F.3d 537, 557 (6th Cir. 2015) (McKeague, J., dissenting) ("While the *Tuscarora* statement has blossomed into a 'doctrine' in some courts in relation to some federal laws, closer inspection of the *Tuscarora* opinion reveals that the statement is in the nature of dictum and entitled to little precedential weight."); *San Manuel Indian Bingo & Casino v. NLRB*, 475 F.3d 1306, 1311 (D.C. Cir. 2007) (stating that the *Tuscarora* statement is in tension with "longstanding principles" of federal Indian law and of "uncertain significance").

In *Tuscarora*, the Supreme Court addressed the issue of whether the Federal Power Act ("FPA") authorized the condemnation of off-reservation land owned in fee simple by the Tuscarora Indian Nation. *Id.* at 110 (describing the issue in the case as "whether the Tuscarora lands covered by the Commission's license are a part of a 'reservation' as defined and used in the Federal Power Act"). The Court held that the FPA did authorize the condemnation of off-reservation land owned by the Tuscarora Indian Nation. *Id.* at 123. To resolve the issue, the Court looked to whether the FPA covered off-reservation lands owned by Indian tribes. *Id.* The Court concluded that the FPA "gives every indication that, within its comprehensive plan, Congress intended to include lands owned or occupied by any persons or persons, including Indians." *Id.* at 118. Ultimately, the Court determined that because the Tuscarora Indian Nation owned the land in fee simple, the lands did not satisfy the statutory definition of "reservation,"[2] and thus the federal government's taking of the land was permitted under the FPA. *Id.*

Here, unlike the CWA, which do not mention Indian tribes in the text of the statute or its legislative history, the FPA gave "every indication" to include lands owned or occupied by any landowner. Additionally, in *Tuscarora*, the Supreme Court addressed only issues of land ownership, not "questions pertaining to the tribe's sovereign authority to govern land." *NLRB v. Pueblo of San Juan*, 276 F.3d 1186, 1198 (10th Cir. 2002). The Court's statement in *Tuscarora* regarding statutes of general applicability was "made in the context of property rights, and [does] not constitute a holding as to tribal sovereign authority to govern." *Id.* at 1199. Furthermore, all

[2] The FPA defines "reservation" to include "national forests, tribal lands embraced within Indian reservations, military reservations, and other lands and interests in lands owned by the United States, and withdrawn, reserved, or withheld from private appropriation and disposal under the public land laws; also lands and interests in lands acquired and held for any public purposes; but shall not include national monuments or national parks[.]" 16 U.S.C. § 796(2).

three cases that the Court cited in support of its statement addressed only whether federal tax statutes applied to *individual Indians*.[3] These cases do not address the very different question of whether a federal statute should be construed as displacing a *tribe's* inherent sovereign authority. Additionally, in the sixty years since *Tuscarora* was decided, the Supreme Court has never cited the statement again.

Because the Supreme Court's statement in *Tuscarora* is dicta that is inconsistent with longstanding federal Indian law principles, the MPCA may not properly rely on *Tuscarora* to assert jurisdiction over the impacted tribes. Rather, the MPCA must defer to applicable federal Indian law principles and relevant Eighth Circuit precedent, and focus on how the application of the CWA to the impacted tribes displaces the tribes' inherent sovereign authority to regulate internal matters.

B. The Minnesota Pollution Control Agency Must Defer to Eighth Circuit Precedent to Determine Whether the Permitting Processes Now Before the Agency are Applicable to Indian Tribes

Tribes located in Minnesota are within the jurisdiction of the United States Court of Appeals for the Eighth Circuit. Therefore, the MPCA must defer to Eighth Circuit precedent to determine whether the CWA may be applied to the impacted tribes.

In *EEOC v. Fond du Lac Heavy Equip. & Const. Co.*, 986 F.2d 246 (8th Cir. 1993), the Eighth Circuit held that Age Discrimination in Employment Act ("ADEA"), a generally applicable federal statute,[4] does not apply to an employment discrimination action involving a

[3] *See Okla. Tax Comm'n v. United States*, 319 U.S. 598 (1943); *Superintendent of Five Civilized Tribes v. Comm'r*, 295 U.S. 418 (1935); *Choteau v. Burnet*, 283 U.S. 691 (1931).

[4] The ADEA defines the term "employer" to mean "a person engaged in an industry affecting commerce who has twenty-five or more employees" and also mean "(1) any agent of such person, and (2) a State or

member of an Indian tribe, a tribal equipment and construction company as the employer, and reservation employment because the "dispute involves a strictly internal matter" and application of the ADEA would affect the "tribe's specific right of self-government." *Id.* at 249. Notably, in *Fond du Lac*, the Eighth Circuit rejected the Ninth Circuit's framework in *Donovan v. Coeur d' Alene Tribal Farm*, 751 F.2d 1113 (9th Cir. 1985) in applying generally applicable federal statutes to Indian tribes. *Id.* 248 n.3 (noting that the Ninth Circuit's application of its "self-government exception" to *Tuscarora*'s presumption "is limited to purely intramural matters such as conditions of tribal membership, inheritance rules, and domestic relations").

First, in *Fond du Lac*, the Eighth Circuit acknowledged the Supreme Court's broad language in *Tuscarora,* but concluded that an internal ADEA dispute between an Indian tribe and a tribal member affects "the tribe's specific right of self-government" such that the "general rule of applicability [from *Tuscarora*] does not apply." *Id.* at 249. The court explained that "[s]pecific Indian rights will not be deemed to have been abrogated or limited absent a 'clear and plain' congressional intent." *Id.* (citing *United States v. Dion*, 476 U.S. 734, 738 (1986). Additionally, the court further explained that "[a]lthough the specific Indian right involved usually is based upon a treaty, such rights may also be based upon statutes, executive agreements, and federal common law." *Id.* at 248.

In *Fond du Lac*, the Eighth Circuit determined that the "dispute [at issue in the case] involves a strictly internal matter." *Id.* at 249. The Eighth Circuit characterized the dispute in issue in the case as "between an Indian applicant and an Indian tribal employer." *Id.* Because the

---

political subdivision of a State, and any interstate agency, but such term does not include the United States, a corporation wholly owned by the Government of the United States, or a State or political subdivision thereof." 29 U.S.C. § 630(b).

"Indian applicant is a member of the tribe, and the business is located on the reservation[,]" the court found that "[s]ubjecting such an employment relationship between the tribal member and his tribe to federal control and supervision dilutes the sovereignty of the tribe." *Id.* The court further explained:

> The consideration of a trib[al] member's age by a tribal employer should be allowed to be restricted (or not restricted) by the tribe in accordance with its culture and traditions. Likewise, disputes regarding this issue should be allowed to be resolved internally within the tribe. Federal regulation of the tribal employer's consideration of age in determining whether to hire the member of the tribe to work at the business located on the reservation interferes with an intramural matter that has traditionally been left to the tribe's self-government. *Id.* at 249.

In conclusion, the Eighth Circuit found that because the tribe's right self-government could be such a "specific right," whenever a general federal regulatory law interfered with tribal self-government, the law was not applicable to Indian tribes absent clear evidence of congressional intent for the law to apply. *Id.* Under the Eighth Circuit's framework, there is no presumption that a federal statute of general applicability applies to Indian tribes as in the Ninth Circuit.

C. The Impacted Tribes' Regulation of Their Own Environmental Protection and Water Quality Standards are Strictly Internal Matter that Fall Solely within the Jurisdiction of the Impacted Tribes.

Here, the issues of environmental protection and water quality regulation by the impacted tribes are internal matters and the application of the CWA would interfere with the impacted tribes' "specific right of self-government." *See Fond du Lac*, 986 F.2d at 249. Like the ADEA, the CWA are generally applicable federal statutes that do not mention Indian tribes in the text of

the statutes or in their legislative history. Furthermore, the application of the CWA to the impacted tribes would interfere with the tribes' exercise of self-government by restricting the tribes from adopting and enforcing their own environmental protection and water quality standards in their own forums. MPCA and federal regulation of the environmental protection and water quality of the impacted tribes substantially interferes with the internal matters of the tribes. Consequently, the Red Lake Band of Chippewa Indians and White Earth Band of Ojibwe formally requests a full hearing, with contested case proceedings.

III. CONGRESS SPECIFICALLY AND EXPRESSLY EXEMPTED *WATER RIGHTS* FROM THE 1953 JURISDICTIONAL GRANT UNDER PUBLIC LAW 280 TO ALL STATES INCLUDING MINNESOTA.

A. Public Law 280 specifically and expressly applies to all of Indian Country within the State of Minnesota, except the Red Lake Reservation.

Public Law 83-280 (18 U.S.C. § 1162(b) and 28 U.S.C. § 1360(b)) does not

> authorize the alienation, encumbrance, or taxation of any real or personal property, *including water rights*, belonging to any Indian or any Indian tribe, band, or community that is held in trust by the United States or is subject to a restriction against alienation imposed by the United States; or shall authorize regulation of the use of such property in a manner inconsistent with any Federal treaty, agreement, or statute or with any regulation made pursuant thereto; or shall deprive any Indian or any Indian tribe, band, or community of any right, privilege, or immunity afforded under Federal treaty, agreement, or statute with respect to hunting, trapping, or fishing or the control, licensing, or regulation thereof.

Public Law 280 (18 U.S.C. § 1162(b), 28 U.S.C. § 1360(b)).

Here, the Minnesota Pollution Control Agency is attempting to unilaterally deprive Chippewa Tribes' and treaty beneficiaries' rights to protect and maintain the abundant, high quality, clean waters necessary for Manoomin (wild rice) and other important fisheries and natural aquatic resources' ecosystems. The Chippewa tribes and

members understand that public waters of Minnesota and the natural resources which rely upon them are threatened and/or impacted; and are where most of the wild rice grows. The Chippewa tribes and members cannot ignore that *Climate change affects lakes, walleye in complex ways*[5] and that the State is trying to preserve as few as 176 designated refuge lakes, where walleye's favorite food the *tullibee* still live, hoping the *tullibee* will be able to survive even with continued warming. It is obvious that the State is not able to adequately protect waters and fisheries. The Chippewa tribes and members understand that any increase in tar sands extraction will only speed up climate change and compound environmental and aquatic problems in Minnesota, and when walleye fishing people can't fish Mille Lacs, they usually shift further north to Big Sandy, Pokegama, Big Winnibigoshish, Cass Lake and Leech Lake, which are all original 1855 reservations.

As part of the Line 3 environmental review process the White Earth Band of Ojibwe helped develop and has adopted the Minnesota Chippewa Tribe's *Anishinabe Cumulative Impacts Assessment* (ACIA) as the White Earth Band's environmental risk and evaluation tool for the meaningful assessment of the short and long term impact of the abandonment of the existing Line 3 pipeline, as well as the impacts from tar sands extraction, greenhouse gases, climate change and additional, future pipeline abandonment from the decreased demand for crude oil. The Red Lake Band of Chippewa Indians adopted Resolution No. 58-18 opposing the new corridor and pipeline abandonment for Line 3 and *Finding* the ACIA superior to the Public Utilities Commission's Environmental Impact Statement (EIS) and chose the No Build Alternative.

[5] See *Climate change affects lakes, walleye in complex ways*, by Elizabeth Dunbar on Minnesota Public Radio, Sept. 9, 2015 at https://www.mprnews.org/story/2015/09/09/walleye-climate-change

The White Earth Band of Ojibwe also *Found* that the Minnesota Chippewa Tribe's Anishinabe Cumulative Impacts Assessment superior to the EIS that has been approved by the Minnesota PUC in examining the cumulative impacts from the proposed Line 3 project upon surface waters, groundwater, fish, wildlife, waterfowl, wild rice, plants, as well as the broader environmental consequences resulting from the proposed Line 3 project. These cumulative impacts necessarily require denying the Line 3 Pipeline Replacement 401 permits. The MPCA must deny the route corridor across the 1855 ceded territory for being in violation of White Earth Band of Ojibwe established off-reservation conservation codes and customs and most importantly for lacking the required consent from the *Chippewas of the Mississippi* as co-owners of the freshwater resources.

Therefore, the White Earth Band of Ojibwe and Red Lake Band of Chippewa Indians require written confirmation from the State of Minnesota MPCA that separate, free and prior, informed consent (as required by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)) is required by and from the Chippewas as riparian, water rights co-owners--for considering to permit this Line 3 pipeline project regulatory easement across the ceded territories' natural resources and waters that unite them. Consequently, because the MPCA's Line 3 water quality permitting violates federal laws protecting important Chippewa water rights, the Red Lake Band of Chippewa Indians and White Earth Band of Ojibwe formally requests a full hearing, with contested case proceedings on the record.

B. **Chippewa Water Quality Property Rights.**

Over 100 years ago the United States Supreme Court established the *Winters Doctrine,* which provided for a first in time, priority *reserved* rights (in waters that arise on, border,

traverse, or underlie reservations). When the federal government created the Indian reservations, water rights were reserved in sufficient quantity to meet the purposes for which the reservations were established. *Winters v. United States*, 207 U.S. 564 (1908). Two decades ago the United States Supreme Court held we are to "interpret Indian treaties to give effect to the terms as the Indians themselves would have understood them." *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U. S. 172, 196 (1999), Treaties are to be "interpreted liberally in favor of the Indians," id. at 194 n. 5, and any ambiguities are to be resolved in the Indians' favor, *Winters v. United States*, 207 U.S. 564, 576–77 (1908). See also *United States v. Bresette*, 761 F. Supp. 658, 661 (D.Minn.1991) ("It is axiomatic that Indian treaty rights are to be afforded a broad construction and, indeed, are to be interpreted as the Indians understood them because the Indians were generally unlettered and the government had great power over the Indians with a corresponding responsibility toward them." (Emphasis in original)).

A year ago the United States Supreme Court in *Herrera v. Wyoming*, 587 U.S. ___ (May 20, 2019) re-affirmed *Mille Lacs* treaty rights analysis declaring that "[t]his case is controlled by *Mille Lacs*", which established that the crucial inquiry for treaty termination analysis is whether Congress has "clearly express[ed]" an intent to abrogate an Indian treaty right, 526 U. S., at 202, or whether a termination point identified in the treaty itself has been satisfied, id., at 207. In *Mille Lacs*, the Court declared "[i]n fact, the entire 1855 Treaty is devoid of any language expressly mentioning usufructuary rights or providing money for abrogation of those rights. These are telling omissions, since federal treaty drafters had the sophistication and experience to use express language when abrogating treaty rights. The historical record, purpose, and context

of the negotiations all support the conclusion that the 1855 Treaty was designed to transfer Chippewa land to the United States, not terminate usufructuary rights."

For the 20,000 present day *Chippewas of the Mississippi* clean water is inextricably linked to the self-sufficiency, economic development and security of present and future generations of northern Minnesota's tribal communities. The circuitous nature of the upper Mississippi River in particular begins adjacent to the White Earth reservation (established by the 1867 Treaty) and then flows through the 1855 ceded territory reservations of Cass Lake, Winnibigoshish, Pokegama, Sandy, Rabbit and Gull Lakes, and then forms the border between the Chippewa territories ceded in 1847 and 1837, with interconnected tributaries, upstream and downstream in all aquatic ecosystems which are the primary sources for important, primary treaty foods like manoomin (wild rice) environments and fisheries.

The best, recent federal cases that best explain how Chippewa rights should be recognized and understood are Minnesota v Mille Lacs[6] (1999) and U.S. v Brown *et al*[7] (8th 2015), also known as *Operation SquareHook*. The Brown Court reaffirms Mille Lacs and how

> The United States made several treaties with Chippewa Indians during the nineteenth century, including two relevant to this case. In July 1837, over one thousand Chippewa Indians gathered at Fort Snelling while their chiefs negotiated with Wisconsin Territorial Governor Henry Dodge who represented the United States. Documents Related to the Negotiation of the Treaty of July 29, 1837, reprinted in Satz, Chippewa Treaty Rights 131–153, at 131 ("1837 Treaty Journal"). The United States sought to purchase land east of the Mississippi River

[6] See Minnesota v. Mille Lacs Band of Chippewa Indians, 526 U.S. 172 (1999).

[7] See U.S. v. Brown, 777 F.3d 1025 (8th Cir. 2015). (It is well settled, however, that an individual Indian may assert usufructuary rights in a criminal prosecution. For example, the Supreme Court stated in United States v. Dion that hunting and fishing "treaty rights can be asserted by Dion as an individual member of the Tribe." 476 U.S. at 738 n. 4, 106 S.Ct. 2216. Evaluating usufructuary rights in United States v. Winans, the Court explained that while "the negotiations were with the tribe," treaties "reserved rights, however, to every individual Indian, as though named therein." 198 U.S. at 381, 25 S.Ct. 662.

in present day central Minnesota and Wisconsin because of its desirable pine timber. Id. at 131–32, 140.

During these negotiations, the Chippewa chiefs emphasized the importance of reserving their rights to fish, hunt, and gather on the land, also called usufructuary rights. According to the treaty journal, Ma-ghe-ga-bo stated, "Of all the country that we grant to you we wish to hold on to a tree where we get our living, & to reserve the streams where we drink the waters that give us life." 1837 Treaty Journal at 142.

The secretary who recorded the proceedings noted that he transcribed the statement as provided by the underqualified interpreters, but he "presume[d] it to mean that the Indians wish to reserve the privilege of hunting & fishing on the lands and making sugar from the Maple." Id. Flat Mouth, chief of the Pillager band which resided at Leech Lake, reiterated the importance of reserving usufructuary rights on the ceded lands:

> My Father. Your children are willing to let you have their lands, but they wish to reserve the privilege of making sugar from the trees, and getting their living from the Lakes and Rivers, as they have done heretofore, and of remaining in this Country.... You know we can not live, deprived of our Lakes and Rivers; ... we wish to remain upon them, to get a living.[8]

Governor Dodge agreed to reserve these rights for the Chippewa Indians. 1837 Treaty Journal at 146. Article 5 of the 1837 treaty provides, "The privilege of hunting, fishing, and gathering the wild rice, upon the lands, the rivers, and the lakes included in the territory ceded, is guarantied to the Indians, during the pleasure of the President of the United States." Treaty with the Chippewa, July 29, 1837, art. 5, 7 Stat. 536 ("1837 Treaty").

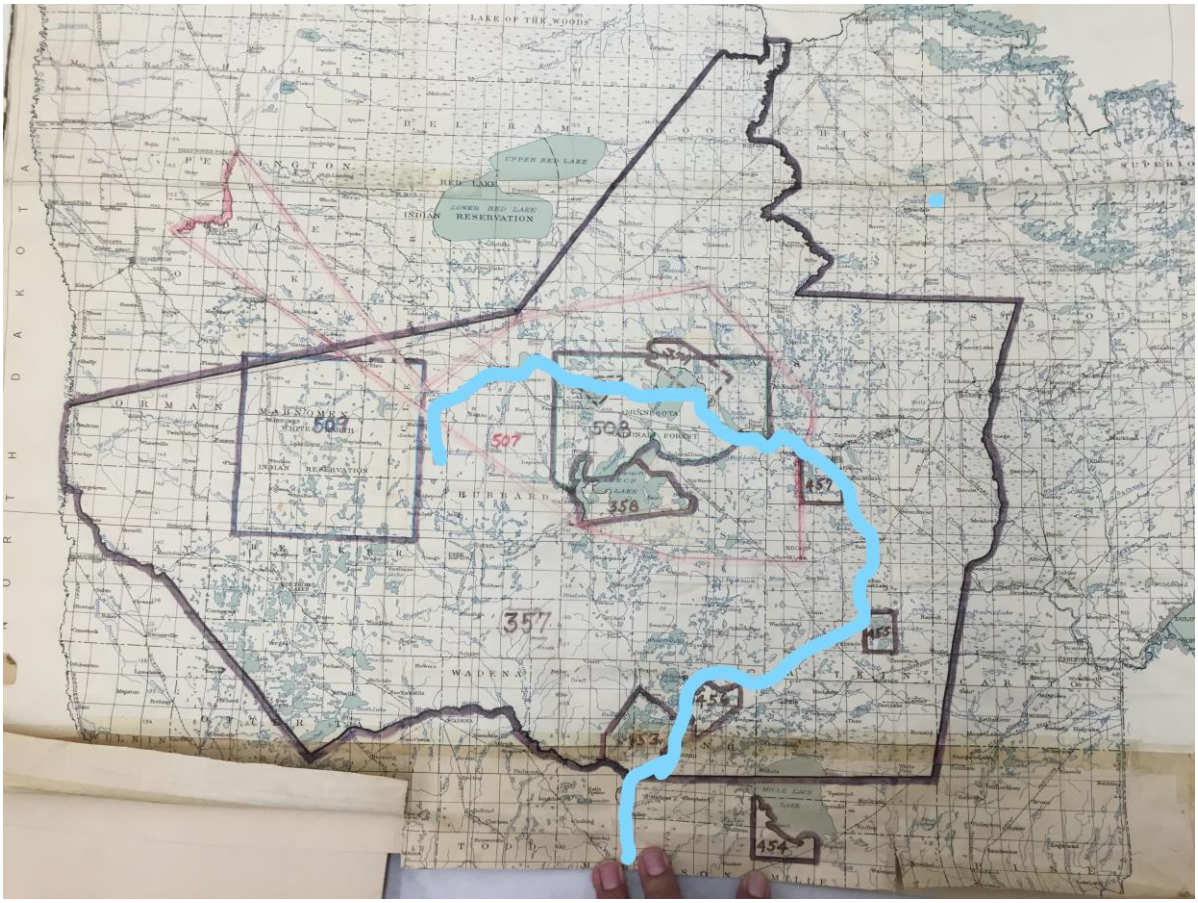
Flat Mouth was an important Chippewa Chief, treaty negotiator and signatory for the 1837 Treaty, who resided at Leech Lake. More importantly here, Flat Mouth was an important Chippewa Chief, treaty negotiator and signatory for the 1855 Treaty as well. The *Mille Lacs* Supreme Court found "the entire 1855 Treaty, in fact, is devoid of any language expressly

[8] Id. at 145.

mentioning-much less abrogating-usufructuary rights. Similarly, the Treaty contains no language providing money for the abrogation of previously held rights." The *Chippewas of the Mississippi* understand Flat Mouth and other signatory chiefs did not change their minds about exercising usufructuary rights between 1837 and 1855.

Consequently, for the *Chippewas of the Mississippi*, abundant, clean water is inextricably linked to the self-sufficiency, economic development and security of present and future generations of northern Minnesota's tribal communities' health and welfare. The upper Mississippi watershed (in light blue on the map), from the Headwaters of the Mississippi River adjacent to White Earth Reservation through the various, original 1855 reservations[9] and ceded territories through Brainerd to St. Cloud, must be recognized as one, long, continuous, first in time, connected chain of reservations, seamlessly linked together as a common, *Chippewas' of the Mississippi* priority quality water property rights under the *Winter's Doctrine* including all the upper Mississippi watershed tributaries, lakes, aquifers, wetlands and natural resources, reserved for the *Chippewas of the Mississippi* to enjoy and protect.

[9] See also *Menominee Tribe v. United States*, 391 U.S. 404 (1968)(the Supreme Court ruled that the Menominee Indian Tribe kept their historical hunting and fishing rights even after the federal government ceased to recognize the tribe.)



An important part of protecting Chippewa sovereign rights is our ongoing struggle to preserve a culture that is best understood in terms of our relationship with the natural environment. There is no economic framework that can properly define the value of manoomin (wild rice) to the Ojibwe people because manoomin is central to Ojibwe cultural identity, spiritual traditions, and physical well-being. Most significant is that wild rice serves as an important indicator species to the ecology of Minnesota's lakes and rivers and provides critical food and habitat to both endemic and migratory species. Tribal members continue to harvest and rely upon manoomin for religious purposes including naming ceremonies, funerals, Midewiwin ceremonies, and various seasonal feasts. These activities are critical components in perpetuating Anishinaabe lifeways and cultural practices, whereby the Ojibwe-Anishinaabe spiritual beliefs

mandate the use of certain plants, animals, and fish in ceremonies attendant to hunting, fishing, and gathering activities and these ceremonies ensure the perpetuation of the resources and the physical, mental, and spiritual well-being of the person for bimaadiziwin "living a good life".

The White Earth Band of Ojibwe has given notice that the State of Minnesota lacks unilateral authority to grant Section 401 Clean Water Act (regulatory water quality easements) permits for Enbridge's Line 3R pipeline activities across Tribal resources, without *Chippewas of the Mississippi's* Tribal consent. The United States understood at the beginning of land cession treaties that the Chippewa expressly reserved "hunting, fishing, and gathering the wild rice, upon the lands, the rivers, and the lakes included in the territory ceded" in 1837. Moreover, MPCA's Line 3 water quality permitting violates federal laws protecting important Tribal water rights. Consequently, the White Earth Band formally requests a full hearing, with contested case proceedings.

C. **Chippewas' Consent Required for MPCA Regulatory Easements for impacting Chippewa Water Property Rights.**

The recent *Operation Squarehook* cases like *United States v Good*[10] in 2013 *distinguished* Red Lake Chippewa usufructuary property rights as "not in common" with non-Indians, from the west coast treaty cases where some Tribal rights were "in common" with citizens of the territory or the United States in N 4 explaining

> that inquiry was necessary in *Puyallup*[11] because the treaty rights at issue protected hunting and fishing "in common with" other citizens of the territory so "any ultimate findings on the conservation issue must also cover the issue of equal protection implicit in the phrase 'in common with.' "Puyallup, 391 U.S. at 395, 403. Here, the treaty

[10] *U.S. v Good*, 2013 WL 6162801, D. Minn. Criminal No. 13-072,Nov. 25, 2013. See also *U.S. v Brown, supra* from Leech Lake Reservation. *Operation Squarehook* included Tribal netters from White Earth, Leech Lake and Red Lake being charged for selling fish.

[11] See *Puyallup Tribe v. Dep't of Game of Wash.*, 391 U.S. 392, 398 (1968).

> contains no language requiring the Chippewa to share their fishing rights "in common" with non-Indians. Rather, courts in this district have already held that the broad scope of the Chippewa's fishing rights precludes state regulation of tribe members' fishing and hunting. *Herbst*, 334 F. Supp. at 1006. Thus, the Court need not engage in this third inquiry because the treaty language does not contemplate that the Chippewa share their hunting and fishing rights with non-Indians. *See United States v. Bresette*, 761 F. Supp. 658, 664 (D.Minn.1991) (rejecting government's argument that "a statute of general applicability may limit Indian treaty rights under *Puyallup* even if it is not a clear abrogation of those rights as required under *Dion* " finding that "the court [in *Puyallup*] interpreted the Indians' fishing rights to be in common with other groups," and therefore determined that "the particular conservation measures did not exceed the Indians' understanding of the treaty" (emphasis omitted)). Thus, in *Puyallup,* the Supreme Court determined that the treaty **did not** protect the Indians' exclusive right to fish in the manner and mode that the state prohibited, so there was no need to consider abrogation, but only whether those state regulations were valid conservation measures that did not discriminate against Indians. *Puyallup,* 391 U.S. at 395–403. Here, the Court concludes that Defendants **do** have a treaty-protected right to the fishing underlying the indictment, but Congress has not abrogated that right. Thus, there is no need to analyze whether the Lacey Act or the regulations are valid nondiscriminatory conservation measures, because even if they were, they cannot be applied to Defendants in violation of their treaty rights.

(Emphasis in original).

Therefore, the White Earth Band of Ojibwe and Red Lake Band of Chippewa Indians requires written confirmation by the State of Minnesota MPCA that separate, free and prior, informed consent (as required by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)) is required by and from the Chippewas as riparian, water rights co-owners--for considering to permit this Line 3 pipeline project regulatory easement across the ceded territories' natural resources and the waters that unite them. Consequently, because the MPCA's Line 3 water quality permitting violates federal laws protecting important Chippewa water rights, the Red Lake Band of Chippewa Indians and White Earth Band of Ojibwe formally requests a full hearing, with contested case proceedings on the record.

CONCLUSION

Chippewa Tribes' and treaty beneficiaries' *water rights* are not subject to regulation by the MPCA and Minnesota cannot use the Clean Water Act process and state eminent domain to unjustly take U.S. Constitutionally and federally protected tribal property water rights or usurp protected tribal rights of consent. Consequently, because the MPCA's Line 3 water quality permitting violates federal laws protecting important Chippewa water rights, the Red Lake Band of Chippewa Indians and White Earth Band of Ojibwe formally request a full hearing, with contested case proceedings on the record.

Respectfully submitted April 10, 2020 by:

/s/ Joseph Plumer

Joseph Plumer, Attorney
Red Lake Band of Chippewa Indians
9352 North Grace Lake Road
Bemidji, MN 56601
Telephone: (218) 556-3824
Email: jplumer@paulbunyan.net

/s/ Frank Bibeau

Frank Bibeau, Attorney
White Earth Band of Ojibwe
51124 County Road 118
Deer River, MN 56636
Telephone: (218) 760-1258
Email: frankbibeau@gmail.com

EXHIBIT E

Senator
John Marty

Senate
State of Minnesota

December 3, 2020

Minnesota Public Utilities Commission
Via email

Dear Chair Sieben and Commission Members:

I write this last-minute appeal urging you to stay construction of the Line 3 replacement until court challenges have been considered.

There is no doubt the majority of the Commission believes it is appropriate to allow the pipeline replacement project to proceed. This is not an attempt to change your decision.

Instead, granting a stay of construction allows the PUC to acknowledge that others have valuable perspectives and should be allowed their day in court. To date, the perspectives of the Red Lake and White Earth Nations, who have rights to treaty lands through which this new corridor will run, have not been taken into account. In the Certificate of Need, the Commission omitted discussion of treaties from the order, determining that while the ALJ report considered them, the PUC did not need to.[1]

Our long history of abuse and mistreatment of native communities and unwillingness to respond to their grievances has gone on far too long. If construction is allowed to proceed at this time, the project will be largely completed before their considerations are taken up in court.

This is also an appeal to let other scientific perspectives represented in cases before the court to be heard. The Commission dismissed from consideration the Administrative Law Judge's finding that the Line 3 replacement project would increase greenhouse gases by 193 million tons of CO2 per year. *That finding shows that the increase in greenhouse gas-emitting fuel pumped through the new Line 3 pipeline, for use elsewhere, is greater than the greenhouse gas emissions from the entire economy of the state of Minnesota!*

[1] Footnote 18 of the September 2018 order states: "For example, the ALJ Report included a section discussing the treaties between the federal government and the Native American sovereign nations located in Minnesota. The Commission concludes that this discussion is not necessary to the Commission's decision, and therefore does not adopt these findings."

2401 Minnesota Senate Bldg, St. Paul, MN 55155 (651) 296-5645 jmarty@senate.mn

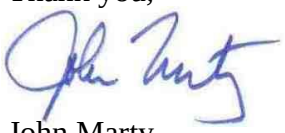
The Commission's decision to ignore that terrible reality was based on the fact that differing studies will come up with different estimates of climate impact. In essence, the Commission decided that because we cannot know the precise climate impact of the pipeline, we will ignore the entire impact. That's akin to saying that "because we cannot accurately measure the greenhouse gas emissions from Minnesota's economy, we can act as if there are no greenhouse gas emissions from Minnesota's economy."[2]

The Commission does not need to change its mind to recognize that other reasonable minds deserve a meaningful chance to be heard in court. Without a stay, these voices will effectively lose that opportunity before irreversible damage is done.

To use the analogy about "closing the barn door after the horse is already out of the barn," failure to impose a stay on construction is telling those waiting for their day in court that "the horse isn't just out of the barn, but is racing around the track and is now on the homestretch." Your failure to impose a stay will make their day in court meaningless.

For all of those with legitimate issues in court – for the Red Lake and White Earth Nations, whose history and voices are different from yours, and for the climate issues on which reasonable minds differ with you – please recognize that the delay is a reasonable price to pay for getting this decision right. Please impose a stay to allow this to be reviewed in court.

Thank you,



John Marty

[2] Footnote 147 of the September 2018 order states: "But the FEIS acknowledged the limitations of the lifecycle greenhouse gas analysis: 'Note that there are assumptions and data limitations in the characterization of life-cycle [greenhouse gas] emissions that vary between studies. As a result, the [greenhouse gas] emissions can differ substantially from one study to the next. Since the studies reviewed do not consistently disclose the details of their analysis, and often rely on proprietary models and data, a thorough assessment of the reasons for this variability is not possible.' FEIS at 5-466. The Commission therefore does not adopt the ALJ Report at finding 676 and those findings that rely on finding 676." [ALJ finding 676 spells out the social cost of carbon (lifecycle climate impact) of the project as $287 billion over 30 years.]

EXHIBIT F

The Minnesota Chippewa Tribe

Administration
218-335-8581
Toll Free: 888-322-7688
Fax: 218-335-8496
Home Loan
218-335-8582
Fax: 218-335-6925
Economic Development
218-335-8583
Fax: 218-335-8496
Education
218-335-8584
Fax: 218-335-2029
Human Services
218-335-8586
Fax: 218-335-8080

June 22, 2021

The Honorable Tim Walz
Governor
130 State Capitol
75 Rev. Dr. Martin Luther King Jr Blvd
St. Paul, MN 55155

Re: Request for Rescinding of DNR Dewatering Permit

Dear Governor Walz:

I write to you today on behalf of the Minnesota Chippewa Tribe regarding the Water Appropriation Permit Amendment No 2018-3420 (Construction Dewatering) that was issued by the Minnesota Department of Natural Resources on June 4, 2021 pursuant to Minnesota Statute §103G.271. The White Earth Reservation was not given sufficient notice, nor did the Department of Natural Resources engage in consultation with the White Earth Reservation in violation of Executive Order 19-24.

The Permit Amendment increases the amount of water that the Enbridge Line 3 Replacement Project may displace from some 510.5 million gallons to 4,982 billion gallons. This is a tenfold increase in the originally approved water appropriation permit. While there was a conversation between a White Earth staff person and a DNR staff person, there was no attempt made at a government-to-government consultation prior to issuing this permit on June 4, 2021.

Given the high temperatures and the low precipitation this season, northern Minnesota is in a moderate draught. Water levels are already dangerously low and displacing this many gallons of water will undoubtedly have a detrimental impact on our wild rice, which is our most sacred food. Time is of the essence, and I ask that you direct the Department of Natural Resources to rescind Water Appropriation Permit Amendment No. 2018-3420 until such time as the Department consults with the White Earth Reservation and all other impacted tribes as contemplated by Executive Order 19-24.

Please contact me if you have any questions or concerns.

Miigwech,

Catherine Chavers

Catherine J. Chavers
President

EXHIBIT G

Gmail

Frank Bibeau <frankbibeau@gmail.com>

Fw: Line 3 Replacement Project - Proposed Amendment to Water Appropriation for Construction Dewatering

7 messages

Renee Keezer <Renee.Keezer@whiteearth-nsn.gov> Thu, Jul 1, 2021 at 3:45 PM
To: "frankbibeau@gmail.com" <frankbibeau@gmail.com>

From: Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>
Sent: Thursday, May 27, 2021 2:30 PM
To: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>
Subject: FW: Line 3 Replacement Project - Proposed Amendment to Water Appropriation for Construction Dewatering

From: Doneen, Randall (DNR) <randall.doneen@state.mn.us>
Sent: Friday, May 14, 2021 2:44 PM
To: tgeshick@boisforte-nsn.gov; waynedupuis@fdlrez.com; samoore@boreal.org; ben.benoit@llojibwe.net; Katie.Draper@millelacsband.com; 'deb.dirlam@lowersioux.com' <deb.dirlam@lowersioux.com>; 'gmiller@piic.org' <gmiller@piic.org>; Amanda Wold <amandaw@uppersiouxcommunity-nsn.gov>; jleblanc@redlakenation.org; Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>; mnorthbird@mnchippewatribe.org; Darren Vogt (DVogt@1854treatyauthority.org) <DVogt@1854treatyauthority.org>; jcoleman@glifwc.org; tina.brown@ho-chunk.com; linda.nguyen@redcliff-nsn.gov; VTateyuskanskan@swo-nsn.gov; sarahs@stcroixojibwe-nsn.gov; scott.walz@shakopeedakota.org
Cc: Harrington, Bradley (DNR) <Bradley.Harrington@state.mn.us>
Subject: Line 3 Replacement Project - Proposed Amendment to Water Appropriation for Construction Dewatering

Tribal Natural Resource Directors:

The Minnesota Department of Natural Resources (DNR) wanted to let you know that we are reviewing a proposal to amend an existing water appropriation permit for the Line 3 pipeline replacement project. The proposed amendment seeks to increase the total amount of groundwater that can be temporarily dewatered from trenches along the route during construction. The proposed amendment would modify the volume permitted, but not the currently approved dewatering methods, whereby water is removed from the trench, stored, and then infiltrated back into the ground in close proximity to the point of each appropriation. This approach limits the duration of any potential impacts to groundwater levels.

What is being requested?

Enbridge is requesting an increase in its total permitted dewatering volume from 510.5 million gallons (MG) to 4,982 MG, an increase of 4,472 MG. The proposed amendment also seeks an additional 1.8 MG appropriation for construction dewatering of a pipeline maintenance shop. In addition, 3,683 MG of the proposed increase is

associated with additional dewatering well point systems that are used to dewater the area around the pipeline trench. The increase in well point systems are proposed on 4 of the 5 construction spreads.

- Spread 2 – 11 well point systems for an additional 700 MG
- Spread 3 – 3 well point systems for an additional 2,720.7 MG
- Spread 4 – 3 well point systems for an additional 25.9 MG
- Spread 5 – 17 well point systems for an additional 236.7 MG

Why is Enbridge seeking this permit amendment?

The amount of dewatering needed during construction thus far has significantly exceeded what Enbridge anticipated and requested in its original permit application. The original estimate for construction dewatering was derived from the previous Alberta Clipper project. The alignment of the Line 3 replacement is different than the Alberta Clipper, especially in the eastern portion or new area of the pipeline project, where the line crosses extensive peatland soil types.

In addition, the company converted to well point systems for dewatering, rather than relying on sump pump dewatering. The company opted to make this shift to assist in meeting construction storm water requirements, as well point systems produce much cleaner water. While the well point systems facilitate meeting construction storm water discharge requirements, it also results in more water being pumped.

The company also has identified a maintenance facility construction effort that will need construction dewatering. This is not part of the corridor, but are required by the Minnesota Public Utility Commission.

What are the natural resource considerations associated with this amendment request, and how might these be managed?

The total volume of water requested under this amendment application is large, and would be a significant increase to the currently permitted volume. As such, one of the threshold issues to be evaluated is the implications for the water table aquifer. The temporary nature of the water appropriation and the distribution of the volume across the length of the route are important considerations in this evaluation. As is the case with the existing permit, there would continue to be temporary localized drawdown of groundwater along the corridor, but any water table impacts from this drawdown would be limited because water will be infiltrated back into the ground in close proximity to the point of appropriation.

Another critical issue for evaluation is management of the water discharge to avoid impacts from inundation and/or sedimentation. The Minnesota DNR and Minnesota Pollution Control Agency (MPCA) are working together to evaluate this issue. Current approaches under consideration include:

- Limiting discharge locations near isolated depressional wetlands and other sensitive water resources.
- Additional measures to ensure adequate oversight of dewatering operations at the increased volume being sought.
- Revisions to the Storm Water Pollution Prevention Plan that would require redundant perimeter controls under certain situations.

Timing for Decision

Enbridge anticipates reaching the appropriation limit of 510.5 MG under its existing permit in June. The Minnesota DNR will likely make a decision on the water appropriation permit amendment in early June.

If you have any questions or concerns about this request you can email or call me at (651) 259-5156. Alternatively, I am tentatively scheduling a meeting at 3 PM on Thursday May 27 if you would like to join and have more of a group discussion. Details on meeting will be provided shortly.

Randall Doneen
CAR Section Manager
Ecological and Water Resources
Minnesota Department of Natural Resources

frankbibeau@gmail.com <frankbibeau@gmail.com> Thu, Jul 1, 2021 at 4:03 PM
To: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>
Bcc: frankbibeau@gmail.com

Mii gwitch Renee,
Were you able to participate in the phone call May 27? Do we know which Indian tribes or bands participated?

Sent from my iPhone

Frank Bibeau
218-760-1258

> On Jul 1, 2021, at 3:45 PM, Renee Keezer <Renee.Keezer@whiteearth-nsn.gov> wrote:
>
> [Quoted text hidden]

Renee Keezer <Renee.Keezer@whiteearth-nsn.gov> Thu, Jul 1, 2021 at 4:08 PM
To: "frankbibeau@gmail.com" <frankbibeau@gmail.com>

Frank,

I did participate on the phone call May 27th. Randall Doneen was the facilitator. Charlie Lippert from Mille Lacs and Wayne Dupuis from Fon Du Lac were in the meeting. There was a woman named Sue but no last name and someone that had their name as MCT. There weren't very many people on the meeting. Did you receive the other email as well?

Renee

From: frankbibeau@gmail.com <frankbibeau@gmail.com>
Sent: Thursday, July 1, 2021 4:03 PM
To: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>
Subject: Re: Line 3 Replacement Project - Proposed Amendment to Water Appropriation for Construction Dewatering

[Quoted text hidden]

---

frankbibeau@gmail.com <frankbibeau@gmail.com> Thu, Jul 1, 2021 at 4:20 PM
To: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>
Bcc: frankbibeau@gmail.com

Yes I did. We will need to talk and have you as a witness. Was any USACE on the call?

Sent from my iPhone

Frank Bibeau
218-760-1258

> On Jul 1, 2021, at 4:08 PM, Renee Keezer <Renee.Keezer@whiteearth-nsn.gov> wrote:
>
> [Quoted text hidden]

Renee Keezer <Renee.Keezer@whiteearth-nsn.gov> Thu, Jul 1, 2021 at 4:21 PM
To: "frankbibeau@gmail.com" <frankbibeau@gmail.com>

What is USACE?

From: frankbibeau@gmail.com <frankbibeau@gmail.com>
Sent: Thursday, July 1, 2021 4:20 PM
[Quoted text hidden]

[Quoted text hidden]

Renee Keezer <Renee.Keezer@whiteearth-nsn.gov> Thu, Jul 1, 2021 at 4:42 PM
To: "frankbibeau@gmail.com" <frankbibeau@gmail.com>

No, there was not anyone there from the Army core of engineers and yes, I am willing to be a witness.

Renee Keezer
Pesticide Coordinator
White Earth Department of Natural Resources

Renee.Keezer@whiteearth-nsn.gov
(218)935-2488 ext:2106

From: frankbibeau@gmail.com <frankbibeau@gmail.com>
Sent: Thursday, July 1, 2021 4:20 PM
[Quoted text hidden]

[Quoted text hidden]

---

frankbibeau@gmail.com <frankbibeau@gmail.com> Thu, Jul 1, 2021 at 4:47 PM
To: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>
Bcc: frankbibeau@gmail.com

US Army corps of Engineers

Sent from my iPhone

Frank Bibeau
218-760-1258

> On Jul 1, 2021, at 4:21 PM, Renee Keezer <Renee.Keezer@whiteearth-nsn.gov> wrote:
>
> [Quoted text hidden]

EXHIBIT H

Fw: Line 3 Construction Dewatering Permit Amendment request

1 message

Renee Keezer <Renee.Keezer@whiteearth-nsn.gov> Thu, Jul 1, 2021 at 3:41 PM
To: "frankbibeau@gmail.com" <frankbibeau@gmail.com>

From: Doneen, Randall (DNR) <randall.doneen@state.mn.us>
Sent: Wednesday, June 9, 2021 2:53 PM
To: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>; Charlie Lippert <Charlie.Lippert@millelacsband.com>; waynedupuis@fdlrez.com <waynedupuis@fdlrez.com>; mnorthbird@mnchippewatribe.org <mnorthbird@mnchippewatribe.org>
Cc: Katie Draper <Katie.Draper@millelacsband.com>; Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>; Harrington, Bradley (DNR) <Bradley.Harrington@state.mn.us>
Subject: RE: Line 3 Construction Dewatering Permit Amendment request

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Renee,

We actually issued the permit amendment last Friday. I have attached a copy of the amended permit and associated record of decision for your information. At this point there are no open comment periods. I have also attached the May 14, 2021 email that was sent to Tribal Natural Resource Directors providing information about the amendment request.

Please let me know if you have additional questions about the amended permit.

Randall Doneen
CAR Section Manager
Ecological and Water Resources
Minnesota Department of Natural Resources

From: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>
Sent: Wednesday, June 9, 2021 11:30 AM
To: Doneen, Randall (DNR) <randall.doneen@state.mn.us>; Charlie Lippert <Charlie.Lippert@millelacsband.com>; waynedupuis@fdlrez.com; mnorthbird@mnchippewatribe.org
Cc: Katie Draper <Katie.Draper@millelacsband.com>; Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>; Harrington, Bradley (DNR) <Bradley.Harrington@state.mn.us>
Subject: Re: Line 3 Construction Dewatering Permit Amendment request

Randall,

Good morning,

I have a few questions regarding the new dewatering permit. As this is a new permit, is there going to be an open comment period? Will there be consultation with the tribes so they may have the opportunity to submit comment if they desire to do so? If there will be a comment period, when will it be available and for how long?

Miigwech,

Renee Keezer

From: Doneen, Randall (DNR) <randall.doneen@state.mn.us>
Sent: Wednesday, June 2, 2021 1:50 PM
To: Charlie Lippert <Charlie.Lippert@millelacsband.com>; Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>; waynedupuis@fdlrez.com <waynedupuis@fdlrez.com>; mnorthbird@mnchippewatribe.org <mnorthbird@mnchippewatribe.org>
Cc: Katie Draper <Katie.Draper@millelacsband.com>; Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>; Harrington, Bradley (DNR) <Bradley.Harrington@state.mn.us>
Subject: RE: Line 3 Construction Dewatering Permit Amendment request

Charlie,

Here is map of the Line 3 construction spreads. Hopefully this at a scale that is helpful.

Randall Doneen
CAR Section Manager
Ecological and Water Resources
Minnesota Department of Natural Resources

From: Charlie Lippert <Charlie.Lippert@millelacsband.com>
Sent: Wednesday, June 2, 2021 12:03 PM
To: Doneen, Randall (DNR) <randall.doneen@state.mn.us>; Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>; waynedupuis@fdlrez.com; mnorthbird@mnchippewatribe.org
Cc: Katie Draper <Katie.Draper@millelacsband.com>; Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>; Harrington, Bradley (DNR) <Bradley.Harrington@state.mn.us>
Subject: RE: Line 3 Construction Dewatering Permit Amendment request

Miigwech Randall for the Final EIS link.
Do you have the file that specifies where each of the five Spreads are? I ask since the pipeline is slated to be laid approximately 3.6 miles from our East Lake (Minisinaakwaang) community, and approximately 3.2 miles from our Lake Minnewawa (Minweweyaashkaang) community, which the Final EIS in Section 11.2.3 makes no such reference since these are on off-Reservation Trust Parcels, which are—by the way—considered Reservation lands, which when the Department of Commerce did their analysis for the PUC, they could have easily used the US Census Bureau GIS boundary file to determine their location but didn't. Since where these two communities of the Mille Lacs Band is in a wetland-dominated area, knowing which Line 3's Spread covers that area would be helpful information.
Miigwech miinawaa.
Charlie L.

From: Doneen, Randall (DNR) <randall.doneen@state.mn.us>
Sent: June 2, 2021 09:22

To: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>; waynedupuis@fdlrez.com; Charlie Lippert <Charlie.Lippert@millelacsband.com>; mnorthbird@mnchippewatribe.org
Cc: Katie Draper <Katie.Draper@millelacsband.com>; Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>; Harrington, Bradley (DNR) <Bradley.Harrington@state.mn.us>
Subject: RE: Line 3 Construction Dewatering Permit Amendment request

Good morning Renee,

As you may know the Minnesota Public Utility Commission was the Responsible Governmental Unit for ensuring Minnesota Environmental Policy Act compliance for the Line 3 Replacement project. Here is a link to the PUC webpage for the Final EIS:

https://mn.gov/eera/web/file-list/13765/

Is there a specific natural resource concern with proposed increase that we should consider addressing? We have focused on ensuring that the water is managed appropriately once it has been appropriated.

Thank you in advance.

Randall Doneen
CAR Section Manager
Ecological and Water Resources
Minnesota Department of Natural Resources

From: Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>
Sent: Tuesday, June 1, 2021 7:08 AM
To: Doneen, Randall (DNR) <randall.doneen@state.mn.us>; waynedupuis@fdlrez.com; 'Charlie.Lippert@millelacsband.com' <Charlie.Lippert@millelacsband.com>; mnorthbird@mnchippewatribe.org
Cc: Katie.Draper@millelacsband.com; Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>; Harrington, Bradley (DNR) <Bradley.Harrington@state.mn.us>
Subject: Re: Line 3 Construction Dewatering Permit Amendment request

---

Mr. Doneen,

Would you please send me the current Environmental Impact Statement for the Line 3 construction project. I have concerns about the proposed dewatering permits and would like to ensure that it is in compliance with 40 CFR 1508.1. The proposed amendment to the permit is a significant difference in comparison to the original permit.

Renee Keezer

From: Doneen, Randall (DNR) <randall.doneen@state.mn.us>
Sent: Friday, May 28, 2021 2:19 PM
To: waynedupuis@fdlrez.com <waynedupuis@fdlrez.com>; 'Charlie.Lippert@millelacsband.com' <Charlie.Lippert@millelacsband.com>; Renee Keezer <Renee.Keezer@whiteearth-nsn.gov>;

mnorthbird@mnchippewatribe.org <mnorthbird@mnchippewatribe.org>
Cc: Katie.Draper@millelacsband.com <Katie.Draper@millelacsband.com>; Monica Hedstrom <Monica.Hedstrom@whiteearth-nsn.gov>; Harrington, Bradley (DNR) <Bradley.Harrington@state.mn.us>
Subject: Line 3 Construction Dewatering Permit Amendment request

Charlie, Renee, Michael and Wayne:

Thank you for taking the time to meet and discuss the proposed amendment to construction dewatering. I wanted to circle back on Charlie's question about infiltration rates and give you an update on some other aspects that we discussed.

Q: What do we know about the infiltration rates in the areas where this water will be discharged?

A: As I had suspected there was not an analysis of infiltration rates for the construction stormwater discharge permit. I did speak with MPCA staff and they provided this following description of the construction stormwater requirements.

"– the company is not required to provide an analysis of infiltration rates in the proposed dewatering locations. The requirement is their discharge can't cause nuisance conditions in a surface water. The SWPPP contains various options for dewatering based on pumping rate and expected sediment load that needs to be removed. These various options are evaluated and selected in the field based on the SWPPP and field conditions at the time of dewatering. If the selected option is not effective in preventing nuisance conditions, the company needs to move up to the next higher level of treatment/dewatering method."

In addition the Project's Environmental Protection Plan (EPP) describes the factors that are considered for constructing and operating dewatering systems. The EPP was too large to attach to this email, but here is an excerpt from Section 5.0 of the EPP that identifies soil type as a factor that is considered when siting and operating these systems:

1. **Water Discharge Setting** – This includes:
a. Soil Type – The soil type the discharged water will flow over. The management of discharged water traveling over sandy soil is more likely to soak into the ground as compared to clay soils.
b. Ground Surface – The topography in the area that will influence the surface flow of the discharged water.
c. Adjustable Discharge rate – The flow rate of the discharged water (which may need to vary) can be managed based on the site conditions to minimize instances of water from reaching a sensitive resource area such as a wetland or waterbody.
d. Discharge Outfall – The amount of hose and number/size of pumps needed to attempt to discharge water at a location which drains away from waterbodies or wetlands.

I would also like to report MPCA has reviewed the revised SWPPP and has verified that it contains the requirement for additional perimeter controls if there is potential for discharges to reach wetlands or surface water. It sounds like there are still some details to get worked out before the plan is finalized, but it does address the important topic that was identified.

DNR is meeting with MPCA and Enbridge in the next couple of days to discuss the company's efforts to avoid isolated depressional wetlands and other surface waters.

Last but not least, it appears that we may be in a position to issue a decision on this request late next week. With that in mind, please get any additional questions or items to consider as soon as you can next week.

Randall Doneen
CAR Section Manager
Ecological and Water Resources
Minnesota Department of Natural Resources

---------- Forwarded message ----------
From: "Doneen, Randall (DNR)" <randall.doneen@state.mn.us>
To: "tgeshick@boisforte-nsn.gov" <tgeshick@boisforte-nsn.gov>, "waynedupuis@fdlrez.com" <waynedupuis@fdlrez.com>, "samoore@boreal.org" <samoore@boreal.org>, "ben.benoit@llojibwe.net" <ben.benoit@llojibwe.net>, "Katie.Draper@millelacsband.com" <Katie.Draper@millelacsband.com>, "'deb.dirlam@lowersioux.com'" <deb.dirlam@lowersioux.com>, "'gmiller@piic.org'" <gmiller@piic.org>, Amanda Wold <amandaw@uppersiouxcommunity-nsn.gov>, "jleblanc@redlakenation.org" <jleblanc@redlakenation.org>, "monica.hedstrom@whiteearth-nsn.gov" <monica.hedstrom@whiteearth-nsn.gov>, "mnorthbird@mnchippewatribe.org" <mnorthbird@mnchippewatribe.org>, "Darren Vogt (DVogt@1854treatyauthority.org)" <DVogt@1854treatyauthority.org>, "jcoleman@glifwc.org" <jcoleman@glifwc.org>, "tina.brown@ho-chunk.com" <tina.brown@ho-chunk.com>, "linda.nguyen@redcliff-nsn.gov" <linda.nguyen@redcliff-nsn.gov>, "VTateyuskanskan@swo-nsn.gov" <VTateyuskanskan@swo-nsn.gov>, "sarahs@stcroixojibwe-nsn.gov" <sarahs@stcroixojibwe-nsn.gov>, "scott.walz@shakopeedakota.org" <scott.walz@shakopeedakota.org>
Cc: "Harrington, Bradley (DNR)" <Bradley.Harrington@state.mn.us>
Bcc:
Date: Fri, 14 May 2021 19:43:45 +0000
Subject: Line 3 Replacement Project - Proposed Amendment to Water Appropriation for Construction Dewatering

Tribal Natural Resource Directors:

The Minnesota Department of Natural Resources (DNR) wanted to let you know that we are reviewing a proposal to amend an existing water appropriation permit for the Line 3 pipeline replacement project. The proposed amendment seeks to increase the total amount of groundwater that can be temporarily dewatered from trenches along the route during construction. The proposed amendment would modify the volume permitted, but not the currently approved dewatering methods, whereby water is removed from the trench, stored, and then infiltrated back into the ground in close proximity to the point of each appropriation. This approach limits the duration of any potential impacts to groundwater levels.

What is being requested?

Enbridge is requesting an increase in its total permitted dewatering volume from 510.5 million gallons (MG) to 4,982 MG, an increase of 4,472 MG. The proposed amendment also seeks an additional 1.8 MG appropriation for construction dewatering of a pipeline maintenance shop. In addition, 3,683 MG of the proposed increase is associated with additional dewatering well point systems that are used to dewater the area around the pipeline trench. The increase in well point systems are proposed on 4 of the 5 construction spreads.

- Spread 2 – 11 well point systems for an additional 700 MG
- Spread 3 – 3 well point systems for an additional 2,720.7 MG
- Spread 4 – 3 well point systems for an additional 25.9 MG
- Spread 5 – 17 well point systems for an additional 236.7 MG

Why is Enbridge seeking this permit amendment?

The amount of dewatering needed during construction thus far has significantly exceeded what Enbridge anticipated and requested in its original permit application. The original estimate for construction dewatering was derived from the

previous Alberta Clipper project. The alignment of the Line 3 replacement is different than the Alberta Clipper, especially in the eastern portion or new area of the pipeline project, where the line crosses extensive peatland soil types.

In addition, the company converted to well point systems for dewatering, rather than relying on sump pump dewatering. The company opted to make this shift to assist in meeting construction storm water requirements, as well point systems produce much cleaner water. While the well point systems facilitate meeting construction storm water discharge requirements, it also results in more water being pumped.

The company also has identified a maintenance facility construction effort that will need construction dewatering. This is not part of the corridor, but are required by the Minnesota Public Utility Commission.

What are the natural resource considerations associated with this amendment request, and how might these be managed?

The total volume of water requested under this amendment application is large, and would be a significant increase to the currently permitted volume. As such, one of the threshold issues to be evaluated is the implications for the water table aquifer. The temporary nature of the water appropriation and the distribution of the volume across the length of the route are important considerations in this evaluation. As is the case with the existing permit, there would continue to be temporary localized drawdown of groundwater along the corridor, but any water table impacts from this drawdown would be limited because water will be infiltrated back into the ground in close proximity to the point of appropriation.

Another critical issue for evaluation is management of the water discharge to avoid impacts from inundation and/or sedimentation. The Minnesota DNR and Minnesota Pollution Control Agency (MPCA) are working together to evaluate this issue. Current approaches under consideration include:

- Limiting discharge locations near isolated depressional wetlands and other sensitive water resources.
- Additional measures to ensure adequate oversight of dewatering operations at the increased volume being sought.
- Revisions to the Storm Water Pollution Prevention Plan that would require redundant perimeter controls under certain situations.

Timing for Decision

Enbridge anticipates reaching the appropriation limit of 510.5 MG under its existing permit in June. The Minnesota DNR will likely make a decision on the water appropriation permit amendment in early June.

If you have any questions or concerns about this request you can email or call me at (651) 259-5156. Alternatively, I am tentatively scheduling a meeting at 3 PM on Thursday May 27 if you would like to join and have more of a group discussion. Details on meeting will be provided shortly.

Randall Doneen

CAR Section Manager

Ecological and Water Resources

Minnesota Department of Natural Resources

3 attachments

2021-06-04-2018-3420_88164_permit_issued.pdf
199K

2021-06-04-Line3-2018-3420Amendment-FOF.pdf
547K

Line 3 Replacement Project - Proposed Amendment to Water Appropriation for Construction

Dewatering.eml
24K

EXHIBIT I

DEPARTMENT OF NATURAL RESOURCES

July 6, 2021

Mr. Frank Bibeau
Executive Director
1855 Treaty Authority
PO Box 418
White Earth, MN 56591

Dear Mr. Bibeau:

Thank you for your correspondence dated June 1, 2021 (White Earth off reservation tribal court And Chippewa treaty protected uses of public lands) and June 7, 2021 (Protection of wild rice, wild rice waters of the Chippewas' of the Mississippi; Shell River and Rights of Manoomin). We appreciate the interest of the 1855 Treaty Authority in the issues raised in your letters.

Consistent with Governor Walz's Executive Order 19-24 and the long-standing practice of the Minnesota Department of Natural Resources, we would welcome the opportunity for government-to-government consultation with the White Earth Nation, Leech Lake Band of Ojibwe, and/or Mille Lacs Band of Ojibwe on the issues you have raised, upon the request of the relevant tribal council(s).

Sincerely,

Sarah Strommen
Commissioner

Attachment 5: Water Drilling Fluid Chemistry – Results Analysis

Water and drilling fluid chemistry from 'frac outs' during Enbridge Line 3 construction, 2021

Updated: October 5, 2021;
Prepared by: Science for the People-Twin Cities
Contact: scienceforthepeople.twincites@gmail.com

What is a frac out? In 2021, Enbridge used a process called Horizontal Directional Drilling, or HDD, to construct the Line 3 pipeline across 21 water bodies (rivers, streams and wetlands). This process involved drilling a tunnel underneath a river or wetland, at a depth of as much as ~60 ft, and then installing prefabricated sections of pipe into the tunnel. To drill these tunnels, Enbridge contractors lubricated a very large drill bit with something called drilling fluid or drilling mud. This fluid is a mix of bentonite clay and other unknown chemicals that Enbridge and state agencies refuse to disclose to the public; these drilling fluid formulations are listed in Line 3 permitting documents[1] as "proprietary", or trade secret. Because Enbridge is drilling through sensitive sediments beneath rivers and wetlands, the tunnels can easily lose structural integrity and develop leaks. These leaks are known as 'frac outs', and result in drilling fluid spills into the surrounding environment. Leaks happen initially in the subsurface, and can spread all the way to the land or water surface, or to other subsurface locations and aquifers.

On August 9, 2021 - and only after considerable pressure by water protectors, the public, tribal leaders and an official inquiry by state legislators -- the Minnesota Pollution Control Agency (MPCA) disclosed that there were 28 known 'frac outs' or drilling fluid spills during Line 3 HDD construction between June 25th and August 5th. Even after drilling fluid had been spilled to public waters, MPCA did not disclose the chemical makeup of the fluid.

Key information from water chemistry analysis:

- When drilling mud was spilled directly into river channels, **high levels of total suspended sediment (TSS) were measured in the river**. TSS can be damaging to aquatic life, and furthermore the very small particles that are typical of drilling mud can be more damaging than "natural" sediments[2]. This finding validates the observations of water protectors who have noted decreased visibility and cloudy waters at rivers where known drilling fluid spills occurred.
- **Drilling mud collected at one site had 401 mg/kg of sulfate**. Sulfate in water is damaging to wild rice. Furthermore, water samples downstream of the same drilling fluid spill had sulfate concentrations above the state standard for wild rice waters.
- On July 28 and 29, water samples collected from the Mississippi River headwaters immediately downstream of several known frac outs showed relatively high concentrations of **TSS, total phosphorus, oil and grease, total organic carbon,**

[1] https://www.pca.state.mn.us/sites/default/files/Attachment-L-Drilling-Mud-Additives-Information-2020.pdf
[2] Aslan, J.F., Weber, L.I., Iannacone, J., Lugon Junior, J., Saraiva, V.B. and Oliveira, M.M. 2919. Toxicity of drilling fluids in aquatic organisms: a review. Ecotoxicology and Environmental Contamination 14: 35-47.

calcium and barium, compared to upstream samples. It is possible that algal growth or some other biochemical event could have contributed to higher concentrations of TSS, total phosphorus, oil and grease and total organic carbon. (Note that the measure of oil and grease used here can detect the presence of contaminants like soap and some petroleum fuels, but also detects things like plant based oils). However, relatively high concentrations of barium are also consistent with a release or spill of drilling mud directly to the river channel. This finding is important because MPCA has never acknowledged contamination of the river channel itself at this location. Additional monitoring by state agencies is needed to determine the extent of drilling mud impacts on Mississippi River and all other sites where fluid was spilled.

- **Drilling fluid is now emplaced in the subsurface at all spill sites, and recent photos and videos indicate it's likely being mobilized.** Long-term monitoring should be initiated to determine if and when that drilling fluid is mobilized into the stream system (e.g. during stream meandering, floodplain inundation or stream incision). And, monitoring could determine whether soluble chemical compounds like sulfate may be leaching into the shallow subsurface flow and over a period of weeks or months begin impacting streams and downstream lakes.
- For more general information about drilling fluid, **see this fact sheet.**

Recommendations:

Based on the preliminary information provided by this volunteer-led sampling, rigorous and immediate sampling by state and/or federal agencies is needed to determine 1) whether sulfates or other contaminants are being released into sensitive waters, including wild rice waters, in locations where drilling mud spills have occurred; and 2) the magnitude and duration of elevated TSS in sensitive waters arising from drilling fluid spills, and 3) the spatial extent of subsurface contamination from drilling fluid. All pipeline construction & operation activities should be put on hold until a complete independent investigation can be completed. Based on the findings of such an investigation, agencies must release information to the public about plans for remediation and penalties for Enbridge appropriate to the level of degradation.

Background

Who collected water samples and why?

Water quality sampling and analysis was coordinated by water protectors at Firelight Encampment, Red Lake Treaty Camp, and Welcome Water Protectors Camp, together with members of the grassroots collectives Science for the People-Twin Cities and Watch the Line. Water samples were collected because 1) it wasn't (and still isn't) apparent whether the Minnesota Pollution Control Agency (MPCA) has conducted any on-site monitoring of frac outs or subsequent environmental degradation that could arise from drilling fluid spills; 2) MPCA had not released complete or accurate information to the public about impacts from frac outs even while water protectors were witnessing these events on the ground first-hand; 3) water protectors were concerned that Enbridge or the "Independent

Environmental Monitors" (IEMs) contracted and paid for by Enbridge would not report the full extent of frac outs to state regulators; 4) water protectors were concerned about impacts from drilling fluid to Manoomin (wild rice), other plant and animal life and to human health; and 5) water protectors and other concerned members of the public had no way to assess the potential hazards of drilling fluid, because the chemical make up of the fluid was unknown and never disclosed by Enbridge nor by state agencies.

Timeline of spill events

On July 6, 2021, water protectors observed a frac out on Willow River. This was the first frac out observed by water protectors during construction of Line 3 in 2021, although MPCA subsequently revealed that additional frac outs had occurred earlier in the season at other locations.

On August 9, 2021, MPCA released information indicating that, as of that time, there had been 28 known spills of drilling fluid into the environment as the result of Line 3 HDD construction between June 8 and August 5, 2021 (Figure 1). The MPCA confirmed that 12 of the 15 river crossings where Enbridge used HDD methods were contaminated by spills of drilling fluid (Table 1). Thirteen of the 28 spills were directly to wetlands at crossing locations. The grassroots, volunteer led organization Watch the Line has compiled some additional context and information about these spills here. Additional information for the 28 known spills - including spill volumes - was also compiled from the MPCA by MN Reformer journalist Rilyn Eischens here. It should be noted that some water protectors believe there are additional unreported spills based on observed frac-outs at locations such at the Mississippi River Crossing #1.

HDD methods were permitted by MPCA for certain stream, river and wetland crossings because of the high sensitivity of these particular ecosystems to degradation. Ostensibly, HDD methods result in less degradation to the environment than open trenching, i.e, digging an open trench directly across the land surface or stream bottom. Open trenching is the primary method Enbridge used to construct most of the pipeline, including across most of the ~200 streams and hundreds of acres of wetlands crossed by the project. However, when drilling fluid spills occur during HDD, the ostensibly more protective aspects of HDD construction are diminished.

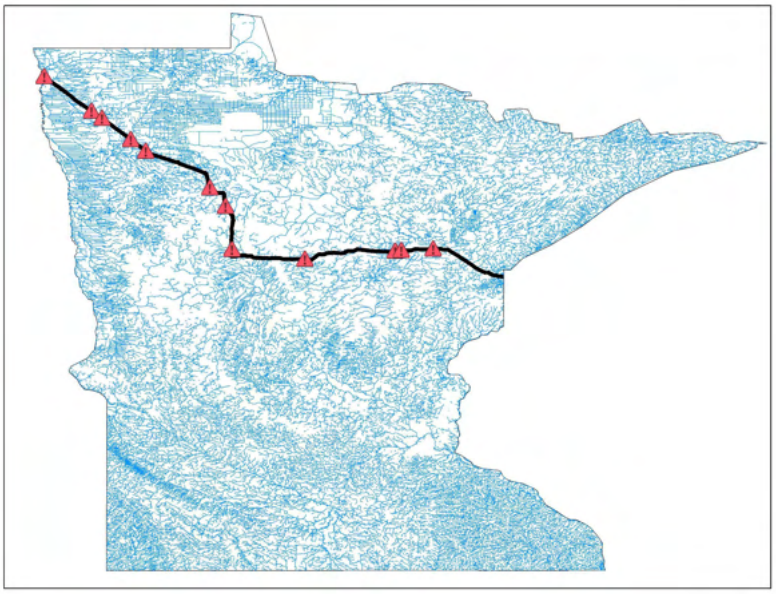


Figure 1. Locations (red triangles) of drilling fluid spills along the Line 3 route (black line) in between June 8-August 5, 2021. Blue lines show streams and rivers across Minnesota.

Location	Date	# Releases	Volume Fluid Released (gallons)
Snake River	6/8/21	1	20
Straight River	6/16/21	1	Not known
Mississippi River Crossing # 2	6/25/21	1	6,000-9,000
Red River	6/25/21, 6/28/21	2	450
Willow River	7/6/21, 7/17/21, 7/21/21	3	170
East Savanna River	7/15/21, 7/17/21, 7/26/21, 7/31/21, 8/5/21	6	1465-1480
Middle River	7/16/21, 7/20/21	4	315
Red Lake River	7/16/21, 7/19/21	2	1280
Clearwater River Crossing # 1	7/18/21	2	40-50
Pine River	7/19/21	1	60-100
Mississippi River Crossing #1	7/20/21, 7/30/21	3	160
Clearwater River Crossing # 2	7/28/21	2	35

Table 1. River crossings where HDD drilling mud spills occurred.

Where and when were water samples collected?

Concerned about the impacts of drilling fluid spills on water and wetlands, water protectors collected a number of samples at crossings where frac outs were observed. These samples included water from 3 rivers, and a direct sample of drilling mud from one active spill site (at Mississippi River Crossing # 1/aka Firelight Encampment):

- River water samples were collected from **Willow River** on July 6, 2021, after water protectors observed an active plume of what appeared to be drilling fluid in the river. This crossing is listed in MPCA documents as Willow River HDD (MP 1066.5)

- River water samples were collected from **Mississippi River** headwaters on July 20, July 23 and July 29 of 2021. These samples were collected after water protectors observed a frac out in a wetland located in the floodplain of Mississippi River on July 20, 2021 (Figure 2). Several additional frac outs were subsequently observed and documented at various locations at this same pipeline river crossing by Ron Turney of the Indigenous Environmental Network. In addition to collecting river water, water protectors obtained one direct sample of drilling mud where it was actively leaking from a wetland at this crossing. This crossing is listed in MPCA documents as Mississippi River HDD (MP 941.0).

- River water samples were collected by water protectors from **Clearwater River** crossing on July 24, 2021.

These were very limited sampling events due to: (i) the public being restricted from accessing these sites and being intimidated by security and law enforcement when collecting samples, and (ii) limited private funding available.

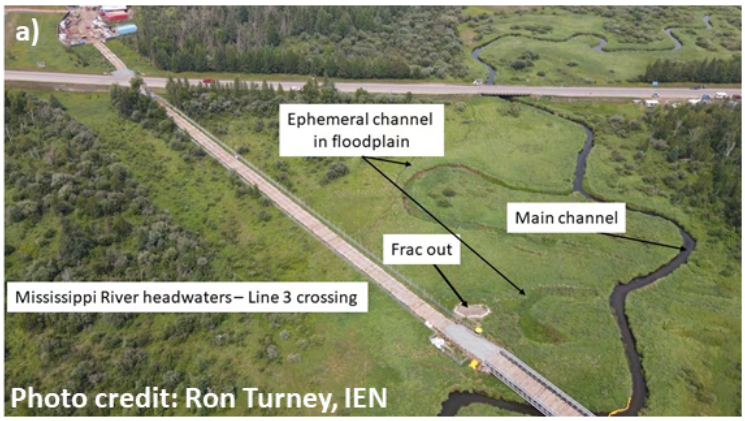


Figure 2. a) Top photo shows location of first known frac out at Mississippi River Crossing #1, observed by water protectors in a wetland on July 20, 2021. b) Right photo shows Enbridge workers attempting to clean up drilling fluid spill in the same wetland.

How were samples collected?

Where available, samples were collected in lab-grade plastic bottles provided by a private certified lab. Water protectors were trained in and followed a standardized sampling protocol which included collecting samples both upstream and downstream of observed potential spill sites, enacting methods to reduce possibilities for contamination, and securing a chain of custody from time of sampling to time of analysis. In some cases when standard collection bottles were not available, samples were collected in clean plastic bottles or glass jars. Where samples were collected in non-standard bottles, it was not possible to analyze samples for the full range of water chemistry, because certain water chemistry tests need very specific conditions (i.e., need to be collected in bottles pre-treated with acid, etc).

Where was water and drilling fluid chemistry tested?

A certified private lab conducted all chemical analyses on water and drilling fluid samples.

What were samples tested for?

Water and drilling mud samples were tested for a range of chemical constituents that were deemed likely to occur based on a literature review of drilling fluid chemistry, and that might be of concern to human or environmental health.

- For water samples, we tested for concentrations of: total suspended solids (TSS), sulfate, calcium, magnesium, sodium, chromium, total phosphorus, chloride, oil and grease, barium.
- For the one drilling fluid sample collected, we tested for a wider set of chemistry including: calcium, phosphorus, magnesium, sodium, barium, chromium, lead, silver, sulfate, chloride, oil & grease, mercury, arsenic, cadmium and selenium.
- **See the Appendix for a full list of all water chemistry results.**

Note that because of grassroots citizen science challenges such as use of non-standard sample bottles at some collection sites and time delays in sample transportation to the lab, there were some additional parameters of interest we were not able to test for, including PAHs and surfactants.

What did water & drilling fluid chemistry results show?

Elevated Total Suspended Soilds (TSS)

TSS is a measure of how much sediment, algae and other particles are in the water. High TSS levels over a period of time can inhibit aquatic plant and animal growth and survival. High sediment loads can lead to sediment settling out or “silting in” habitats like mussel beds and fish spawning locations. Importantly, the TSS from drilling mud is “finer” (smaller particles) and chemically different than natural sediment. Scientific evidence indicates that these

characteristics make it particularly damaging to the gills of mussels and aquatic insects[3], which Enbridge and regulatory agencies did not take into account. The water quality standard for TSS that is considered protective of aquatic life in Minnesota rivers is 10 mg/L, which cannot be exceeded for more than 10% of the time over a multi-year period without requiring the water body to be classified as "impaired". In other words, this means that it is often legal under MPCA state regulations to discharge heavy sediment loads that lead to a stream exceeding 10 mg/L TSS *so long as* those high TSS levels do not last for more than 10% of the time. *However*, it's still illegal to discharge TSS into a stream unless the activity is permitted. Here, we believe the MPCA 401 permit allows TSS "discharges" (spills) as long as they don't cause impairment according to Minnesota pollution standards.

At river sites where drilling fluid plumed up from the subsurface directly into the river, the river showed elevated levels of TSS. At the Willow River, TSS concentrations upstream of the spill ranged from 0-24 mg/L, while at the spill site TSS concentrations averaged 148 mg/L.

At the Mississippi River, TSS measurements up and downstream of the known frac out varied depending on the day of collection (River water samples were collected on three different dates in July following the identification of frac outs at this site). On July 23, TSS levels were relatively low, ranging from 8 - 10 mg/L, however on July 28 and 29, TSS levels ranged as high as 340 mg/L for a sample collected upstream of the known frac out and 1550 mg/L for a sample collected downstream of the frac out. (Note that the 'frac outs' were reported by MPCA as occurring 'in a wetland', and not in the river itself).

These high TSS values are well above the water quality standard considered protective of aquatic life (10mg/L). However, as previously stated, MPCA allows a stream to exceed the standard for short periods during a year without necessitating an impairment listing. With only 1-3 days of citizen science water monitoring, we do not have sufficient data to understand the long-term risks of drilling fluid spills for TSS impairment. **A key consideration for MPCA to monitor for and report to the public would be how long TSS concentrations have been elevated at spill locations in rivers, and whether prolonged periods of high TSS can be attributed to drilling mud.**

Sulfate

Chemical analysis of the drilling mud collected at Mississippi River pipeline crossing (Firelight Encampment) showed a concentration of 401 mg/kg of sulfate. In addition, water chemistry for a sample collected in Mississippi River downstream of the known frac out showed a sulfate concentration of **12.6 mg/L, which is above the state sulfate standard of 10 mg/L for Manoomin (wild rice) waters.**

Barium sulfate, also known as barite, is a likely constituent of drilling fluid. Barium sulfate is a mineral that is often considered insoluble. However, at least one study of barium sulfate in floodplain sediments of the Mississippi River has shown that this compound can become soluble under acidic and anaerobic conditions that are found in wetland environments. More

[3] Aslan, J.F., Weber, L.I., Iannacone, J., Lugon Junior, J., Saraiva, V.B. and Oliveira, M.M. 2919. Toxicity of drilling fluids in aquatic organisms: a review. Ecotoxicology and Environmental Contamination 14: 35-47.

importantly, **the concentration of sulfates in the drilling fluid appears to exceed that expected from barium sulfate alone**, based on the barium concentration and the fact that barium sulfate ($BaSO_4$) occurs in a 1:1 stoichiometric ratio. Thus, the sulfates in the drilling fluid appear to exceed that contributed by barite alone. **It is possible that these sulfates are more readily soluble and thus more likely to contaminate surface or groundwaters. Only additional monitoring could determine the form of these sulfates and their potential risk to wild rice and other sensitive ecosystems.**

Additional Chemistry Findings

We tested the water for a number of other constituents that we identified as possible indicators of the presence of drilling mud, based on the scientific literature, or that might be of concern if they were spilled into the environment. For example, we tested water samples for levels of sodium, chloride, barium, chromium, phosphorus, and oil and grease. Additional notable findings from these results include the following:

- On July 28 and 29, water samples collected **downstream of the frac out** location on Mississippi River had **relatively high concentrations of TSS, total phosphorus, oil and grease, calcium, total organic carbon, and barium**, compared to upstream samples. (Note that the measure of oil and grease used here can detect the presence of contaminants like soap and some petroleum fuels, but also detects things like plant based oils). These findings could indicate that drilling mud had reached the Mississippi River channel itself on these days. While higher concentrations of phosphorus and organic carbon could also indicate algal growth or some other biological event, the higher concentration of barium suggests drilling fluid may have been present. More monitoring would be needed to ascertain why water quality was altered downstream of the frac outs at the time of sampling. MPCA has never acknowledged whether drilling fluid has contaminated the river channel at this crossing location.
- The drilling mud sample, in addition to containing environmentally relevant concentrations of sulfates, also contained sodium, chloride and magnesium.

Finally, it is important to note that our sampling regime was very limited relative to the extent of the potential problem, and without a more comprehensive monitoring plan we will not be able to fully understand the pollution risks of the frac-outs, or their break down products.

What are the long term concerns?

Plumes of drilling mud contaminants in the subsurface and floodplain can take days, weeks or months to become evident at the surface, and/or to affect the main river channel. River conditions this summer were very low flow due to the historic drought, and spills in the floodplain are likely to be mobilized under higher flow/storm conditions. Evaluating the longer term impacts of frac outs would thus require longer term monitoring by state agencies responsible for protecting the health of Minnesota waters.

Appendix

Water chemistry results for all samples collected June-July 2021. “Upstream” and “Downstream” refer to where water samples were collected from the river relative to the longitudinal position of known frac outs. “Upstream” indicates samples were collected upstream of the frac out locations, “downstream” indicates samples were collected downstream of the frac out location. All units are mg/L except where noted. “NA” = chemical analysis was not run for that sample. **Highlighted results indicate chemistry that could be of potential/possible concern to the environment and that should be the focus on continued monitoring, assessment and remediation.**

Table A1. Willow River 7/6/21

	Time	Upstream	Downstream
TSS	10:30AM 16:00PM	0 24	135 160
Sodium	10:30AM 16:00PM	 NA	9.23 10.10
Magnesium	10:30AM 16:00PM	 NA	14.82 16.19
Calcium	10:30AM 16:00PM	 NA	58.15 65.27
Chromium	10:30AM 16:00PM	 NA	0.001 0.001
Iron	10:30AM 16:00PM	 NA	0.002 0.002
Copper	10:30AM 16:00PM	 NA	0.008 0.008
Zinc	10:30AM 16:00PM	 NA	0.011 0.011
Arsenic	10:30AM 16:00PM	 NA	0.001 0.001
Lead	10:30AM 16:00PM	 NA	0.002 0.002
Barium	10:30AM 16:00PM	 NA	0.079 0.094

Table A2. Mississippi River Crossing # 1 (Firelight) 7/20/21

	Upstream	Downstream
TSS	36	72
Sulfate	<5	<5
Calcium	33.8	51.8
Magnesium	8.55	13.1
Sodium	2.41	3.65
Chromium	<0.01	<0.01

Table A3. Water chemistry results from Mississippi River Crossing # 1 (Firelight) 7/23/21

	Upstream	Downstream
TSS	10	8
Sulfate	<5	<5
Calcium	69.5	70.2
Magnesium	24.4	24.5
Sodium	7.29	7.18
Chromium	<0.01	<0.01
Ortho Phosphorus	0.035	0.035
Chloride	<3	<3
Total Phosphorus	0.07	0.065
Oil and grease	<5	<5

Table A4. Drilling fluid chemistry results from Mississippi River frac-out 7/23/21 - this sample of drilling fluid was obtained from an active frac out in a wetland in the floodplains of the Mississippi River

Units are mg/kg	Drilling fluid in clay
Calcium	6400
Total Phosphorus	78.21
Magnesium	1677
Sodium	917.6
Barium	16.19
Chromium	2.24
Lead	3.12
Silver	<0.4876
Sulfates	401
Chloride	263
Oil and grease	NA
Mercury	<0.037
Arsenic	1.281
Cadmium	<0.049
Selenium	0.562
All measured PAHs	NA

Table A5. Water chemistry results from Mississippi River Crossing # 1 (Firelight) 7/28/21

	Upstream	Downstream
TSS	340	1550
Sulfate	<5	12.6
Calcium	75.30	136.0
Magnesium	26.10	32.10
Sodium	7.96	8.970
Chromium	<0.01	<0.01
Ortho P	NA	NA
Chloride	<3	<3
Total Phosphorus	0.101	4.28
Oil and grease	NA	NA
Total Organic Carbon	5.20	12.30
Barium	0.195	0.938

Table A6. Water chemistry results from Mississippi River Crossing # 1 (Firelight) 7/29/21

	Upstream	Downstream
TSS	317	1500
Sulfate	<5	<5
Calcium	67.60	79.10
Magnesium	25.60	27.20
Sodium	7.86	8.14
Chromium	<0.01	<0.01
Ortho P	NA	NA
Chloride	<3	<3
Total Phosphorus	0.065	4.33
Oil and grease	<5	12.5
Total Organic Carbon	5.10	10.10
Barium	0.123	0.231

Table A7. Water chemistry results from Clearwater River 7/24/21

	Upstream	Downstream
TSS	408	402
Sulfate	NA	NA
Calcium	67.60	71.00
Magnesium	29.00	30.30
Sodium	8.67	8.91
Chromium	<0.01	<0.01
Ortho P	NA	NA
Chloride	13.8	13.9
Total Phosphorus	0.1489	0.157
Oil and grease	<5	<5
Total Organic Carbon	NA	NA
Barium	0.09	0.09

Attachment 6: Scientist Opposition Letter to Amended Water Appropriations Permit

President Biden
1600 Pennsylvania Avenue
Washington, DC 20500

Governor Walz
130 State Capitol
75 Rev Dr. Martin Luther King Jr. Blvd.
St. Paul, MN 55155

7/20/2021

Dear President Biden and Governor Walz,

We are scientists with expertise in groundwater, streams, lakes and wetlands. We strive to aid in the protection of waters so that all Minnesotans and tribal nations may benefit from clean, scenic, and lifegiving waterways. We wish to advise this government in avoiding expensive and often intractable problems that result from water degradation, overuse, and pollution.

We are dismayed that the Minnesota Department of Natural Resources issued a major permit amendment for the Enbridge Line 3 water appropriations without adequate tribal consultation nor public notification. With the amendment, this permit appropriates 5 billion gallons of water to Enbridge for construction of their pipeline and becomes one of the largest, if not the largest, appropriation of water from Minnesota's shallowest surficial aquifers in the last 30 years. In our evaluation as scientists, this water appropriation could have substantive negative impacts on sensitive waterways. Wetlands and groundwater systems provide numerous critical functions our society relies on including biodiversity support, flood control, carbon storage, water quality amelioration, drinking water supplies, and habitat for foods like Manoomin/wild rice that are sacred to Anishinaabe people. Once degraded, these critical ecosystem functions are very difficult to restore.

This dewatering permit should have triggered thorough tribal consultation and a public comment period. Moreover, neither the immense extent of water appropriation nor the resulting impacts of this volume of dewatering along the route were addressed in the project's Final Environmental Impact Statement (FEIS), and therefore the new appropriation permit should have required a supplemental Environmental Impact Statement.

We identify the following concerns around DNR's failure to abide by the scientific and legal process in issuing this water appropriations permit:

- Though Enbridge submitted the amendment application to DNR in January, tribal resource staff were given only cursory notification in mid-May, days before the permit was issued anyway. As noted by the Minnesota Chippewa Tribe and The White Earth Reservation Business Committee, DNR's approval of the permit under these circumstances represents a violation of meaningful government-to-government consultation. As scientists, we reiterate the concerns of the tribes around the failure of the Minnesota state government to adhere to the requirements of the consultation process.
- For Enbridge, the DNR inexplicably waived the normal requirement that a permittee understand the details of the aquifers they wish to appropriate water from prior to removing water. DNR asserts that they did so because they assumed impacts of these withdrawals will be "temporary and minor". This assumption is unfounded and does not appear to be supported by any scientific analysis. Specifically, DNR should have required that Enbridge characterize aquifers along the route, per standard procedure, because only then could Enbridge ensure that appropriated water would be returned to the correct

location. As it stands, Enbridge plans to infiltrate the water in upland locations – away from the wetlands from which the water is taken. This ill-considered approach will very likely lead to: (1) water loss via evapotranspiration (an effect that will be strongly exacerbated by the current dry conditions in that part of the state), and (2) some water being misdirected to different aquifers. The net effect will be that some wetlands remain dry for far longer than DNR surmises, leading to the possibility of long-term wetland degradation. Especially considering that wild rice/ Manoomin is highly sensitive to water fluctuations and is a sacred relative to Anishinaabe people, we find this risk unacceptable.

- DNR also did not require Enbridge to conduct water table monitoring, which could show how much water drawdown is occurring in the wetlands and how quickly the water level recovers. Such monitoring could have supported DNR's claims that these effects will be temporary and could have helped assure the public that DNR is adequately protecting wetland resources, which are so critical to maintaining Mississippi River water quality.
- If a water appropriations permit can be increased by 10x without a new public comment period, we assert that "sham permitting" is occurring and the public comment process is broken. The DNR could conceivably issue *any* permit for a small amount of water, thereby not raising any concerns with the public, then behind closed doors "amend" each permit for a much more massive volume of water. This has set a dangerous precedent for how the state government operates with regards to public waters and the public trust.

Therefore, we assert that this permit should be 'stayed' or rescinded until proper tribal consultation and a public comment period can occur. A scientifically-sound approach to assessing the full impact of 5 billion gallons of water appropriation of state and tribal waters during a drought will require significant additional analysis, such as that provided by a supplemental EIS. We strongly urge the DNR to include a requirement that Enbridge characterize the aquifers they will impact. Any water appropriations permit issued by DNR for this project should be contingent on monitoring of water levels before and after dewatering to determine whether the effects are temporary or long-lasting. Lastly, we condemn any permit process that fails to uphold government-to-government relations between the state of Minnesota and tribal nations.

We are happy to provide more details, if helpful. We can be reached via these addresses: dolph.christine@gmail.com, laura.day.triplett@gmail.com, and jo.king.hannah@gmail.com.

Sincerely,

Dr. Christine Dolph, Research Scientist, Department of Ecology, Evolution and Behavior, University of Minnesota

Dr. Laura Triplett, Associate Professor of Geology, Gustavus Adolphus College

Hannah Jo King, PhD Candidate, Natural Resources Science & Management, University of Minnesota-Twin Cities

Marta B. Roser, Water Resources Specialist

Jami Gaither, Metallurgical Engineer/Climate Justice Advocate/Clearwater County Line 3 Abutter

Dr. Dan Walls, Chemical Engineer/Fluid Mechanician

Dr. James Cotner, Professor, University of Minnesota-Twin Cities/Department of Ecology, Evolution and Behavior

Julia Brokaw, PhD Candidate, Department of Entomology

Dr. Dianne Rocheleau, Professor Emerita, Clark University, Geography: Watersheds, Land Use and Environmental Science

Paul Stolen, environmental scientist and government regulator of pipelines, including construction monitoring for compliance

Dr. Judy Helgen, Retired research scientist from MPCA, worked to develop biological monitoring of wetlands

Dr. Lisette E. Torres-Gerald, Senior Research Associate and Project Coordinator, TERC, former aquatic ecologist

Rebecca Walker, PhD Candidate, Science, Technology, and Environmental Policy

Dr. G.-H. Crystal Ng, Associate Professor of Hydrogeology, University of Minnesota-Twin Cities

Alan Knaeble, Senior Glacial Geologist, Minnesota Geological Survey, University of Minnesota-Twin Cities. Primary mapper/author for the glacial geology of Aitkin, Carlton, Crow Wing, and Hubbard County atlases.

Dr. Daniel Larkin, Associate Professor, Fisheries, Wildlife and Conservation Biology, University of Minnesota-Twin Cities

Anu Wille, MS Candidate, Natural Resources Science & Management

Amelia Kreiter, PhD Candidate, Natural Resources Science & Management

Samuel Reed, PhD Candidate, Department of Forest Resources

Kelly Duhn, MS Candidate, Water Resources Science, University of Minnesota - Duluth

Gwendolen Keller, MS Candidate, Department of Forest Resources, Research Field: Black ash wetland ecology in northern Great Lakes region

Sarah Roth, Research Associate, Center for Changing Landscapes and Department of Forest Resources

Renee Keezer, Pesticide Coordinator, White Earth Department of Natural Resources, Masters Student, Environmental Science: Environmental Health & Toxicology

Dr. William M. Longo, Visiting Assistant Professor, Macalester College; Postdoctoral Research Associate, University of Minnesota-Twin Cities. Research Fields: Limnology, Environmental Chemistry

Erin M. Mittag, PhD Candidate, University of Minnesota-Twin Cities/Department of Ecology, Evolution and Behavior

Erik Wallenberg, PhD Candidate, Environmental History; former water quality researcher, Upstate Freshwater Institute

Benjamin Allen, Bioinformatics Technician, Federal Contractor

Emily Green, MS, University of Minnesota; Researcher, Kawe Gidaa-naanaagadawendaamin / First We Must Consider Manoomin project

Daniel Furuta, PhD candidate, UMN Biosystems engineering

Sarah Dance, Graduate Research Assistant, University of Minnesota-Twin Cities/Department of Earth and Environmental Sciences

Dr. Rebecca Montgomery, Professor, Department of Forest Resources, University of Minnesota

Christopher Schuler, PhD Candidate, University of Minnesota-Twin Cities/Department of Earth & Environmental Sciences

Dr. Lucia Baker, Environmental Fluid Mechanics

Willis Mattison, MS Ecology, Retired Minnesota Pollution Control Agency Regional Director

Michael Northbird, Environmental Program Manager, Minnesota Chippewa Tribe

Dr. Mae A. Davenport, Professor, Department of Forest Resources and Director, Center for Changing Landscapes, University of Minnesota-Twin Cities

Dr. Daniel J. Hornbach, John S. Holl Professor of Environmental Studies, Macalester College, St. Paul, MN

Dr. Cara M. Santelli, Associate Professor of Geomicrobiology, Earth and Environmental Sciences, University of Minnesota-Twin Cities

Dr. Oriana Chegwidden, PhD in hydrology, Research Scientist at CarbonPlan (affiliation for identification purposes)

Dr. Karin Kettenring, Ph.D. in Applied Plant Sciences from University of Minnesota, Professor of Wetland Ecology at Utah State University

Dr. Serina L. Robinson, Ph.D. in Environmental Microbiology from University of Minnesota-Twin Cities, former research fellow at U.S. EPA Mid-continent Ecology division

Dr. Jeff Jeremiason, Ph.D. in Environmental Engineering, Professor of Environmental Studies and Chemistry, Gustavus Adolphus College, St Peter, MN

Emily Resseger, Environmental Analyst, Metropolitan Council

Institutions and organizations provided for identification purposes only

Cc: Minnesota Chippewa Tribe
White Earth Reservation Business Committee
Minnesota Department of Natural Resources, Commissioner
Minnesota Pollution Control Agency, Commissioner
Public Utilities Commission
U.S. Army Corps of Engineers, St. Paul District

Attachment 7: Email Communications

Re: Line 3 at first Mississippi River crossing

5 days ago at 5:06 PM

From:Rita Chamblin
To"Kuskie, Melissa (MPCA)"

Melissa-
Then, I think it's more accurate for you to say that the spills did not occur in the river channel. I'm not asking you to provide locational information - everyone knows where the workers were collecting drilling fluid. But, using the phrase "near [or nearer] the drill entry or exit location" is, as we know in this case, extremely misleading. You haven't been confusing and it's not semantics. Please correct your update to reflect this more accurate characterization.
-Rita

On July 21, 2021 at 4:38 PM, "Kuskie, Melissa (MPCA)" <melissa.kuskie@state.mn.us> wrote:

Hi Rita,

I think we might be in a semantics situation, and I do apologize if my responses are not providing clarification and thus creating confusion. The information we are trying to convey is that the releases that have occurred have not been in the river, they are outside the river nearer to the entry or exit point (than the river itself is). The only locational information I'm able to provide at this time is that the release was not in the river itself.

The portion of the antidegradation assessment I included noted, of course, that releases near the exit point are common," but I also included the description of the relative risk under and then moving away from the waterbody itself noting the risk of release increases "for a portion of the drill beyond the banks of the waterbody…" Basically that the risk of release increases as you move outwards from the river.

Apologies, again, for any confusion, Rita, and do appreciate you reaching out.

-melissa

From: Rita Chamblin <murphychamblin@icloud.com>

Sent: Wednesday, July 21, 2021 3:51 PM

To: Kuskie, Melissa (MPCA) <melissa.kuskie@state.mn.us>

Cc: Doneen, Randall (DNR) <randall.doneen@state.mn.us>

Subject: Re: Line 3 at first Mississippi River crossing

Melissa-

Thanks, but I'm still going to call this an untrue statement. This spill was clearly nearer the river than the drill site by a wide margin. And, it was not near the exit point; it was virtually midway between the entry and exit points. There are plenty of publicly available pictures and videos to reference. We were also fortunate that a documentary crew happened to be there yesterday.

So, if you claim yesterday's Mississippi River crossing spill as near or nearer the entry/exit locations, I have grave concerns about the other spills that we haven't been on site to learn about.

-Rita

On July 21, 2021 at 3:18 PM, "Kuskie, Melissa (MPCA)" <melissa.kuskie@state.mn.us> wrote:

Hey Rita – probably just fast typing – “nearer” the entry/exit locations is the more accurate statement (as in, not in the body of the stream crossed, closer to the entry/exit points where the drill is typically shallower).

Here’s how it’s described in the antidegradation assessment (application for the 401):

Specifically, the risk of inadvertent release is low (calculated factor of safety above 1.0) over the portion of the drill that underlies the waterbody. In some instances, the calculated factors of safety drop below 1.0, indicating a higher risk of inadvertent returns, for a portion of the drill beyond the banks of the waterbody, as the drill nears the exit point. Inadvertent drilling fluid returns near the exit point of HDDs are common and anticipated as the bit approaches the surface.

From: Rita Chamblin <murphychamblin@icloud.com>

Sent: Wednesday, July 21, 2021 3:14 PM

To: Kuskie, Melissa (MPCA) <melissa.kuskie@state.mn.us>

Cc: Doneen, Randall (DNR) <randall.doneen@state.mn.us>

Subject: Re: Line 3 at first Mississippi River crossing

Melissa-

One more thing. The MPCA released a Line 3 Update a little over an hour ago. In it you say that all of the inadvertent releases of drilling fluid other than at the Willow River occurred near the drill entry or exit location. Yet, that's demonstrably untrue for yesterday's spill at the first Mississippi River crossing. That spill occurred maybe a quarter of a mile away from the drill site. I'm not good with eyeballing distances, but the drill site was on the north side of the highway from where the guys were working. Whether dumping or vacuuming in the early morning or cleaning up drilling fluid later in the day, those activities were close to the bridge over the river on the south side of the highway.

What am I missing?

-Rita

On July 21, 2021 at 11:07 AM, "Kuskie, Melissa (MPCA)" <melissa.kuskie@state.mn.us> wrote:

Hi Rita,

Thanks for your email. IEMs are present at the active HDD sites – they may not be readily "distinguishable" from other folks on site (like the HDD crew or Enbridge environmental inspectors), but we have increased the number of IEMs needed for the project in order to ensure that the HDD sites can be adequately monitored (the 401 Certification identified a minimum of 24 IEMs – 4 per spread; there are currently 41 IEMs, with the additional monitors brought on in June and July).

I do apologize, as I've got some limitations on being able to provide information because we are actively investigating and so most information is considered nonpublic by statute (Minn. Stat. 13.39). I recognize that is frustrating.

I can refer you to a couple of the documents associated with the 401 certification. This is the Environmental Protection Plan which outlines some information about HDD processes and general response and recovery measures for inadvertent releases. These are the site-specific inadvertent release response plans which are exactly what they sound like – outline more specifics for each site. The video you sent is from some distance so I can't determine definitively what they're doing, but it looks like a vac truck, which is one of the measures discussed in response procedures to "suck up" the drilling mud from a release where feasible.

Hopefully this information is helpful. As we are able to release additional information, I'll try to connect back with you and follow up on questions.

Thanks,

Melissa

From: Rita Chamblin <murphychamblin@icloud.com>

Sent: Wednesday, July 21, 2021 8:44 AM

To: Kuskie, Melissa (MPCA) <melissa.kuskie@state.mn.us>; Doneen, Randall (DNR) <randall.doneen@state.mn.us>

Subject: Line 3 at first Mississippi River crossing

Melissa and Randall-

What was Enbridge doing in this video yesterday morning at the first Mississippi River crossing?

https://drive.google.com/file/d/1jbQqzUDr-pZiDhTz2mHqxtnoO6OjTUPq/view?ts=60f81a91

My concern is that it appears that they were working on the opposite side of the matting road from the frac-out. This makes it look like they're dumping fluid on the other side. If so, what was dumped and was this permitted?

And, about that frac-out, when did you have samples taken at the site?

When will someone from one of your agencies be on site to monitor what's happening? If there's been an IEM on site, it hasn't been evident.

Thanks.

-Rita Chamblin