

Statement of Basis
Briefing Memorandum

Enbridge Alberta Clipper and Southern Lights Pipeline projects
Enbridge Energy, Limited Partnership and Enbridge Pipelines LLC
1320 Grand Avenue
Superior, Wisconsin 54880
NPDES Permit No.: MN-0070092-1

Receiving Water: Waters of the United States within the exterior boundaries of the Leech Lake Indian Reservations

A. Description of Activities

Enbridge Energy, Limited Partnership in conjunction with Enbridge Pipelines (Southern Lights) L.L.C (referred to collectively as Enbridge) have applied for a Presidential Permit for the construction, operation, and maintenance of a proposed pipeline and associated facilities for importation of crude oil from Canada. The proposed Alberta Clipper Pipeline extends from Hardisty, Alberta, Canada to Superior, Wisconsin and will have the capacity to deliver an average of 450,000 barrels per day (bpd) of crude oil from a supply hub near Hardisty to an existing terminal in Superior. In the United States, the Alberta Clipper pipeline will consist of approximately 326.9 miles of new 36-inch-diameter liquid petroleum pipeline and associated facilities that will be installed primarily within or adjacent to the existing Enbridge pipeline corridor from the U.S./Canada border to the existing Enbridge terminal in Superior. In addition, a 20-inch-diameter liquid hydrocarbon pipeline (Southern Lights Diluent Pipeline) will be installed adjacent and parallel to the proposed Alberta Clipper Pipeline; from the Clearbrook terminal to the Superior terminal. The proposed projects will impact approximately 702.40 acres of land associated with the Leech Lake Band of Ojibwe Reservation.

Consistent with U.S. Department of Transportation safety requirements, the structural integrity of the new pipeline must be established prior to putting the pipeline in use for its intended operation. Hydrostatic testing is a common means of evaluating the integrity of pipelines. The pipeline is filled with water to an established pressured rating and the line checked for leaks and stability. Following testing of the pipeline's integrity, the water must be released back to the environment. During these tests, water is used as the testing medium rather than as a process stream. Because no additives are used, it is anticipated that the water used will not change significantly and thus, will reflect the characteristics of the source from which it was appropriated. Hydrostatic test water discharges are typically one time events that may occur over 24 hours. Flow volume and discharge duration will be dependent upon the size and length of the pipeline segment being tested and the discharge pumping rate. A table of test segments and associated volumes is provided below.

In order to prevent the entrainment of fish or other species of concern during hydrostatic test water withdrawal from waterbodies, screening will be used and installed around the intake hoses. The permittee shall attempt to avoid backwater areas, slow flow areas, and the mouths of tributary streams when determining the location for hydrostatic intake hoses in waterbodies. Caution shall be used against appropriating in known spawning areas or during the spawning season.

To minimize impacts on surface waters and to prevent erosion, the permittee plans to discharge hydrostatic test water to a well-vegetated, upland area or an appropriate dewatering structure. Dewatering structures may include geotextile filter bags and/or a hay bale structures lined with geotextile fabric. The permittee shall use the discharge locations as identified in the October 5, 2009 e-mail from Natural Resource Group to EPA. Runoff from the site has the potential to reach the identified receiving waters. All hydrostatic testing activities will be monitored by environmental inspectors and the outflow rates adjusted, if necessary.

HYDROSTATIC DISCHARGE LOCATIONS – LEECH LAKE RESERVATION

Outfall Number	Receiving Water ¹	Milepost	Longitude (DMS)	Latitude (DMS)	County	PLSS	Estimated Volume (million gallons)
001	Pike's Bay	955.8	47° 22' 47"	-94° 35' 15"	Cass	T145N, R31W, S15	0.12 ² 0.04 ³
002	Mississippi River	986.0	47° 19' 24"	-93° 57' 34"	Itasca/ Cass	T144N, R26W, S3	0.20 ² 0.06 ³
003	Ball Club River	989.5	47° 19' 54"	-93° 53' 21"	Itasca	T145N, R25W, S31	7.60 ⁴ 2.35 ⁵

¹ Source water for hydrostatic test will be obtained from the receiving waterbody (except for Pike's Bay) or from a local municipal supply.
² 36 inch (Alberta Clipper) Horizontal Directional Drill (HDD) test segment
³ 20 inch (Southern Lights) HDD test segment
⁴ 36 inch (Alberta Clipper) mainline test segment
⁵ 20 inch (Southern Lights) mainline test segment

Discharge Limitations:

Hydrostatic Test Water

Effluent Limitations and Monitoring Requirements

The permittee is authorized to discharge hydrostatic test water. Such discharges shall be limited and monitored by the permittee as specified below:

<u>Parameter</u>	<u>Effluent Limitations</u>		<u>Monitoring Requirement</u>	
	<u>Daily Min.</u>	<u>Daily Max.</u>	<u>Frequency</u>	<u>Sample Type</u>
Total Discharge Volume (MG)		(Report)	Continuous	Calculation
Total Suspended Solids		30 mg/l	See item #3	Composite
Dissolved Oxygen	5 mg/l		See item #3	Grab
pH (standard units)	6 S.U.	9 S.U.	See item #3	Grab
Oil & Grease		10 mg/l	See item #3	Grab
Chlorine, Total Residual		0.038 mg/L	See item #3	Grab

(See item # 7)

Treatment System,
Discharge and Receiving
Water Inspection

(Report)

Continuous

Visual
See item# 6

1. Representative samples - Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge to the receiving waters.
2. Monitoring Location - Samples and measurements taken in compliance with the monitoring requirements above shall be taken after treatment and prior to discharge into the receiving waters. For intake credits, receiving water body samples shall be taken mid-stream, mid-depth in the early morning hours. For determining maintenance of background (generally applicable to a discharge to a wetland), monitoring within the water body shall occur before and after the discharge at a point which would represent the discharge's impact on the receiving water body.
3. Monitoring Frequency – The permittee shall take a minimum of three grab samples during each projects discharge. Grab samples shall be taken at the beginning, in the middle and at the end of each discharge event in which monitoring is required. For pH, dissolved oxygen and total residual chlorine, each grab sample shall be analyzed and compared to the limit. For oil & grease, each grab sample shall be analyzed and the average of the three samples shall be compared to the limit. Notwithstanding the foregoing, composite sampling may be used for total suspended solids.
4. Monitoring Methods - The sampling procedures, preservation and handling, and analytical protocol for compliance monitoring shall be in accordance with EPA approved methods, 40 CFR Part 136.
5. Additional Monitoring - If the permittee monitors any pollutant more frequently than required, using EPA approved methods, the results of such monitoring shall be included in the records.
6. Outfall Observation:
 - a. The permittee is required to have a representative on site for the duration of the discharge;
 - b. The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge.
 - c. Any unusual characteristics, as described at item 6.b above, shall be recorded detailing the findings of the investigation and the steps taken to correct the condition.
7. The Total Residual Chlorine limit is only applicable if the source water used for the hydrostatic test has been chlorinated.

8. To avoid the transfer of invasive aquatic organisms, the permittee shall not transfer hydrotest influent water from one watershed divide to another. That is, intake from surface water source shall be returned to the same surface water body or water body within the same watershed.
9. For wetland discharges, pH levels in the waste stream shall not affect background. In lieu of monitoring the discharge pH, the permittee may monitor the pH levels in the wetland near the discharge before and after the discharge event. The same shall be done for Dissolved Oxygen (DO) monitoring for wetland discharges, where the discharge DO level is less than 5.0 mg/L.

Basis for limits: There are no federally promulgated effluent limitation guidelines or standards for this type of discharge. Therefore, technology-based effluent limitations were established based on Best Professional Judgment (BPJ) under Sec. 402(a)(1)(B) of the CWA. In establishing standards appropriate for the hydrotest dischargers, staff looked to similar permits issued by the Minnesota Pollution Control Agency (MPCA) to similar dischargers. Experience with these one time discharge events have taught staff the control over discharge velocity is just as important as control over pollutant levels in the discharge, and that narrative standards requiring the use of best management practices for the control of discharge velocity should be used in conjunction with numeric effluent limitations.

Sec. 502 (11) of the CWA defines “effluent limitation” to mean any restrictions established by the permitting authority on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, and thus narrative standard to control the rate of the physical discharge is in conformance with federal law.

Technology-based treatment requirements represent the minimum level of control that must be imposed on a permit issued under section 402 of the CWA [40 CFR §125.3]. Sec. 301(b)(1)(C) of the CWA requires the establishment of any more stringent limitation, including those necessary to meet water quality standards. Water quality standards are composed of three parts: use classifications, numeric and/narrative water quality standards, and antidegradation policy. It is a national goal that wherever attainable, water quality be protected to provide for the propagation of a healthy and balanced population of shellfish, fish and wildlife and allow recreational activities in and on the water (fishable/swimmable) [Sec. 101(a)(2) of the CWA]. Thus, unless a use attainability analysis conducted in accordance with 40 CFR §131.10(j) indicates otherwise, the water use classification(s) should include a fishable/swimmable designated beneficial use. Such an analysis has not been conducted on any of the water bodies mentioned herein, and the appropriate use classification for these waters is fishable/swimmable. As such, the permitting authority is not estopped from establishing more stringent standards or monitoring in the event that the discharge is to a receiving stream where the permitting authority determines that additional or more stringent requirements and/or effluent limitations than those indicated in this permit may be necessary to substantially assure compliance with applicable regulations. The permitting authority shall apprise the permittee of these additional requirements, more stringent and/or additional effluent limitations, and/or water quality standards and then they shall become a part of the requirements applicable through this permit for the specific discharge. The permittee shall submit any additional information required by the permitting authority to assure that these

additional requirements, more stringent and/or additional effluent limitations and/or water quality standards are being met.

EPA is the appropriate authority for purposes of certifying the proposed discharge under Section 401 of the Clean Water Act regarding discharges within the Leech Lake Indian Reservation. Clean Water Act Section 401 certification is not needed from the state or the Leech Lake Tribe as neither have water quality standards applicable to the receiving water at the points of discharge.

Special Conditions

- To minimize the potential impact to fish during withdrawal of hydrostatic test water, the permittee shall install intakes with filtering and screening devices (with openings no greater than 1 inch to preclude fish from being pulled in with the test water) and suspend the intakes within the waterbody or just below the surface of the water. Withdrawals shall be made at controlled rates to protect aquatic life, provide for all waterbody uses, and avoid effects on downstream withdrawals of water by existing users. When using the dam-and-pump method, screening devices shall be installed at the pump intakes to minimize entrainment impacts to aquatic species.
- The permittee shall avoid instream work within trout streams and their tributaries between September 1 and April 15 for coldwater fisheries and between March 15 and June 15 for coolwater and warmwater fisheries.
- Erosion and Sediment Control – The permittee shall employ BMPs [best available technology economically achievable (BAT)] to reduce pollutant levels in the discharge. Energy dispersal devices shall be used to minimize bottom scouring, erosion and sediment transport in, into or near receiving waters. The use of BMPs is a minimum requirement, additional pollutant control technologies are required if necessary to maintain water quality for recreational activities in and on the water and for the protection and propagation of a balanced, indigenous aquatic community and the flora and fauna that support that community.
- Corrective measures shall be taken for any discharge causing or contributing to a noticeable increase in turbidity and/or suspended solids levels to surface waters or should the discharge cause or create a sediment plume.
- Oil or other substances shall not be discharged in amounts that create a visible color film.
- The discharge shall not degrade the aquatic habitat, which includes the waters of the state and stream bed, in any material manner.
- The discharge shall not seriously impair or endanger the normal fishery and lower aquatic biota upon which it is dependent. The species composition shall not be altered materially, and the propagation or migration of the fish or other biota normally present shall not be prevented or hindered by the discharge.
- The discharge shall not in any manner render the receiving water unsuitable or objectionable for fishing, fish culture or recreational activities in or on the water.

- The discharge shall not cause or contribute to a material increase in undesirable slime growths or aquatic plants, including algae.
- Irrespective of numeric effluent limitations, the pollutant levels in the discharge shall not impair the receiving water for its designated use. Lacking water quality standards to the contrary, all waters mentioned herein are considered to be protected for a fishable/swimmable designated beneficial use.
- The permittee shall immediately cease any discharge which cause turbid conditions or results in a sediment plume in the receiving water and immediately employ corrective measures to mitigate the impairment.
- Facility Operation - the permittee shall all times properly operate and maintain all treatment or control systems installed or used by the permittee.
- Removed Substances - solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of waste waters shall be disposed of in compliance with applicable law and in such a manner as to prevent any pollutant from such materials from entering receiving waters.
- Authorization to Discharge - coverage under this chapter shall be limited to discharges to surface water. It shall be the permittee's responsibility to seek, apply for and obtain any additional authorizations necessary to initiate the discharge.
- The effluent limitations proposed in this permit are based on minimum secondary treatment standards (40 CFR 133). As such, EPA is not estopped from establishing more stringent effluent limitations, additional or more frequent monitoring, and/or any other restrictions or requirements which might be necessary to protect the receiving stream for its designated uses.
- The permittee shall implement its March 20, 2009, Minnesota and North Dakota Environmental Mitigation Plan as it relates to hydrostatic testing provided the mitigation measures are not superseded by this permit.
- **Advance Notice of Discharge**-This permit is intended to cover discharges of hydrostatic test water to surface waters located within the exterior boundaries of the Leech Lake Indian Reservation. The requirements of the permit are general in nature and are intended to protect applicable water quality standards. The permit requires the permittee to submit site-specific information to EPA and the Tribe prior to undertaking a project that would have a discharge covered by this permit. Unless more stringent requirements based on the site-specific information are required, the permittee can proceed with the project. If additional more stringent site-specific requirements are needed, after consultation with the Tribe and the permittee, EPA will inform the permittee by letter of the requirements prior to the project proceeding.
- **Prohibitions**
 1. **Prohibition on non-storm water discharges.** All discharges covered by this permit

shall be composed entirely of hydrostatic test water. This permit does not authorize the discharge of sewage, wash water, scrubber water, spills, oil, hazardous substances, or equipment/vehicle cleaning and maintenance wastewaters to ditches, wetlands, or other surface waters of the U.S.

2. **Prohibition on the discharge of excessive sediments.** The discharge of sediments is prohibited, except in minor amounts associated with the proper implementation of sound soil erosion and sediment control practices.
3. **Discharges Not in Compliance with Water Quality Standards.** Discharges covered under this permit shall not cause or contribute to a violation of an applicable water quality standard. Where a discharge is determined to cause or contribute to the violation of an applicable Tribal or State Water Quality Standard, EPA, Region 5, will notify the permittee of such violation(s) and the permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard, and shall document these actions in a letter to EPA, Region 5. Compliance with this requirement does not preclude any enforcement activity as provided by the Clean Water Act for the underlying violation.
4. **Discharges to Municipal Wastewater Treatment Systems.** The permittee shall not transport pollutants to a municipal wastewater treatment system that will interfere with the operation of the treatment system or cause pass-through violations of effluent limits or water quality standards.
5. **Endangered Species.** Discharges and construction activities covered under this permit shall not adversely affect Federal listed endangered and threatened species or designated critical habitat. The permittee shall make every attempt to avoid identified sensitive biological resources along the pipeline when establishing specific appropriations and discharge locations or implement the mitigation measures identified by the Minnesota Department of Natural Resources.
6. **Historic Properties.** Discharges and construction activities covered under this permit shall protect historic properties that are listed or are eligible to be listed in the National Register of Historic Places. The permittee shall make every attempt to avoid previously identified sensitive cultural resources along the pipeline when establishing specific appropriations and discharge locations. If these sites cannot be avoided, there should be mitigation measures taken. Plans should reflect a treatment plan to mitigate potential adverse effects. Should any unreported cultural materials be discovered during project activities, all work shall cease and the Tribal Historic Preservation Officer (THPO) is to be notified immediately. Should any human remains or suspected human remains be encountered, all work shall cease and the following personnel should be notified immediately in this order: County Sheriff's Office, Office of the State Archeologist, and the THPO.
7. **Water Treatment and/or Chemical Additives(s).** The Permittee has not been approved for the use of water treatment and/or chemical additives. If the Permittee wishes to use additives, approval must be requested from EPA prior to use.

8. **Outstanding Resource Value Waters/Trout Waters.** Discharges to outstanding resource value waters (ORVW), as defined in Minn. R. 7050.0180 or Tribal Water Quality Standards, or trout waters as defined in Minn. R. 7050.0420 or Tribal Water Quality Standards, are restricted.
9. **Erosion, Flooding, and Nuisance Conditions.** The Permittee shall operate and maintain the discharge operation in such a manner so as to cause no erosion, flooding, or other nuisance conditions in the area of the operation or in the receiving stream.
10. **Construction/Installation.** This permit does not authorize the construction or installation of any pipeline facilities.
11. **Prohibition to appropriate source water from Pike's Bay or Pike's Bay Channel.** The permittee shall not appropriate source water for hydrostatic testing from Pike's Bay or Pike's Bay Channel.

ESA and NHPA Compliance

The permittee has applied to the U.S. Department of State (DOS) for a Presidential Permit for the construction, operation, and maintenance of facilities at the U.S./Canada border for a proposed pipeline and associated facilities for importation of crude oil from Canada. DOS receives and considers applications for Presidential Permits for such oil pipelines pursuant to the authority delegated to it by the President of the United States under Executive Order (EO) 13337. DOS has determined that issuance of a Presidential Permit would constitute a major federal action that may have a significant impact upon the environment within the context of the National Environmental Policy Act of 1969 (NEPA).

As the lead federal agency for the NEPA environmental review of the proposed Alberta Clipper Project (proposed Project), DOS prepared a Final Environmental Impact Statement (FEIS) in compliance with the requirements of NEPA and the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR] 1500–1508). As part of the FEIS, Endangered Species Act (ESA) and National Historic Preservation Act (NHPA) requirements have been and are being addressed. Though this NPDES permit action is a separate federal action, the impacts related to the discharge of hydrostatic test waters were addressed as part of the FEIS.

The following ESA consultations are ongoing or have been completed as part of the DEIS:

United States Fish and Wildlife Service

The Alberta Clipper project has received concurrence from the Fish and Wildlife Service that the project is "not likely to adversely affect" federally listed threatened and endangered species in the vicinity. A copy of the Fish and Wildlife Service concurrence letter is included in the administrative record.

Tribal Biological Consultations

Biological consultations with the Leech Lake Band of Ojibwe and Fond du Lac Band of Lake Superior Chippewa tribes regarding impacts of the Alberta Clipper project on tribally listed species have been conducted. The results of those consultations have been incorporated into a

Biological Assessment currently under review by the tribes as a part of the project's Environmental Impact Statement. The Biological Assessment is Appendix T of the project's Environmental Impact Statement and can be reviewed at:

<http://www.albertaclipper.state.gov/clientsite/clipper.nsf?Open>

Minnesota Department of Natural Resources

The following is a summary of consultations with the Minnesota Department of Natural Resources:

October 3rd, 2006	Initial Natural Heritage Inventory (NHI) Review
May 25th, 2007	Alternative Route NHI Review
November 3rd, 2008	NHI Update and Re-review of Project Route
January 30th, 2009	Project Letter to MDNR Regarding T&E Species on Project Route
March 19th, 2009	Meeting Regarding Rare Plants on Project Route
Ongoing	Conversations With the MDNR Are Ongoing Regarding Enbridge's Botrychium Avoidance and Monitoring Plan, With Approval of the Final Plan in 2009.

In addition, since protection of threatened and endangered species and its critical habitat is also a permit condition, we do not believe that the issuance of the permit and its associated discharges will have an effect on those species, and therefore, believe we have met our requirements under the ESA.

The following NHPA consultations are ongoing or have been completed as part of the FEIS:

A detailed description of the Alberta Clipper Project's compliance with Section 106 of the National Historic Preservation Act and a summary of the cultural resource consultations that occurred can be found in Section 4.11.3 of the project's Environmental Impact Statement (EIS).

The EIS is located at the following URL:

<http://www.albertaclipper.state.gov/clientsite/clipper.nsf?Open>

A list of federally recognized Native American tribes that were contacted by the Department of State regarding the Alberta Clipper Project is Appendix W of the project's EIS. A summary of the tribal consultations that were completed for the project can be found in section 1.4 of the project's EIS, which can be reviewed at:

<http://www.albertaclipper.state.gov/clientsite/clipper.nsf?Open>

Additional consultations were conducted with the Leech Lake Band of Ojibwe tribe for the portion of the project's EIS that analyzes impacts on land administered by the Chippewa National Forest. A summary of the consultations conducted can be found in Appendix R of the project's EIS, which can be reviewed at:

<http://www.albertaclipper.state.gov/clientsite/clipper.nsf?Open>

