

NPDES Permit No. IL0080063  
Notice No. JAR:14031301.jar

Public Notice Beginning Date: **April 15, 2014**

Public Notice Ending Date: **May 15, 2014**

National Pollutant Discharge Elimination System (NPDES)  
Permit Program

Draft New NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency  
Bureau of Water,  
Division of Water Pollution Control  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-0610

Name and Address of Discharger:

Enbridge Pipelines (Illinois) LLC  
1409 Hammond Avenue  
Superior, WI 54880

Name and Address of Facility:

Hydrostatic Testing Discharges  
Located in Fayette, Livingston  
Macon, Marion, McLean Counties

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Jaime Rabins at 217/782-0610.

The applicant operates a crude petroleum pipeline (SIC 4612). Wastewater will be generated from hydrostatic testing a new 167 mile 24-inch pipeline and associated appurtenances resulting in an average discharge of 2.88 MGD of hydrostatic test water from outfalls 001 - 006.

Application is made for the new discharges which are located in Livingston, Fayette, Macon, and Marion Counties, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Vermilion River	40° 54' 38"	North	88° 41' 47"	West	General Use	A
002	Mackinaw River	40° 38' 52"	North	88° 51' 40"	West	General Use	Not Rated
003	Unnamed Tributary to Willow Branch	39° 54' 14"	North	89° 02' 37"	West	General Use	Not Rated
004	Sangamon River	39° 48' 48"	North	89° 02' 39"	West	General Use	Not Rated
005	Kaskaskia River	39° 05' 23"	North	89° 01' 15"	West	General Use	B
006	Fire Suppression Pond	38° 47' 01"	North	89° 03' 56"	West	General Use	Not Rated

Additional information regarding receiving waters is provided on the following page under Identification and Characterization of Affected Water Body.

To assist you further in identifying the location of the discharge please see the attached map.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfalls: 001 - 006 Hydrostatic Test Water (DAF = 2.88 MGD)

PARAMETER	LOAD LIMITS lbs/day		REGULATION	CONCENTRATION LIMITS mg/l		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Flow (MGD)						
pH						35 IAC 302.204
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	30	35 IAC 304.124
Iron				2	4	35 IAC 304.124
Total Residual Chlorine					0.05	35 IAC 302.208

The following explain the conditions of the proposed permit:

The special conditions clarify flow, pH, TRC, monitoring location, DMRs, re-opener, and FOS notification.

Antidegradation Assessment for Enbridge Pipelines – Southern Access Extension  
 NPDES Permit No. IL0080063  
 Livingston, Fayette, Macon, and Marion Counties

The subject facility has applied for an NPDES permit for the hydrostatic testing of a new crude oil pipeline and associated facilities. There will be six hydrostatic effluent outfalls at the locations depicted in the following table. Outfall number, source water, receiving water body and volume of flow are given in the table. All discharges will be filtered through structures to disperse energy and prevent erosion. Duration of discharge will be from less than 0.1 to 2.2 days. Maximum discharge rate will be 2,000 gallons per minute. A permit limit for total residual chlorine will be applied to the locations where municipal water may be the source of water for the test. All other waters used will be taken from the water body that will receive the discharged effluent after the test or groundwater.

Outfall Number	Total Effluent Volume	Facilities to be Hydraulically Tested	Source of Hydrostatic Test Water	Receiving Water for Discharged Effluent
001	1.935 Million Gallons	Pipeline and horizontal drilling segments	Vermilion River	Vermilion River
002	4.937 MG	Pipeline and horizontal drilling segments	Mackinaw River	Mackinaw River
003	0.015 MG	Pump Station	Municipal or groundwater	Unnamed Tributary to Willow Branch
004	4.842 MG	Pipeline and horizontal drilling segments	Sangamon River	Sangamon River
005	12.533 MG	2 Pipeline segments and horizontal drilling segments	Kaskaskia River	Kaskaskia River
006	0.269 MG	Relief Tank and Appurtenances	Municipal, Groundwater or Fire Suppression Pond	Fire Suppression Pond

#### Identification and Characterization of the Affected Water Body.

Receiving Stream	Segment Code	7Q10 Flow (cfs)	303(d) List Status	IDNR Stream Integrity Rating	Dissolved Oxygen Enhanced?
Vermilion River	DS-14	3.3	Impaired for public water supply use - nitrate	Biologically Significant, "A" rating	Yes
Mackinaw River	DK-20	Zero	Impaired for fish consumption use - PCBs	No rating	Yes
Unnamed Trib Willow Creek	No Segment Code	Zero	Not Assessed	No rating	No
Sangamon River	E-05	36	Impaired for primary contact use – fecal coliform bacteria and fish consumption use – mercury and PCBs	No rating	No
Kaskaskia River	O-33	24	Impaired for primary contact use – fecal coliform bacteria and public water supply use - manganese	"B" rating	No
Fire Water Pond	None	None	Not a water of the state	None	None

All the streams above, with the exception of the Fire Water Pond, are General Use waters and all these except for the unnamed tributary of Willow Branch are fully supporting aquatic life use according to the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List. The unnamed tributary of Willow Branch has not been assessed by Illinois EPA.

#### Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

Parameters that will increase in loading are associated with residual materials in the pipeline. Total suspended solids, oil and grease, and iron may be suspended in the test water originating from the inside of the pipe, valves and fittings of the pipeline even though this is a new pipeline. No adverse impacts to the water bodies are anticipated from the hydrostatic tests.

### **Fate and Effect of Parameters Proposed for Increased Loading.**

The iron and total suspended solids discharged will be regulated by the state effluent standards and will become part of the bed sediment of the receiving waters. Oil and grease will also be regulated with the state effluent standard and therefore no visible remnant will be discharged. One aspect of the project that needs special mention in the permit is the fact that 4.937 MG of water is to be removed from the Mackinaw River, which during drought has no flow (7Q10 = zero). A possibility exists that the pipeline company will want to remove this water when very little water may exist in the Mackinaw. A provision will be placed in the permit that prohibits water removal unless the stream flow is 38 cfs or greater at the Mackinaw site. This will mean that at worst, the company will take no more than 20 percent of the water out of the stream when conducting the hydrostatic testing. The method of water withdrawal is also important in order to avoid impact to aquatic life. A two inch mesh wire screen must be used at this location and an intake velocity of no more than 1.5 feet per second must be maintained. Another required provision is that if municipal water is used for the hydrostatic tests that it be dechlorinated if any measurable TRC remains after testing. No adverse effects are anticipated in the receiving waters if these provisions are met.

### **Purpose and Social & Economic Benefits of the Proposed Activity.**

It is vitally important that pipelines be hydrostatically tested to ensure the safety of the nearby communities. Regulations require this testing.

### **Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.**

The pipeline owner has chosen responsible methods of hydrostatic testing. Waters used in the testing are taken from the receiving stream or from municipal or groundwater sources. Therefore, no possibility exists to spread invasive species during the testing. The test using municipal drinking water that will discharge to waters of the State will have a permit limit for total residual chlorine and therefore the water must be dechlorinated before discharge. Erosion control measures will be applied at the points of discharge. This consists of energy dispersion structures placed in such a way as to disperse energy and filter particles.

The hydrostatic test methods chosen are the accepted norm for these projects. Hydrostatic testing is a very short-term activity. The discharges will last only up to 2.2 days. Arranging for effluents to be land applied, sent to a POTW or other alternatives are not practical for this type of discharge. Discharging the effluents to local surface waters in a responsible manner has been developed as the proper method of dealing with the water needed for the testing.

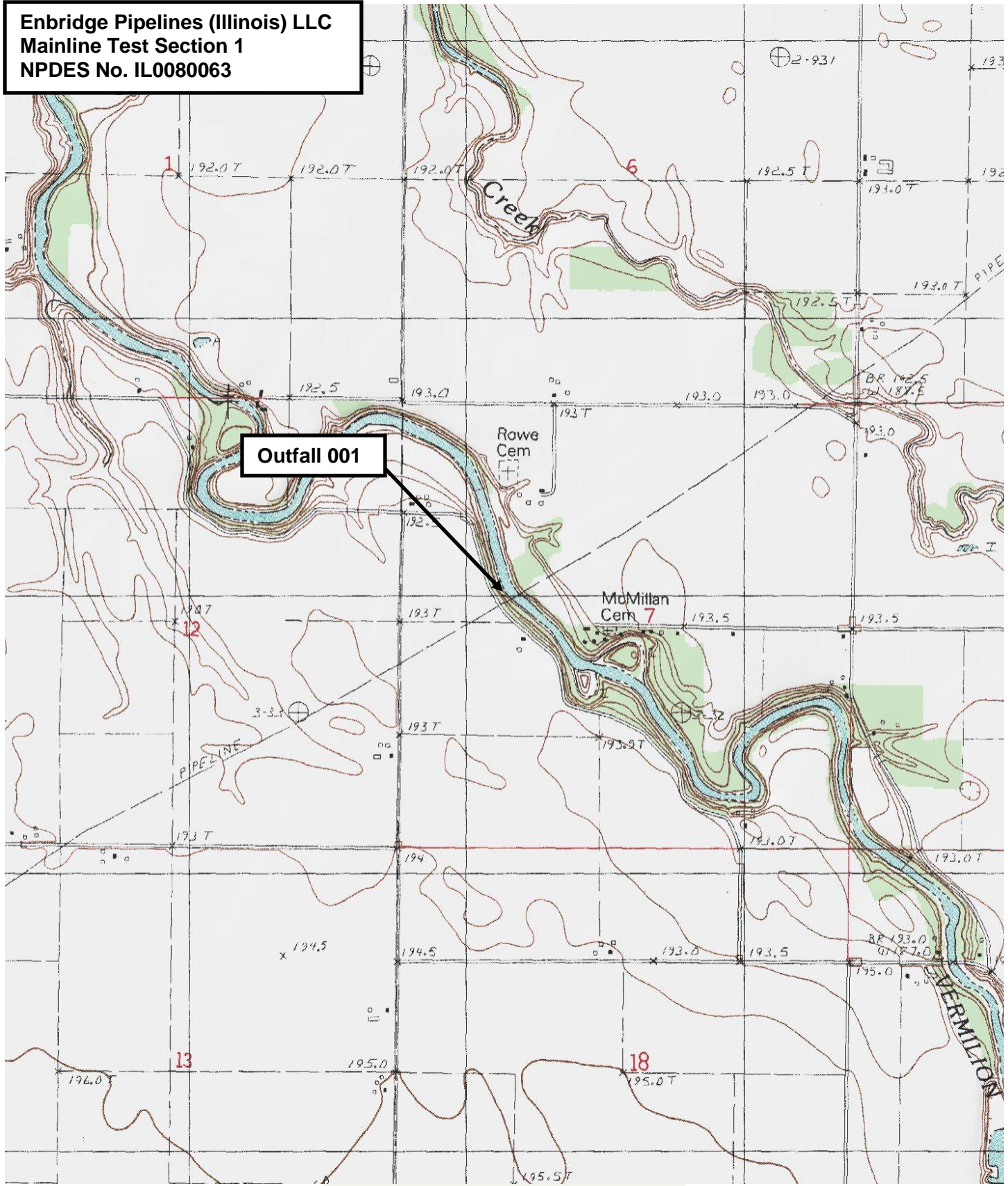
### **Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities**

The Illinois Department of Natural Resources was consulted regarding threatened and endangered species issues for each discharge location via the EcoCAT system between March 6 and March 11, 2014. It was immediately determined that no threatened or endangered species reside in the Sangamon River, the unnamed tributary of Willow Branch, and the Kaskaskia River. Termination of consultation was immediately provided for the discharges to these streams. A letter dated March 7, 2014 was received from IDNR regarding the discharge to the Vermilion River. IDNR has determined that adverse impacts are unlikely and consultation was terminated. IDNR had concerns about the discharge (and water withdrawal) at the Mackinaw River site given that this site is close to a unique biological area in the river that has an "Unusual Concentration" of invertebrate species. The conditions above regarding intake velocity of 1.5 feet per second and a minimum river flow of 38 cfs present before water may be withdrawn are reiterated in a March 12, 2014 letter from IDNR that terminates consultation providing these conditions are met.

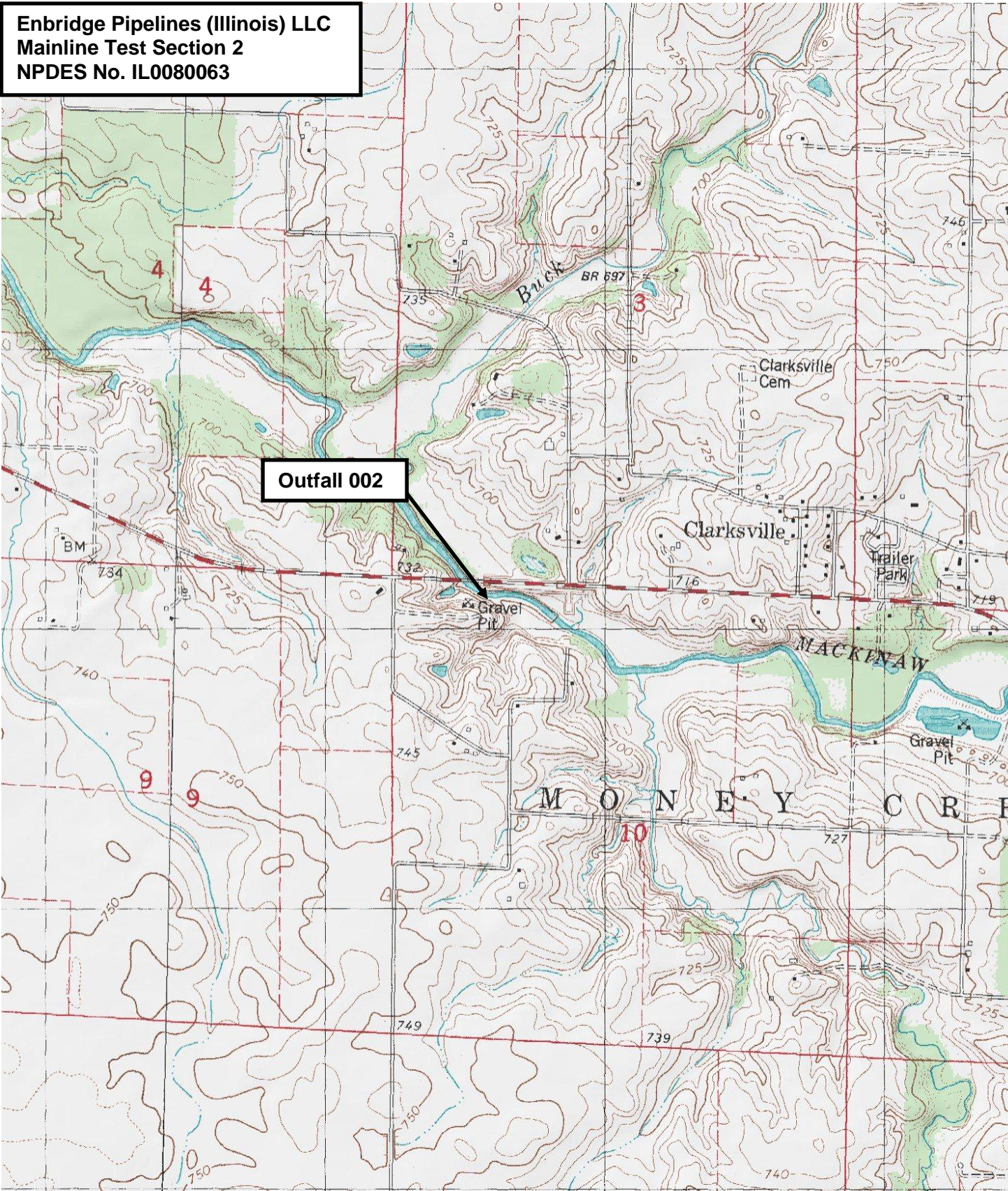
### **Agency Conclusion.**

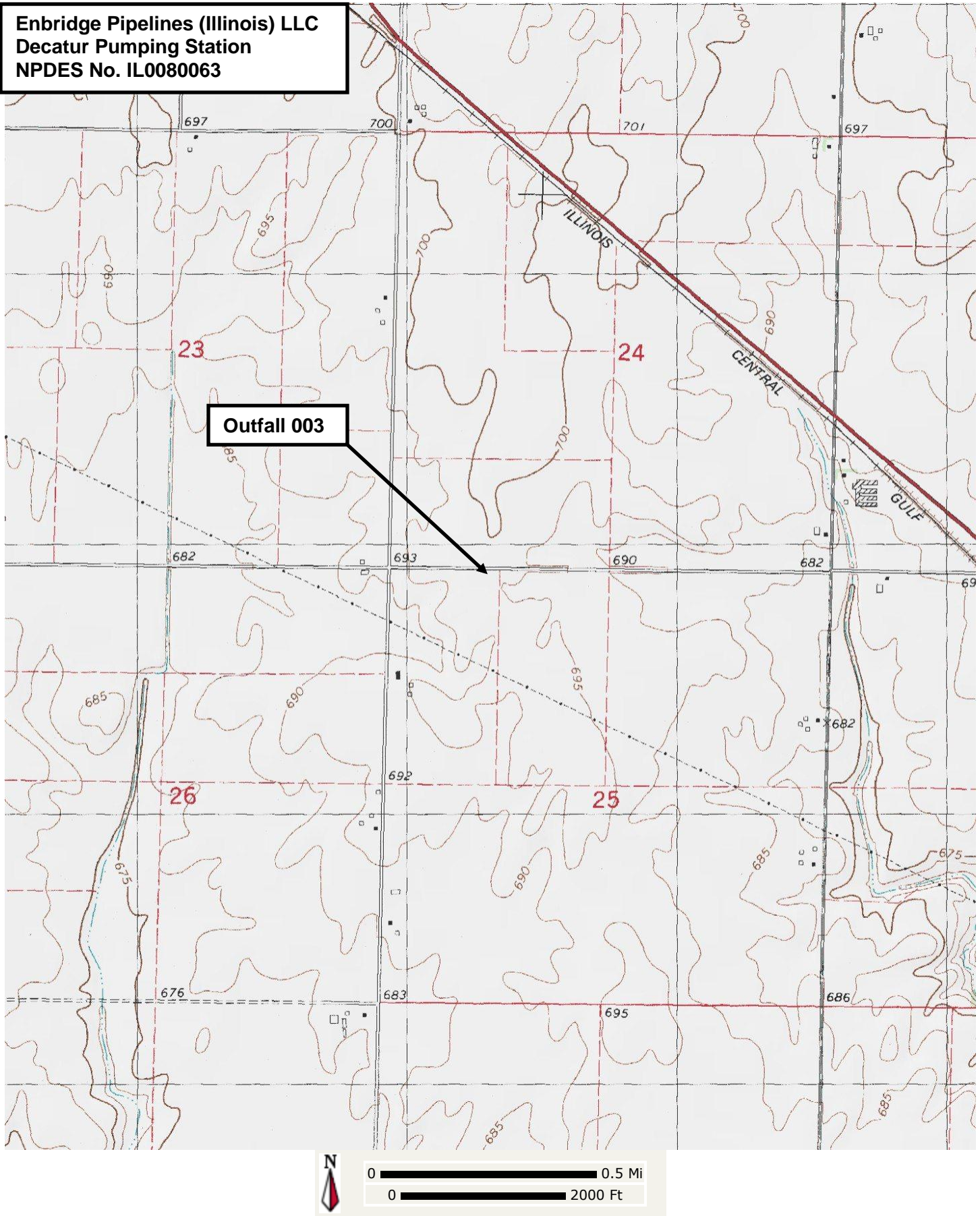
This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving streams, ponds and wetland will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the communities at large by ensuring the safety of the crude oil pipeline. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

**Enbridge Pipelines (Illinois) LLC  
Mainline Test Section 1  
NPDES No. IL0080063**

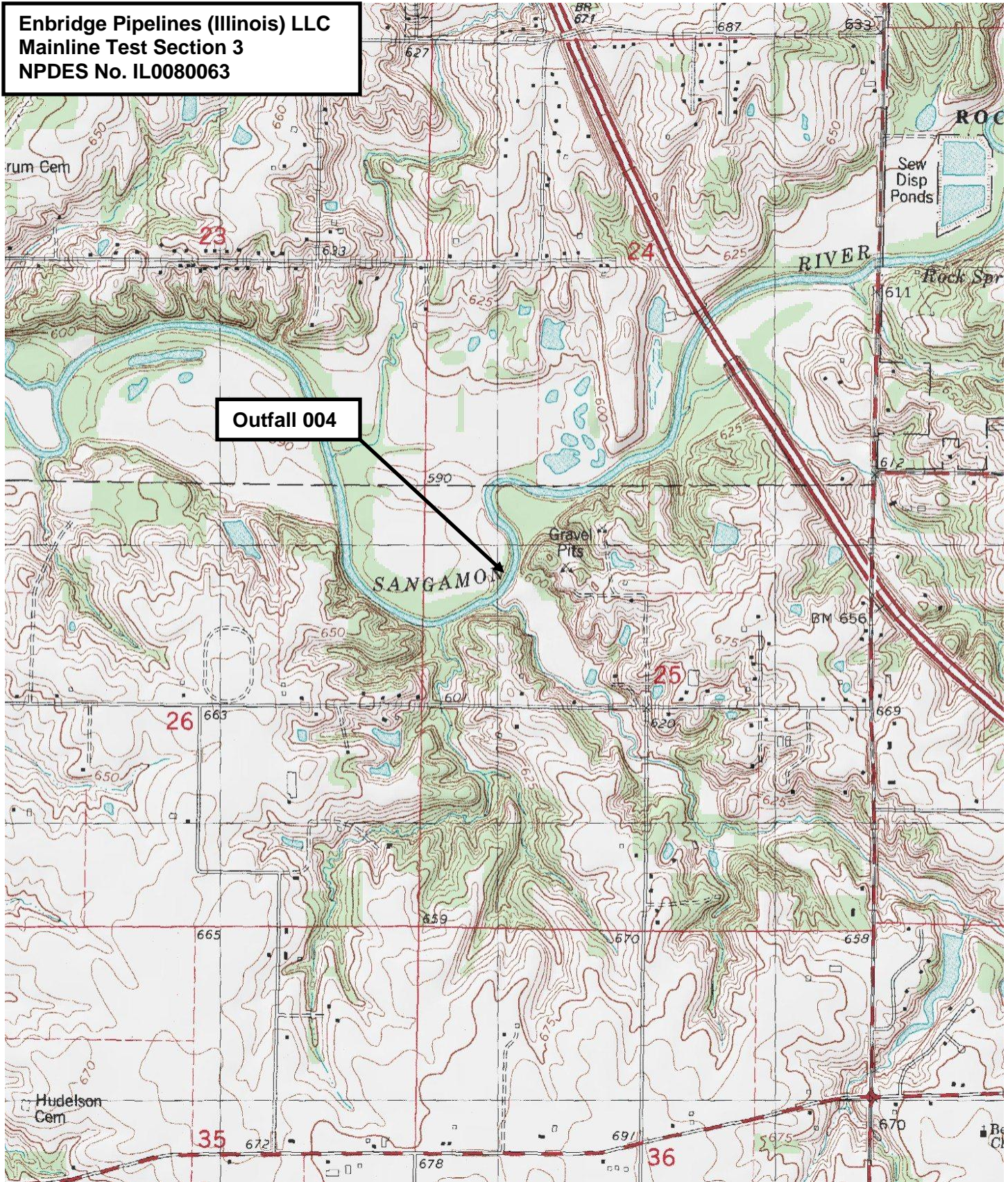


**Enbridge Pipelines (Illinois) LLC  
Mainline Test Section 2  
NPDES No. IL0080063**





**Enbridge Pipelines (Illinois) LLC  
Mainline Test Section 3  
NPDES No. IL0080063**

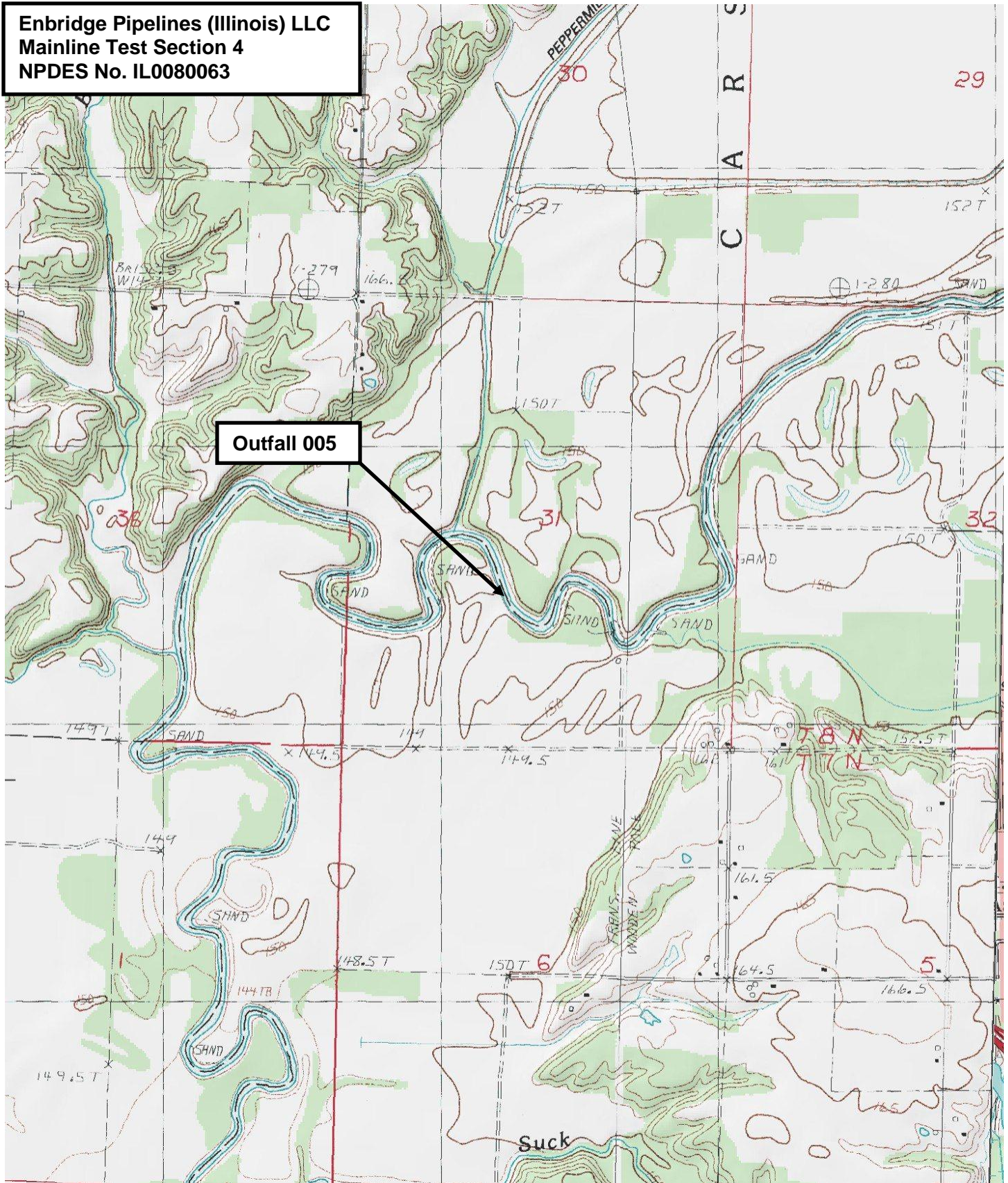


**Outfall 004**





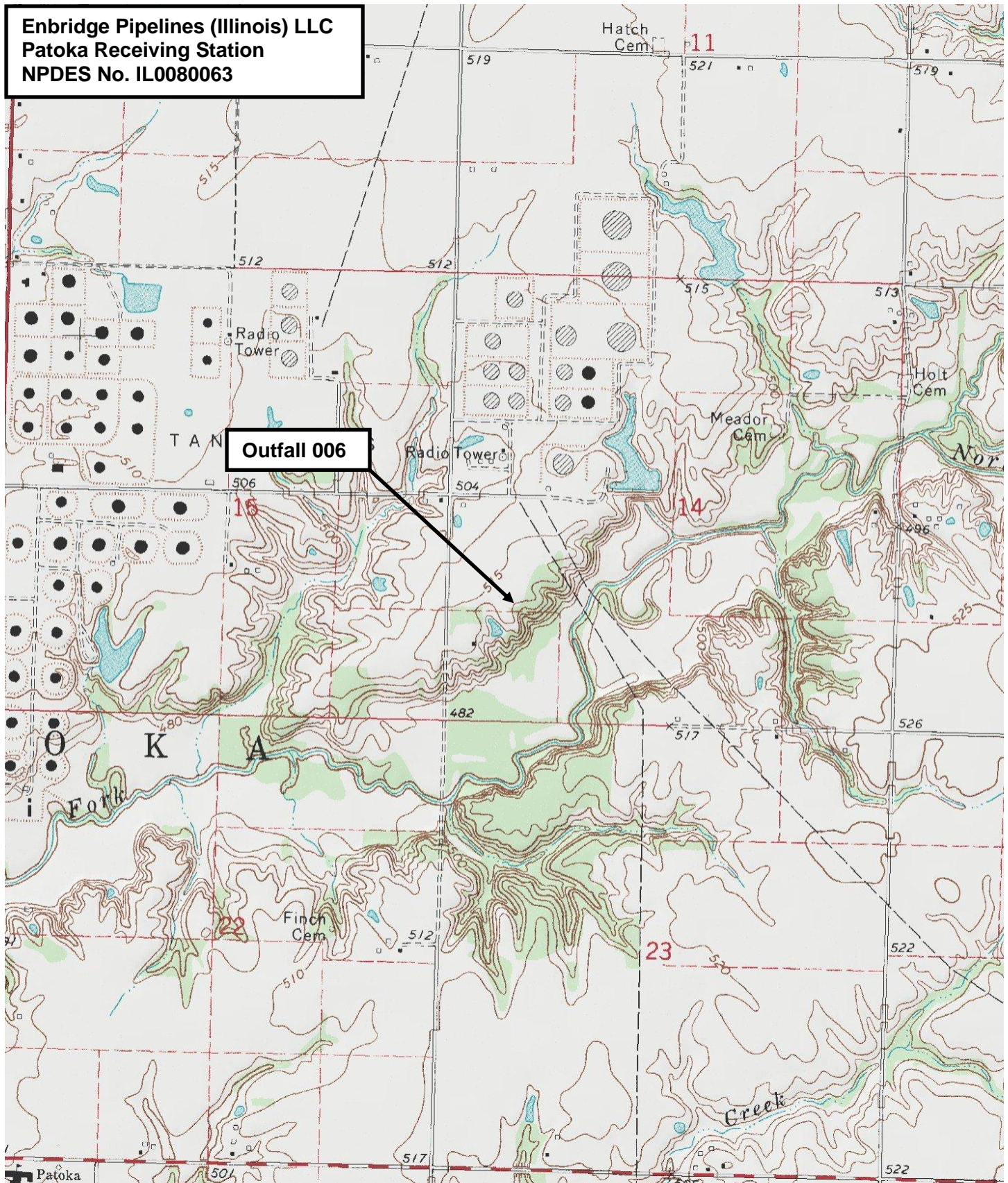
**Enbridge Pipelines (Illinois) LLC**  
**Mainline Test Section 4**  
**NPDES No. IL0080063**



**Outfall 005**



**Enbridge Pipelines (Illinois) LLC  
Patoka Receiving Station  
NPDES No. IL0080063**



**Outfall 006**



0 0.5 Mi  
0 2000 Ft

NPDES Permit No. IL0080063

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

New (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:		
Enbridge Pipelines (Illinois) LLC 1409 Hammond Avenue Superior, WI 54880		Hydrostatic Testing Discharges Located in Fayette, Livingston Macon, Marion, McLean Counties
Discharge Number and Name:	Facility Name and Address:	Receiving Waters:
001 Hydrostatic Test Water	Mainline Test Section 1 N 40° 54' 38", W 88° 41' 47"	Vermilion River
002 Hydrostatic Test Water	Mainline Test Section 2 N 40° 38' 52", W 88° 51' 40"	Mackinaw River
003 Hydrostatic Test Water	Decatur Pumping Station Nearest intersection is W. Park Rd & N. Glasgow Rd. (just west of site) 39° 54' 14", W 89° 2' 37"	Unnamed Tributary to Willow Branch
004 Hydrostatic Test Water	Mainline Test Section 3 N 39° 48' 48", W 89° 2' 39"	Sangamon River
005 Hydrostatic Test Water	Mainline Test Section 4 N 39° 5' 23", W 89° 1' 15"	Kaskaskia River
006 Hydrostatic Test Water	Patoka Receiving Station Nearest Intersection is Dickey Pond Rd and Farthing Rd. N 38° 47' 01", W 89° 03' 56"	Fire Suppression Pond

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

NPDES Permit No. IL0080063

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfalls: 001 - 006 Hydrostatic Test Water (DAF = 2.88 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				1/Discharge	
pH	See Special Condition 2				1/Discharge	Grab
Total Suspended Solids			15	30	1/Discharge	Grab
Oil and Grease			15	30	1/Discharge	Grab
Iron			2	4	1/Discharge	Grab
Total Residual Chlorine	See Special Condition 3			0.05	1/Discharge	Grab

Total Residual Chlorine is only required to be tested when the hydrostatic test water contains or could contain chlorine and/or residuals.

Water shall not be removed from the Mackinaw River unless stream flow is 38 cfs or greater as measured at the upstream station identified as USGS 05567500 Mackinaw River near Congerville, IL or other site approved of by the Agency.

Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum value on the monthly Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.5 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. All samples for total residual chlorine (TRC) shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained.

SPECIAL CONDITION 4. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 5. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMR) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/net-dmr/index.html>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15<sup>th</sup> day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMR shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 6. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 7. The permittee shall provide telephone notification to the appropriate IEPA Regional Office at least 24 hours prior to any hydrostatic pipeline testing which may result in a discharge.

When discharging from outfalls 001, 002, 003, and 004 the Champaign FOS shall be notified at 217/278-5800

When discharging from outfalls 005, and 006 the Collinsville FOS shall be notified at 618/346-5120

SPECIAL CONDITION 8. No effluent shall contain settleable solids, floating debris, visible oil, grease, scum, or sludge solids. Color (including color resulting from dyes or tracers in the hydrostatic test water), odor and turbidity must be reduced to below obvious levels.

SPECIAL CONDITION 9. All tanks, pipelines and appurtenances must be thoroughly cleaned and free of product residuals prior to hydrostatic testing activities. This requirement does not apply to newly constructed tanks or pipelines. Cleaning waters are not authorized to be discharged by this permit and must be disposed of at a site and in a manner acceptable to the Agency. Contact the Industrial Permit Unit at (217) 782-0610 to determine if specific disposal practices of cleaning waters requires additional permitting.

SPECIAL CONDITION 10. Appropriate measures shall be taken to prevent water quality impacts resulting from soil erosion due to the discharge. The discharge flow rate shall be controlled so as not to cause scouring or other damage to stream beds or banks.

SPECIAL CONDITION 11. When test water is discharged to the same waterbody from which it was withdrawn, compliance with the numerical effluent standards is not required when effluent concentrations in excess of the standards result entirely from influent contamination, evaporation, and/or the incidental addition of traces of materials not utilized or produced in the hydrostatic test activity that is the source of the waste.

Special Conditions

SPECIAL CONDITION 12. Solid wastes such as straw used for filtering or erosion control shall be disposed of in accordance with state and federal law.

SPECIAL CONDITION 13. Except for the situations described in (A) and (B) below, the permittee shall only discharge untreated hydrostatic test water to the watersheds from which the source water was drawn.

- (A) The permittee may discharge hydrostatic test water withdrawn from any waters of the state (except zebra mussel contaminated waterbodies) to any watershed provided the water has been treated to kill any organisms. Prior to discharge the treated water must meet the limit for total residual chlorine listed on page three of this permit. The permittee shall provide written notification to the Illinois EPA in the event that treatment processes other than chlorination are to be utilized for biological treatment. The notification shall include a description of the proposed treatment process along with basis of design information. Only those treatment programs approved by the Illinois EPA may be implemented. A permit modification may be required to include additional limits and conditions based on the alternative treatment proposed and will require public notice and opportunity for hearing.
- (B) Source water withdrawn from any waterbody believed to be contaminated with zebra mussels may only be returned to its origin. For information regarding waterbodies contaminated with zebra mussels, contact Bob Mosher (IEPA - Standards Unit) at 217/782-0610. The permittee must apply for a biological treatment program that must be approved by the IEPA in the event the permittee wishes to discharge zebra mussel contaminated water to a different waterbody. For all treatment programs, including chlorination, written notification to the Illinois EPA shall be submitted and shall include a complete description of the proposed treatment process as well as information explaining the basis of design. Only those treatment programs approved by the Illinois EPA may be implemented. A permit modification may be required to include additional limits and conditions and will require public notice and opportunity for hearing.