MEMO

TO:

LaPorte County Board of Commissioners

FROM:

Michael Hollcraft

DATE:

October 2, 2012

SUBJECT:

Enbridge Line 6B Phase 2 Pipeline Construction Project

REQUEST:

Please enter the documents (listed below) into the October 2, 2012

LaPorte County Board of Commissioners Meeting Minutes.

Dear Commissioners:

Please enter this memo and the following documents pertaining to the Enbridge Line 6B Phase 2 pipeline construction project into the October 2, 2012 LaPorte County Board of Commissioners meeting minutes.

Documents:

- 1. September 6, 2012 Letter from the Hoosier Environmental Council to the LaPorte County Commissioners, including the three (3) attached Enbridge construction diagrams.
- 2. September 18, 2012 Email excerpt from Michael Hollcraft to LaPorte County Building Commissioner Annemarie Polan.
- 3. Pages 3 and 4 of the Enbridge Line 6B Phase 2 Environmental Mitigation Plan (EMP).
 - "...Enbridge will obtain the necessary permits for the installation of the pipeline. Permit requirements may be more stringent than the requirements of this EMP. <u>In all cases, the more restrictive covenants will apply</u>." (page 4, bottom)
- 4. September 6, 2012 USFWS Letter from Scott Pruitt to Marty Maupin.

(Enbridge Line 6B pipeline enters LaPorte County, Indiana at Enbridge milepost 495.1 and exits LaPorte County at Enbridge milepost 518.9)

Thank you for your cooperation in this matter.

Valparaiso Office:

150 Lincolnway, Suite 3002 Valparaiso, IN 46383 P 219.464.0104



3951 N. Meridian, Ste. 100, Indianapolis, IN 46208 P 317.685.8800 F 317.686.4794

WWW.HECWEB.ORG

September 6, 2012

Certified Mail, Return Receipt Requested

LaPorte County Board of Commissioners 555 Michigan Avenue, Suite 202 LaPorte, Indiana 46350

RE: Enbridge Line 6B Phase 2 Pipeline Construction Project

Dear Commissioners:

We, the undersigned, are a group of concerned citizens, non-profit organizations, and landowners who will be impacted by the Enbridge Line 6B Phase II Pipeline Construction Project as planned for LaPorte County. We are concerned that the proposed pipeline project does not comport with the LaPorte County Joint Zoning Ordinance 2012.02, as adopted in March of this year and, therefore, poses a threat to public health, safety, welfare, and environment.

As you know, Enbridge, a Canadian firm, has publicly stated its intent to "completely replace 60 miles of pipeline in Southern Michigan and Northern Indiana.¹" However, we know from review of company documents related to the project, that construction of the pipeline is actually a new development and not merely a replacement project. As such, the new pipeline construction project meets the definition of *development* activity under Zoning Ordinance Section 31.05.

Specifically, Enbridge plans to construct a new, thirty-six (36) inch petroleum pipeline through LaPorte County by acquiring new, permanent right-of-way easements from LaPorte County property owners. The existing pipeline will remain in the ground, and instead of transporting conventional crude, the new pipeline will transport diluted bitumen from the tar sands in Alberta, Canada. Moreover, Enbridge has publicly stated that the planned pipeline is a growth/expansion project which will enable them to increase their shipping capacity from 240,000 to 500,000 barrels per day. As a new development, Enbridge must comply with all zoning provisions in LaPorte County that apply to their new pipeline construction project including but not limited to Article 22, Section 22.04 (a) which states:

"Absolutely no development activity (except as provided below) may occur within the minimum setback which is defined as 75 feet from the ordinary high water mark of streams, lakes, and ponds, and 50 feet from the edge of wetlands, or within a designated depressional area. In no case shall the setback be less than the boundary of the 100-year

¹ See LaPorte County Commissioners, Minutes of May 15, 2012 Meeting, p. 3

floodway as defined by FEMA. The enforcement official may require a larger setback based upon flooding, erosion, pollution, endangered species, riparian or wetland functions and values, or other relevant factors."

Nevertheless, according to Enbridge's construction plans, available on the Indiana Department of Environmental Management (IDEM) website, it appears that Enbridge does not intend to observe the minimum fifty (50) foot setback requirement from wetlands and waterbodies within LaPorte County. Specifically, the proposed pipeline project includes excavation of 13 water-bodies and 37 wetlands within LaPorte County, alone. (See attached Enbridge construction diagrams which pertain to their Line 6B Phase 2 project. These diagrams illustrate Enbridge construction plans as they relate to Section 22.04 (a), with specific illustrations pertaining to excavating within wetlands and river beds.)

Due to this critical environmental concern, we respectfully request that the Board or other enforcement official dedicated pursuant to Section 26.01, review the detailed construction plans Enbridge has submitted to state agencies including those submitted to the Indiana Department of Natural Resources and the Indiana Department of Environmental Management and make a determination as to: 1) whether the construction requires a building permit; and 2) whether the construction, as proposed, will violate the development setback requirements Section 22.04 (a).

If either question is answered in the affirmative, we ask the Board or dedicated enforcement official to take all appropriate action, including, if necessary, bringing an enforcement action under Section 26.04, to ensure Enbridge meets all zoning requirements for protection of public health and the environment.

We thank you for your prompt attention to the foregoing concerns. Please feel free to contact the undersigned with any questions.

Respectfully,

Kim Ferraro, Attorney

Hoosier Environmental Council

Kim Ferraro

Nicole Barker, Executive Director Save the Dunes Conservation Fund

Nicole Barbur

WWW.HECWEB.ORG

² http://www.in.gov/idem/6798.htm#2012-321-64-MTM-A

Bowden Quinn, Conservation Director Sierra Club, Hoosier Chapter

Michael Africaff

Michael Hollcraft, Landowner

Adriana Don, Landowner

Adriana.

Encl.: Wetland Construction Detail Drawing # DET 113W

Figure 24 - Typical Wetland Crossing Method Figure 15 - Environmental Mitigation Plan

Cc: Kenneth Layton, President, LaPorte County Board of Commissioners

Barbara Houston, Vice President, LaPorte County Board of Commissioners

Willie Milsap, Commissioner, LaPorte County Board of Commissioners

Annemarie Polan, LaPorte County Building Commissioner

Douglas Biege, Attorney for the LaPorte County Building & Planning Commission

Mitchell Bishop, LaPorte County Planner

Michael Kuss, LaPorte County MS4 Joint Board member

Kenneth Purze, LaPorte County Drainage Board member

Rick Brown, LaPorte County MS4 Coordinator

Anthony Hendricks, LaPorte County Surveyor

Tony Mancuso, LaPorte County Health Board Administrator

Mary Hollingsworth, Branch Chief, Office of Water Quality, IDEM

Marty Maupin, Project Manager, Northwest Region, IDEM

Colonel Frederic Drummond, District Engineer, USACE

Robert Carter Jr., Director, IDNR

Lynn Lewis, Assistant Regional Director – Ecological Services, USFWS

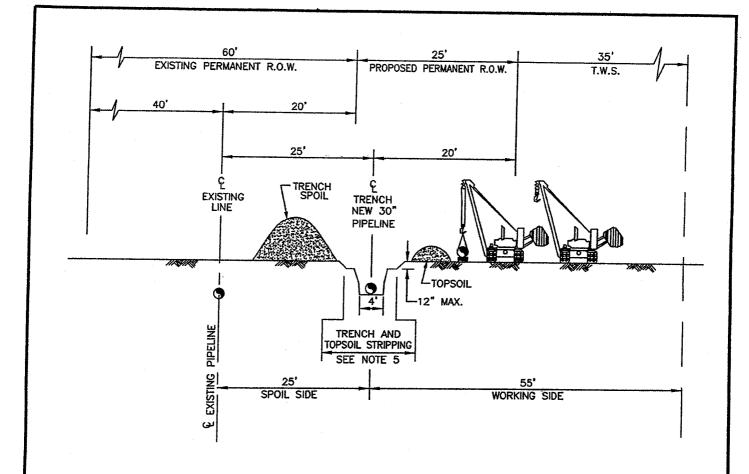
Kim Savage, Attorney, Savage Law PLC

Gary Gensch Jr., Attorney, Field Law Group PLC

Bowdeya Tweh, Business Reporter, The Times of Northwest Indiana

Ryan Dvorak, State Representative (D) - South Bend, Indiana

Jim Arnold, State Senator (D) - District 8, Indiana



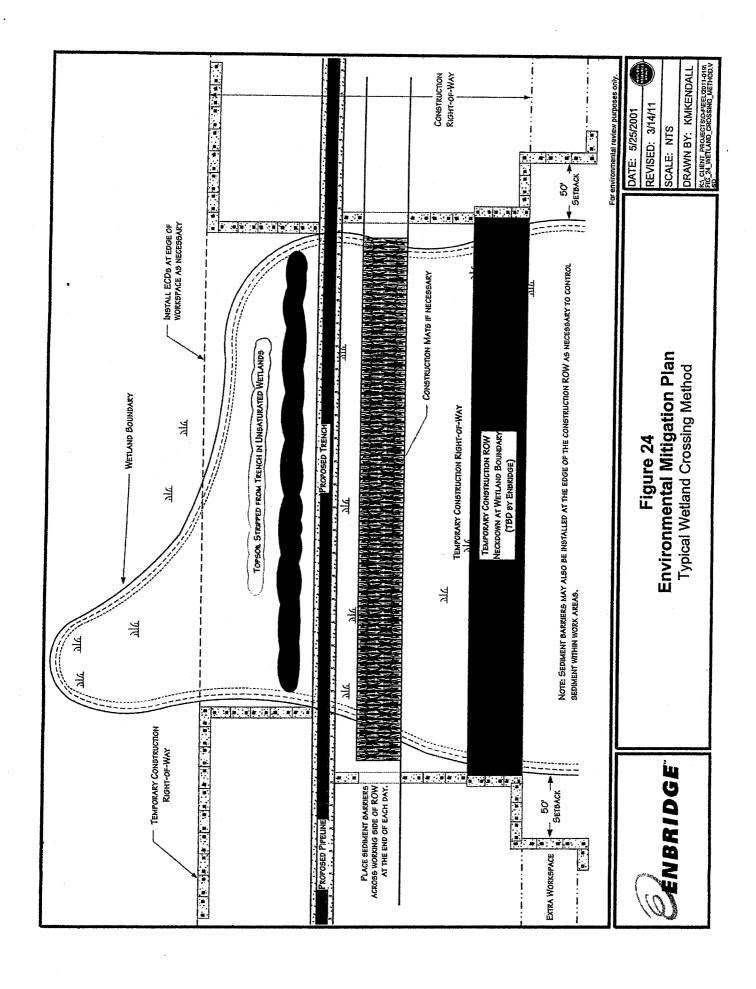
PROFILE

NOTES:

- CONSTRUCTION FOOTPRINT WILL TYPICALLY BE 80 FEET WIDE CONSISTING OF 20 FEET OF EXISTING AND 25 FEET OF NEW PERMANENT RIGHT-OF-WAY EASEMENT AND 35 FEET OF TEMPORARY WORKSPACE. EXTRA TEMPORARY WORK SPACE WILL BE NECESSARY AT MAJOR ROAD, RAIL AND RIVER CROSSINGS AND OTHER SPECIAL CIRCUMSTANCES, AS REQUIRED.
- 2. THIS DRAWING REFLECTS "TRENCH AND TOPSOIL" STRIPPING PROCEDURE, SALVAGE TOPSOIL AT LOCATIONS IDENTIFIED ON THE CONSTRUCTION ALIGNMENT SHEETS, OR AS DIRECTED BY THE COMPANY'S INSPECTOR. DEPTH OF TOPSOIL STRIPPING IS NOT TO EXCEED 12 INCHES.
- 3. STOCKPILE TOPSOIL AS SHOWN OR IN ANY CONFIGURATION APPROVED BY THE COMPANY'S INSPECTOR. KEEP TOPSOIL CLEAN OF ALL CONSTRUCTION DEBRIS.
- 4. LEAVE GAPS IN TOPSOIL AND SPOIL PILES AT OBVIOUS DRAINAGES. DO NOT PUSH TOPSOIL INTO CREEKS OR WETLANDS. DO NOT USE TOPSOIL FOR PADDING. AVOID SCALPING VEGETATED GROUND SURFACE WHEN BACKFILLING TOPSOIL PILE.
- 5. TOPSOIL STRIPPING ALLOWED ONLY ABOVE PIPE TRENCH IN WETLANDS.

REV.	1	_	07/27/11
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DRAWN ESC	DATE 05/10/2011	and the reservoir of the second	CONSTRUCTION DETA	AIL.
	DATE DATE SHEET 1 OF 1	ENBRIDGE™	30" or 36" LINE 6B 2012 PIPE REPLACEMENT WETLAND CONSTRUCTION R.O.W. 25' FROM EXISTING LINE	
JOB NO. 17855.000 CLIENT:	<u> </u>			
ENBRIDGE CLIENT JOB NO. 00000.000		UniversalPegasus	DET 113W	REV.



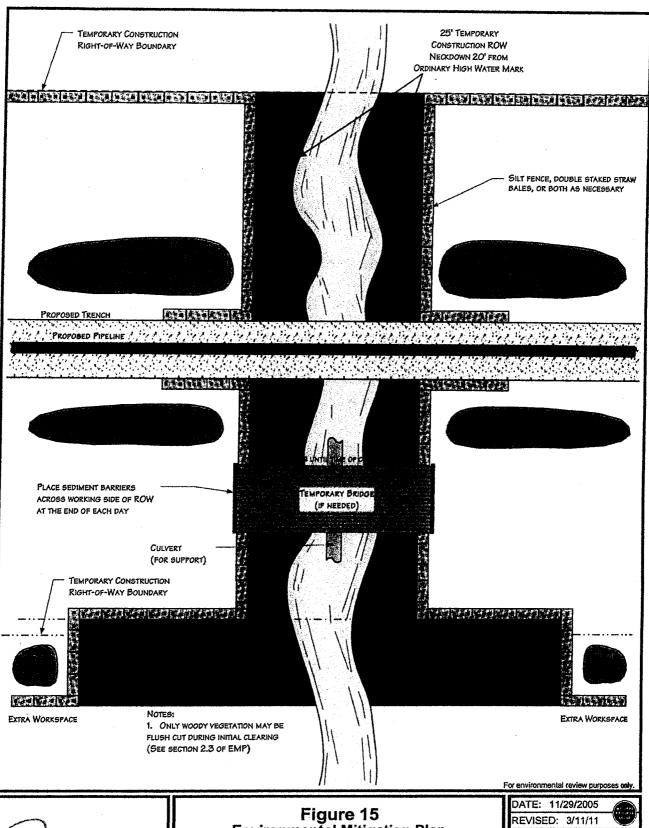




Figure 15
Environmental Mitigation Plan
Typical Waterbody Crossing
Open Cut - Wet Trench Method

DATE: 11/29/2005
REVISED: 3/11/11
SCALE: NTS
DRAWN BY: JPB
KLGIENT PROJECTED-PERIODING METTERNOLUSE
TECHNOLOGY OF ENGLY METTERNOLUSE

Michael Hollcraft

From: Michael Hollcraft [mfhollcraft@comcast.net]
Sent: Tuesday, September 18, 2012 6:54 PM

To: 'apolan@laportecounty.org'

Cc: 'Bishop, Mitchell J.'; 'Brown, Rick'; 'Elizabeth_McCloskey@fws.gov'; 'Kim Ferraro'

Subject: Enbridge Line 6B Phase 2 pipeline construction project

Dear Ms. Annemarie Polan,

Thank you for taking the time to meet with me today to discuss the Enbridge Line 6B Phase 2 pipeline construction project. It was also helpful to have LaPorte County Planner Mitch Bishop join in our conversation, since he is very familiar with LaPorte County Ordinance 2012.02.

As you stated today, Enbridge has not submitted a building permit application for the Line 6B Phase 2 pipeline construction project. However, as I mentioned, Enbridge did submit permit applications to the MS4 Coordinator and to the LaPorte County Drainage Board for this project earlier this summer, which raises the obvious question of why Enbridge has not yet submitted a building permit application to your office when they have stated their intention to begin construction on this project during the fall of 2012.

Additionally, it would appear that some of the more detailed maps submitted to the MS4 office by Barr Engineering (on behalf of Enbridge) for this project are significantly inaccurate. More specifically, just on the maps that I reviewed, the first set of maps showed the existing Line 6B pipeline approximately fifty (50) feet to the south of the Line 6B pipeline right-of-way southern boundary in many locations and completely omitted the second existing pipeline known as the Line 6B "Loop Line", which is currently within the existing 60 foot right-of-way and has been for more than three decades. The second set of maps corrected for these obvious mistakes and omissions, but did not appear to accurately show the position of the Line 6B "Loop Line" within the existing right-of-way easement on my particular property in at least one key location.

Given the sheer magnitude and potential hazard of this Line 6B Phase 2 pipeline construction project, I believe it is appropriate at this point to question the competency and professionalism of Barr Engineering. I should also point out that Barr Engineering is based in Duluth, Minnesota. It is noteworthy that Section 22.08 (b) of LaPorte County Ordinance 2012.02 states: "All plans, reports, calculations, and narratives shall be prepared in accordance with this article and signed and sealed by a professional engineer, registered in the State of Indiana."

As you suggested, a review committee of key LaPorte County personnel with the right skills to evaluate the Enbridge Line 6B Phase 2 project is appropriate, especially given the potential impact that this project could have on the public health, natural resources, and property values within LaPorte County. Currently, the Line 6B Phase 2 pipeline construction project plans are available on the IDEM website.

1.0 GENERAL MITIGATION MEASURES

1.1 TEMPORARY EROSION AND SEDIMENT CONTROLS

Temporary erosion and sediment controls ("ECDs") include, but are not limited to, slope breakers, sediment barriers (i.e. silt fence, straw bales, biologs, etc.), stormwater diversions, trench breakers, mulch, and revegetation. The goal of ECDs is to minimize erosion onsite, and prevent construction-related sediment from migrating offsite into sensitive resource areas such as streams, wetlands, lakes, or drainage ditches (dry or flowing). The Contractor must, at all times, maintain erosion and sediment control structures as required in the project construction documents and as required by all applicable permits. Non-functional erosion and sediment control features must be repaired, replaced, or supplemented with functional materials within 24 hours after discovery, or as otherwise specified in the project permits.

ECDs must be installed after initial clearing but before disturbance of the soil, and must be replaced by permanent erosion controls as restoration is completed. Additional information on ECDs is provided in the upland, waterbody, and wetland sections.

1.2 RIGHT-OF-WAY ACCESS

Access to the right-of-way ("ROW") will be from public roadways and Enbridge-approved private access roads only. Enbridge is responsible for creating signs or other methods to identify approved access roads in the field and to ensure that access is confined to only the approved roads. Vehicle tracking of soil from the construction site will be minimized by installation and implementation of Best Management Practices ("BMPs") such as stone pads, timber mats, reducing equipment/vehicle access to the ROW where practicable (off-ROW parking), or equivalent. Installation of stone or timber mat access pads must be in accordance with applicable permits and state/federal specifications. If such BMPs are not adequate to prevent sediment from being tracked onto public roads, street sweeping, or other equivalent means of collecting sediment, must be used. If soil is tracked onto a roadway, the Contractor must remove accumulated material from the road and return it to the construction ROW within an upland area as soon as possible, but in no circumstances more than 24 hours after discovery. In addition, soil on roadways cannot be swept and/or graded into the road ditch or onto the shoulder.

1.3 ROAD REPAIR

The Contractor must repair private roads, lanes, and public roads damaged when moving equipment or obtaining access to the ROW.

1.4 RIGHT-OF-WAY REQUIREMENTS

All construction equipment and vehicles will be confined to the approved ROW and additional workspace. Prior to commencement of clearing operations, the outer limits of the construction ROW and additional workspace areas will be marked with distinctive stakes and flagging by Enbridge. Construction activities are restricted to the approved designated areas. Other areas (pipe storage and contractor yards, borrow and disposal areas, access roads, etc.) will be posted for use by the Contractor during construction activities.

The construction ROW (construction workspace) for a project will vary and may include a portion of Enbridge's existing corridor, new permanent corridor, permitted temporary workspace, and site-specific additional workspaces as defined below and shown in Appendix A. The construction ROW width will be

reduced in selected locations (e.g., wetlands, waterbodies, and forested windbreaks), in accordance with applicable permit conditions, as indicated on the project construction alignment sheets and in the field by the use of staking.

(a) ROW (Permanent)

Enbridge's existing permanent ROW varies in width. Additional footage may be added, depending on the location of the new pipeline(s) in relation to existing pipelines, if applicable. The ROW is maintained to facilitate access and aerial inspection of the pipeline system.

(b) Temporary Workspace

In addition to the ROW/permanent corridor, construction will require Temporary Workspaces (TWS). The TWS will be located adjacent to and contiguous with the proposed ROW/permanent corridor and will be identified on the construction alignment sheets and by distinctive staking of construction limits prior to clearing.

(c) Additional Workspace

Site-specific additional workspace ("AWS") locations (construction work areas beyond the permanent corridor and TWS previously described) will be required at select locations such as steep slopes, road, waterbody, railroad, some wetland crossings, and where it is necessary to cross under the existing pipelines or foreign utilities. AWS will typically be located in uplands adjacent to the construction ROW and set back at least 50 feet from sensitive resource boundaries where site-specific field conditions allow. However, to complete work safely, Enbridge may need to locate AWS within a wetland or within the 50-foot setback from a wetland or waterbody based on site-specific conditions. AWS adjacent to waterbodies and/or wetlands is addressed further in sections 2.4 and 3.3, respectively.

Enbridge will acquire AWS from the landowner where necessary; use of unauthorized workspace is prohibited without Enbridge's approval. In all cases, the size of AWS will be kept to the minimum necessary to safely conduct work. All approved AWS locations are depicted on the construction alignment sheets.

1.5 LINE LIST AND PERMITS

Enbridge will provide the Contractor with a Construction Line List ("CLL") that describes special requirements (e.g., timber salvage, topsoil segregation, restoration measures, fencing requirements, etc.) as agreed upon with Landowners provided they conform to the project permits. The Contractor must comply with these special requirements and/or permit conditions.

The CLL reflects requirements and comments provided by Landowners; however it is not a comprehensive list of construction requirements. The CLL must be considered in conjunction with other project documents and permits. Any third party agreements between the Contractor and the Landowner must be pre-approved by Enbridge and in writing.

Unless otherwise noted within this EMP, Enbridge will obtain the necessary permits for the installation of the pipeline. Permit requirements may be more stringent than the requirements of this EMP. <u>In all cases, the more restrictive requirements will apply.</u>



United States Department of the Interior Fish and Wildlife Service

Bloomington Field Office (ES) 620 South Walker Street

Bloomington, IN 47403-2121 Phone: (812) 334-4261 Fax: (812) 334-4273

September 6, 2012



Mr. Marty Maupin
Indiana Department of Environmental Management
Office of Water Quality
MC65-42 WQA IGCN 1255
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Project: IDEM ID: 2012-321-64-MTM-A

Applicant: Enbridge Energy, Limited Partnership

Line 6B Replacement Project

Lake, Porter, LaPorte, and St. Joseph Counties

Dear Mr. Maupin:

The U.S. Fish and Wildlife Service (FWS) has reviewed the above referenced Public Notice for Section 401 Water Quality Certification, dated August 17, 2012.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U.S. Fish and Wildlife Service's Mitigation Policy.

The applicants propose to replace an existing 30-inch diameter petroleum products pipeline with a 36-inch diameter pipeline along about 50 miles in Lake, Porter, LaPorte, and St. Joseph Counties. The Lake County pipeline segment will extend east from Mile Post 470.5 in Merrillville through Hobart, entering Porter County at MP 478. It proceeds northeast through Porter County in mostly rural areas but includes South Haven and associated residential subdivisons. The LaPorte County project consists of 2 segments. The first segment extends from MP 495.1 at the Porter/LaPorte County line northeast to a compressor station south of Michigan City at MP 499.4. The second segment begins at MP 504.5 northwest of LaPorte and continues northeast, going north of Hudson Lake, and enters St. Joseph County at MP 518.9. The pipeline will continue northeast across northwestern St. Joseph County to approximate MP 525.6, where it enters Berrien County, Michigan.

In Merrillville, the new pipeline will be constructed along the south side of the Grand Trunk Western/Canadian National Railway tracks although the existing pipeline is long the north side of the tracks. The Turkey Creek Country Club will be crossed but none of its ponds or wetlands will be impacted. Turkey Creek will be crossed at MP 471.2 using the dry open cut method, which involves damming the stream and pumping or fluming the water past the work area; a construction bridge will likely be necessary as well. At MP 471.4 an unnamed tributary of Turkey Creek will be crossed, also using the dry open cut method.

Just east of Broadway/SR 53 the pipeline will cross under the railroad tracks to the north side. At this site 2 emergent/forested wetlands will be impacted, with 0.26 acre affected; the forested wetland will be partially replanted. The pipeline will then traverse part of Hidden Lake Township Park and cross an unnamed tributary of Hidden Lake and Turkey Creek using the dry open cut method.

At MP 473.5 the pipeline will be constructed between 2 residential subdivisions while following an unnamed tributary of Turkey Creek and crossing it 3 times; 2 primarily forested wetlands will also be impacted. Two of the stream crossings are proposed to use the wet open cut method, meaning they will simply be trenched without diverting the water, and the third will use the dry open cut method. Three bridges will likely be needed. The wetland impacts equal 0.29 acres, which will be partially replanted.

Between MPs 474 and 475 the pipeline will traverse cropland along the south side of 61st Avenue before entering the floodplain of Deep River. Although the floodplain is generally heavily forested, it is more open at this site due to existing pipelines and a major high tension power line right-of-way. The pipeline construction will impact 0.88 acre of forested wetlands and 1.51 total wetland acres, plus an oxbow channel. Table B-2 indicates that the oxbow will be crossed using the dry open cut method and that the Deep River crossing will utilize horizontal directional drilling (HDD). However, these crossings are close together, so using 2 different methods would mean that at least 1 of the HDD staging areas would be in the wetlands in the floodplain. Therefore, HDD must be used for the entire crossing, including the forested and emergent wetlands. The Environmental Mitigation Plan submitted with the permit application states that utilizing HDD "normally does not result in the disturbance of the stream banks or riparian vegetation" except for limited hand clearing of woody vegetation in order to install a guide wire. Therefore, with the use of HDD the wetlands and oxbow channel at this site, along with the river, would be left undisturbed.

East of Deep River the pipeline will generally follow a high tension power line corridor through residential subdivisions. Several wetlands and small streams will be impacted in this area, including 0.92 acre of forested wetlands and 2.40 total wetland acres; 0.21 acre of forested wetlands will be permanently converted to emergent wetlands and the rest will be replanted. The small streams will be crossed with either wet or dry open cut methods.

Wetlands would be impacted on both sides of the Lake/Porter County line at County Line Road. On the Lake County side, 0.75 acre of emergent wetland would be affected, and on the Porter County side 0.34 acres of an open water/emergent/scrub-shrub/forested wetland would be impacted, with 0.08 acre being the forested component.

At Peregrine Ditch and Roper Ditch, 2 forested/emergent wetlands will be impacted, with the Peregrine Ditch impacts equaling 0.40 acre, 0.37 of which is forested, and the Roper Ditch impacts equaling 0.24 acre, 0.14 of which is forested. Most of the forested wetlands will be replanted after construction. Enbridge is proposing to cross both streams by the dry open cut method, which will require temporary dams and bridges. These 2 streams are headwaters of Duck Creek, which has numerous seeps and small fens, so there may be such special wetlands in the project impact area. Therefore we believe that these 2 streams and their wetlands should be jointly crossed using HDD. This would also avoid damage to potential Indiana bat roosting trees.

Between MPs 479.2 and 479.6 the pipeline will go around the closed Wheeler Landfill and will use the wet open cut method to cross 2 tributaries of Duck Creek that were diverted around the landfill. Emergent/forested wetlands equaling 1.35 acres will be impacted at these streams, with the forested component being 0.33 acres. Most of the forested wetlands will be replanted.

Haven Hollow Township Park will be crossed at MP 483.1; this community park is already affected by the existing Line 6B and 2 ANR natural gas pipelines and now it will be damaged again by this new Enbridge pipeline. The area between MPs 483 and 483.5 is very congested because, in addition to the existing pipelines, there is a waste water treatment plant and the busy intersection of CR 700 North and SR 149, plus several bridges over Salt Creek because of its sinuosity. Yet Enbridge intends to jam the new pipeline in along the north side of CR 700 North, between the roadway and the WWTP. ANR built its second pipeline several hundred feet to the south because of this congestion, but encountered soils problems and was therefore delayed in making the dammed and flumed crossing of Salt Creek. Large steelhead were trapped at their temporary crossing for weeks and native fish and wildlife species were adversely affected as well.

Enbridge's currently proposed crossing site of Salt Creek is entirely within wetlands, which are forested except for along the existing pipeline right-of-way; a total of 1.02 acres of wetlands will be impacted, with 0.61 of those being forested. At least 3 potential Indiana bat roost trees could be taken at this site. The same unstable soils issues as ANR encountered might occur for the Enbridge pipeline as well since the Line 6B crossing site is within the same fluvaquents soils. Therefore we believe that in order to avoid the extreme congestion issues at the currently proposed pipeline location, Enbridge should instead follow the ANR bypass of the site and utilize HDD for the river and floodplain crossings in order to avoid the known soil instability issues and the creek and wetlands.

At MP 484.3, 2 headwater streams of a tributary of Salt Creek and associated wetlands will be crossed, affecting 0.47 acres of wetlands. The 0.06 acre of forested wetlands that will be cleared will mostly be replanted. There will be 5 stream crossings at MP 485.2 - 485.3, which will utilize either the wet or dry open cut methods. However, there are numerous potential Indiana bat roost trees in this area, and it appears that maybe 4 will be affected.

Several forested wetlands will be impacted in the vicinity of MP 484.5 – 485.6, which seems to be about 0.50 acre of impact, based upon confusing information in Table B-1. The crossing of a small tributary of a wetland at MP 485.8 also includes wetland impacts.

At MP 486.5 – 486.6, 1.06 acres of emergent/scrub-shrub wetlands will be impacted as the pipeline goes between 2 subdivisions. An additional 2.52 acres of wetlands will be impacted at MP 486.9 – 487.1, with 1.40 acres of those impacts being to forested wetlands, which will mostly be replanted after construction. At least 1 potential Indiana bat roost tree will be taken. A series of aerial photographs of this area indicates either open water or an aquatic bed in part of the wetlands on the west side of Meridian Road. Therefore, the water regime of these wetlands needs to be defined in order to determine if the push-pull method should be utilized, with no sidecasting of soils into the wetlands.

Three tributaries of Damon Run will be crossed at MP 487.7 – 487.8 and a primarily forested wetland will also be affected in association with 1 of the streams. Several additional headwater streams will be affected near the pipeline crossing under SR 49, at Old SR 49/Calumet Avenue, and at the CSX Railroad. Some small emergent and forested wetlands will be impacted in association with these streams.

Between CR 200 East and Coffee Creek, 0.95 acre of forested and emergent wetlands will be affected by pipeline construction, with 0.89 acre being the forested component. It is indicated that Coffee Creek will be crossed by the dry open cut method, which will entail damming, fluming, and a work bridge. Because of the high quality of the wetlands in this area, and because Coffee Creek is a salmonid stream, we believe that both the stream and wetland should be crossed utilizing HDD in order to avoid clearing of the forested wetland, especially since there is a high tension power line right-of-way just to the north which also has eliminated forested wetlands and riparian habitat along Coffee Creek.

At MP 489.7, 0.62 acre of emergent/scrub-shrub wetland will be crossed just west of CR 250 East. A series of aerial photographs of this area indicates either open water or an aquatic bed in part of the wetlands. Therefore, the water regime of these wetlands needs to be defined in order to determine if the push-pull method should be utilized, with no sidecasting of soils into the wetlands.

A large forested/emergent wetland will be crossed at the Windermere Subdivision at MP 490.8; 0.62 acre of the 1.02 acres of impacts will be to the forested component. However, most of the forested wetland will be replanted. At least 1 potential Indiana bat roost tree will be removed. Sand Creek would be crossed just east of CR 350 East at MP 491 using the dry trench method.

Where the pipeline crosses CR 400 East there are wetlands on both sides of the roadway and both will be impacted by the new Line 6B. The primarily forested wetland on the west side will have 0.27 acre of total impacts and 0.24 acre of forested wetlands impacts, although most will be replanted. The emergent wetland on the east side of the road will have 0.35 acre of impacts.

At MP 492.2, Mar-Mac Creek, which flows northwest to Mar-Mac Lake and then Rice Lake, will be crossed using the dry trench method. There are wetlands on both sides of the creek, the majority of which are forested (0.49 acre), although there is also a scrub-shrub component and the existing right-of-way is emergent; the total impact will be to 0.84 acre. A series of aerial photographs indicated that there is some open water wetland at this site as well. Upland woodland will also be cleared at this site, including 2 potential Indiana bat roost trees. Because of the forested upland and wetland impacts and the fact that this stream is tributary to lakes, we believe that HDD should be used here, from the farmland on the west side to farmland on the east side of Greening Road, which parallels the creek.

At MP 492.9 – 493, an unstated acreage of a large upland woodland will be cleared for the temporary workspace; 0.32 acre of forested wetland and a small stream will also be affected here. Although it is indicated in Table B-1 that most of the forested wetland will be replanted, there is no indication whether the upland forest will also be replanted. Information on Enbridge's Website states that the company has a Neutral Footprint program which includes "planting a tree for every tree we remove"; therefore we expect them to replant this upland forest.

A stream and a scrub-shrub wetland will both be crossed at MP 493.6, affecting 0.52 acre of wetland, which likely will be converted to an emergent wetland. Skunk cabbage is present and we know this site to be a seep wetland, based upon site reviews15 years ago related to the proposed Vector natural gas pipeline, which also utilizes this right-or-way; therefore this wetland needs to be crossed using the push-pull method, with the soils removed to upland and not sidecast into the wetland.

Forested and scrub-shrub wetlands totaling 0.98 acre will be affected in the vicinity of MP 494 – 494.2, which is just before and just after the crossing of the Norfolk Southern Railroad double tracks. The wetland southwest of the tracks includes skunk cabbage and blueflag and may also be a seep or fen wetland. Again, the push-pull crossing method should be used, with the soils removed to upland and not sidecast into the wetland.

A large forested wetland will be impacted at MP 494.5, with 1.57 acres of total impacts, 1.41 of them being forested. This wetland also has skunk cabbage. Although all but 0.19 of the 1.41 acres of forested wetlands that are cleared will be replanted, the temporary workspace needs to be reduced to the absolute minimum necessary to place the pipe as close to the existing pipeline as possible; the soil needs to be removed to adjacent uplands, with no sidecasting into the wetland. At least 1 potential Indiana bat roost tree was found in this forested wetland but we are unable to determine from the maps provided whether or not it might be affected. However, if the temporary workspace is reduced as requested, it likely will not be impacted.

At MP 494.7, Massauga Creek will be crossed using the dry cut method with a dam and flume. Although this stream is bordered by agricultural land at the crossing site and has a narrow band of riparian trees except at the existing pipeline and high tension power line crossing, it rises at springs in the moraine to the south and flows north mostly through woodlands from its headwaters to Burdick Road. It is a tributary of the East Branch Little Calumet River, flows through the new Reynolds Creek State Game Bird Area, and may support salmonids. Therefore, the new pipeline should be placed as close as possible to the existing pipes in order to reduce riparian tree clearing, and trees need to be replanted on the stream banks after construction.

Reynolds Creek will be crossed at MP 495 using the dry trench method, which utilizes a dam, flume, and temporary work bridge. Like Massauga Creek, Reynolds rises from springs in the moraine to the south and from the Purdue North Central campus and flows through mostly forested lands to County Line Road. North from there to the East Branch Little Calumet River it flows through agricultural lands, the new Reynolds Creek State Game Bird Area, and property owned by the Porter County Chapter of the Izaak Walton League. Reynolds Creek is a known salmonid stream and also supports brown trout and/or brook trout. Although the proposed crossing site has a narrow band of trees on each bank except where the existing pipelines and high tension power lines cross, which is herbaceous vegetation and a few shrubs, the stream should be crossed using HDD because of the importance of its trout and salmon fishery.

The pipeline crosses into LaPorte County just east of the Reynolds Creek crossing and encounters both forested and emergent wetlands, where 0.44 acre will be impacted, of which half is forested. The pipeline is proposed to move to the north side of the existing Line 6B at this site, which will reduce the forested wetland impacts. Replanting of most of the forested wetlands is proposed. Forested uplands are proposed to be cleared at MP 495.5 and we expect them to be replanted under the Neutral Footprint program.

There are numerous wetlands in the vicinity of MP 496, including forested, scrub-shrub, and emergent types; a total of 0.70 acre of impacts will occur, with most of that to emergent wetlands. Based upon site reviews conducted 15 years ago prior to construction of the Vector natural gas pipeline along this route, there are wetland seeps in this area. These unique wetland types have already been affected by 2 previous pipelines and will be adversely affected again by this new project.

A large wetland at Otis, MP 496.4, is listed as being an emergent wetland, but a review of a series of aerial photographs shows that it has often been an aquatic bed, especially north of the existing 2 pipelines where the new Line 6B is proposed. It is also at least semipermanently wet rather than seasonally wet. Therefore, we believe the push-pull crossing method needs to be utilized, with storage of the soil in adjacent uplands rather than being sidecast into the wetland.

Two small tributaries of the East Branch Little Calumet River will be crossed at MPs 496.6 and 496.7. A small amount of wetlands will be impacted in this area, including 1 with skunk cabbage, indicating a seep or fen. It is proposed to replant the small forested wetlands with boxelder, which is not acceptable; pin oak and swamp white oak should be planted here. There

will be considerable impacts to upland forest in this area, but no information has been provided about the species composition of these uplands, how many acres would be cleared, or whether or not they would be replanted; one potential Indiana bat roost tree will be taken, however. Under Enbridge's Neutral Footprint program, we expect this upland forest to be replanted.

The East Branch Little Calumet River, a salmonid stream, and its associated wetlands will be crossed at MP 497; 0.59 acre of the 0.69 acre wetland impact will be to forested wetlands. The river meanders a great deal in this area, and the maps seem to indicate that both banks would be cleared within the temporary workspace. However, the north bank of the river could not be used as workspace without extensive bridging, so clearing and utilization of temporary workspace must occur only on the south side of the river and soils must be stored within adjacent uplands and not sidecast into the wetland or near the stream bank. Considerable upland forest clearing will occur west of the river as well, potentially affecting at least 2 likely Indiana bat roost trees. The use of HDD should be considered here if it will reduce both the upland and wetland forest impacts. It is not indicated if upland forests would be replanted but most of the forested wetlands will be replanted; under Enbridge's Neutral Footprint program, we expect this upland forest to be replanted.

There are wetlands on both sides of Holmsville Road in the vicinity of MP 497.5. The large, deep water wetland at Boy Scout Camp To-Pe-Ne-Bee, which is maintained at a deep depth by beaver dams, is the most significant and contains a diverse mix of aquatic bed, emergent, scrubshrub, and forested types. The existing Line 6B skirts the north side of the wetland, affecting both forested wetlands and uplands, and the new pipeline will affect 1.31 acres of wetlands, 0.71 of which is forested. Upland forest will also be affected in this area, although no information is provided on that impact; 2 potential Indiana bat roost trees will be taken.

The Vector natural gas pipeline diverted around this area because of the sensitivity of the wetlands and their adjacent uplands. Enbridge has surveyed that route as Alternative S-1A-13 but shows that most of the wetlands that would be impacted at MP 497.4 with this alternative would be forested. That is not the case, however, because the Vector pipeline has already used that route and therefore cleared a portion of the forested wetlands and converted them to emergent. Although some additional forested wetlands would be cleared here for an additional pipeline and additional upland woodlands would also be cleared east of Holmsville Road, the overall impacts to wetlands would be less than following the existing Line 6B, and the quality of the wetlands that would be impacted is less than that of the Camp To-Pe-Ne-Bee wetland. Therefore we request that Enbridge utilize Alternative S-1A-13 in order to avoid the Camp To-Pe-Ne-Bee wetland and adjacent uplands.

The headwaters of West Branch Trail Creek will be crossed at MP 498.9, where considerable clearing of upland forest will occur due to temporary workspace. However, the proposed location of the new Line 6B is not shown on the Merject maps provided with the permit application (Maps 40 and 41 of 50), although workspaces are shown, including major clearing at the creek itself. The new pipeline location is shown north of the existing line on the Stantec

maps provided with the endangered species report, but the workspaces are not shown on that map (page 34 of 67). It appears that excessive clearing of this large upland forest would occur, which is unacceptable. All of the upland forest impacts in the temporary workspace must be replanted.

The first portion of the LaPorte County section of Phase 2 will end at a compressor station at MP 499.4. The next 5 miles are addressed under Phase 1 of this project (IDEM ID # 2012-322-45-MTM-A) and will be addressed in a separate letter from the FWS. The second portion of Phase 2 begins at MP 504.5 northwest of the City of LaPorte. The new pipeline will originally be on the south side of the existing line, but it would switch to the north side just east of US 35.

Two large wetland complexes of forested, scrub-shrub, and emergent types will be impacted in the vicinity of MP 506.5, with a total impact to 1.07 acres. Forested wetland impacts will be 0.26 acre of this impact and will be replanted. In order to reduce the width of the temporary workspace, the soils need to be moved to adjacent uplands and not sidecast into the wetlands. A small tributary stream will be impacted at MP 506.9, with upland woodland also being impacted. Upland woodlots will continue to be impacted as the pipeline continues northeast toward US 20 and I-80/90 and will need to be replanted. US 20 will be crossed at MP 510.2

At MP 510.7 upland woodlands and various wetlands could be impacted but it is not clear which of the 3 alternatives for the new pipeline will actually be utilized since there are residential constraints here as well. Headwaters of the Little Kankakee River, which is basically a drainage swale through cropland, will be crossed at MP 510.8.

Following the existing Line 6B, there will be considerable upland woodland impacts and some small wetland impacts between MPs 512.5 and 512.9, but a large deep water wetland, apparently a small pothole lake, will not be impacted. Wetland and upland woodland impacts will also occur between MPs 513.8 and 514 and both will need to be replanted.

Between MPs 515.8 and 516.3, Line 6B twice crosses wetlands on the west side of Hudson Lake. These wetlands are primarily forested, although there are also scrub-shrub and emergent components. The crossing at MP 515.8 would actually be primarily in upland since there is a small area of forested upland between 2 Houghton muck wetland basins. The crossing at MP 516.3 will affect 0.57 acre of forested wetlands primarily through clearing for temporary workspaces; 0.04 acre of emergent wetland, which is the current cleared right-of-way, will also be affected. All but 0.06 acre of the forested wetland will be replanted. These wetlands are not contiguous with Hudson Lake, being separated by upland and North Emery Road, but they are connected to the lake through small streams. It is our understanding that they are considered "High Consequence Areas" by Enbridge even though they are not contiguous with Hudson Lake. The temporary workspaces at these 2 wetlands need to be reduced to the minimum possible, the push-pull construction method needs to be used, and the soils need to be transported to adjacent upland fields rather than temporarily sidecast into the wetlands.

Another primarily forested wetland will be crossed at MP 516.8; 0.30 acre of forested wetland will be affected, with only the existing right-of-way being emergent wetland. Again, the temporary workspace needs to be reduced, the push-pull construction method used, and the soils transported to adjacent upland fields.

At MPs 517.1 and 517.3, 2 northern portions of a large irregularly shaped wetland will be crossed, affecting 0.53 acre, which is a mix of scrub-shrub and forested wetlands. Although the forested wetland will be replanted, apparently the scrub-shrub wetland will not; however, the scrub-shrub wetland needs to be replanted with buttonbush and other shrub species. As with the other wetlands near Hudson Lake, the temporary workspaces need to be reduced to the minimum, the push-pull construction method used, and the soils transported to adjacent uplands rather than being sidecast into the wetlands.

A 33-acre wetland supporting a diversity of habitat types will be bisected by the new Line 6B at MP 517.5. The crossing will be 1356.3 feet long, which will be almost double the second longest impact (W-486-b at MP 486.9 in Porter County). This large wetland contains water that is several feet deep and has forested (living), forested (dead), scrub-shrub, emergent, aquatic bed, and open water components, most of which are present within the proposed pipeline corridor.

The wetland is bordered by upland woodland and grassland, with no active row crops on the parcel, although there are croplands to the east on adjacent property. A small intermittent stream flows into the east side of the wetland in the vicinity of the proposed pipeline crossing. It is a defined channel/ravine beginning at the top of the hill and flowing first through grassland and then about an acre of upland woodland, before exiting the woodland and spreading the water overland without a defined channel as it reaches the wetland. The drainage course has a drop of about 25 feet over the 1000 feet between the top of the hill and the edge of the wetland. The proposed new pipeline centerline is along the centerline of this ravine for about 200 feet and adjacent to it for the remainder of that 1000 feet. Enbridge intends to clearcut the woodland through which this ravine flows as part of the permanent right-of-way and temporary workspace. Although it is marked as waterbody S-517-b on the Merjent map, it is not included in Table B-2. Given the steepness of this ravine, there will be significant erosion issues if the pipeline is constructed as shown on the maps. Therefore, if the pipeline follows this route and not an alternate alignment, it will need to deviate around this ravine and woodland.

Because of its water depth, this wetland cannot be crossed using the Typical Wetland Crossing Method shown as Figure 24 in the Public Notice. Either it will have to be directionally drilled or utilize the push-pull technique, recognizing that the pipeline must be realigned around the ravine on the east side of the wetland.

During the fall of 2011, Enbridge had to replace several sections of existing Line 6B within this wetland because of anomalies. The landowner required them to use mats even on the upland to the east of the wetland due to the highly erodible soils on that slope, as exemplified by the presence of the ravine, which is currently stabilized because of the vegetation that is in place. He also required Enbridge to build a trestle across the wetland to reach the dig sites and to store the

excavated soil on an upland field to the east (Enclosure No. 1). These same techniques will be required to lay a new pipe through this wetland if this route is utilized, with the clearing and total impact area to be confined within the proposed additional 25 feet of permanent right-of-way that Enbridge is requiring for this pipeline replacement project. The entire forested portion of the wetland (living and dead) contains suitable Indiana bat roost trees, there are several large hickories within the approximate 1 acre upland woodland along the ravine, and there are numerous other suitable roost trees on the property.

Although this wetland is connected to Hudson Lake by the Benjamin Schultz Legal County Drain, which makes is just as connected to the lake as the wetlands on the west side of the lake between MPs 515.8 and 516.3, it is not considered a "High Consequence Area" by Enbridge, for unknown reasons.

We have been advised that a resent botanical survey of the wetland indicates that it has natural area qualities based upon a Floristic Quality Assessment utilizing the methods described in *Plants of the Chicago Region* (Floyd Swink and Gerould Wilhelm. 1994. 4th edition. Indianapolis: Indiana Academy of Science). Under this system, if the coefficient of conservatism (C value) for a site is 3.5 or higher or the floristic quality index (I value) is 35 or more, the site has sufficient floristic quality to be at least of marginal natural area quality. If the C value is 4.5 or higher or the I value is 45 or more, the area has natural area quality. Based upon a 1 day summer botanical survey, the wetland alone has a native mean C of 4.2 and with non-native species included it has a C of 3.5; the native FQI (I) is 43.2 and with non-native species included it is 39.8. The ravine woodland that would be destroyed by the pipeline has a native mean C of 4.3 and with adventives a C of 3.7; the native FQI is 33.1 and with adventives is 30.6. The property as a whole has a native C of 4.4 and with adventives a C of 3.8; the native FQI is 47.4 and with adventives is 43.7. With spring species included the numbers would likely be even higher.

The pipeline crosses into St. Joseph County at MP 518.9, where it is just south of a long, narrow wetland/lake complex that will not be impacted, although a small stream associated with the wetland/lake will be crossed. At MP 519.2, 0.15 acre of a forested wetland will be impacted by the temporary workspace but will be replanted after construction.

Between MPs 519.3 and 519.5, 2 high quality forested/scrub-shrub/aquatic bed wetlands will be crossed, with 1.60 acres of the scrub-shrub portion to be impacted, primarily by the temporary workspaces. This wetland complex must also be crossed utilizing the push-pull method, with reduced workspaces, transport of the excavated soils to adjacent upland fields, and no sidecasting of soils. Although replanting is apparently not proposed, these wetlands should be replanted with buttonbush and other suitable native shrub species. Several potential Indiana bat roost trees were observed in these wetlands and associated uplands.

At MP 520 there are forested wetlands on both sides of Timothy Road, with only minor impacts to the 1 on the west side but 1.14 acres of impacts to the high quality wetland on the east side. According to our review of a series of aerial photographs and the site photographs provided with

the permit application, this wetland has a great deal of standing water a foot or more deep, native sedges, and skunk cabbage in the cleared current right-of-way, and a variety of tree and shrub species in the proposed right-of-way. The temporary workspace must be reduced to the absolute minimum necessary to place the pipeline, with the push-pull construction method utilized, soil transport to adjacent cropland, and no sidecasting of soils.

A large forested upland and wetland will be crossed between MPs 520.5 and 520.8, with the western half being mature upland and the eastern half being forested and scrub-shrub wetland; 1.34 acres of wetland will be impacted. Seven potential Indiana bat roost trees were recorded in both the upland and wetland portions of this site, and it appears that most if not all will be taken during project construction. The proposed temporary workspaces must be reduced in width, the push-pull construction method must be utilized, soils must be transported to adjacent upland cropland, and no soils can be sidecast into either the upland forest or the wetlands. Most of the forested wetlands will be replanted, but the forested uplands must be replanted as well.

At MP 521.1, 0.38 acre of forested wetland will be impacted, and at MP 521.2, 0.41 acre of emergent wetland will be affected. Most of the forested wetland will be replanted.

Geyer Ditch, which is the headwaters of the Kankakee River, will be crossed at MP 523.1 using the wet open cut method. Trees cleared from the banks in the temporary workspace must be replanted.

The proposed project will temporarily impact 6.45 acres of wetlands in Lake County, 19.80 acres in Porter County, 5.24 acres in Segment 1A and 7.16 acres in Segment 2A in LaPorte County, and 5.35 acres in St. Joseph County, for a total impact of 44.00 acres. The impacts will be due to excavation and sidecasting of the soils and due to any necessary use of mats for equipment access. There will be temporary impacts to 2.24 acres of forested wetlands in Lake County, 8.47 acres in Porter County, 1.94 acres in Segment 1A and 3.14 acres in Segment 2A in LaPorte County, and 3.10 acres in St. Joseph County, for a total of 18.89 acres cleared. Permanent impacts to forested wetlands in Lake County will be 0.37 acres, in Porter County will be 1.03 acres, in LaPorte County will be 0.21 acre in Segment 1A and 0.31 in Segment 2A, and in St. Joseph County will be 0.36 acre, for total permanent impacts to forested wetlands of 2.28 acres.

As mitigation for these impacts, Enbridge Energy proposes to restore/construct wetlands and a prairie buffer on 70 acres owned by the Indiana Department of Natural Resources along Kemper and Carver Ditches in Porter County. The Public Notice states that the proposed mitigation area is within the Reynolds Creek watershed, but Reynolds Creek, a north-flowing stream, joins the East Branch Little Calumet River 2.5 miles south of the proposed mitigation area, so its watershed is well south of the proposed mitigation site.

The proposed mitigation area is shown in the Porter County soil survey to be entirely hydric Milford silty clay loam, as are adjacent parcels to the west and south; I-94 forms the north boundary of the site and Kemper Ditch and County Line Road are to the east. A 20-acre restored wetland owned by the Town of Chesterton as mitigation for wetland impacts in the Peterson

Ditch watershed is located to the southwest. The site has regularly been used for row crops by the Indiana Department of Corrections but was deeded to the Department of Natural Resources in 2011 for eventual restoration to native habitats. Therefore, IDNR is making it available to Enbridge Energy to do that restoration. A dry to mesic prairie buffer will encircle the site and comprise 34.7 acres; emergent wetlands will be created in 4 excavated basins and a drainage swale totaling 17.7 acres; 1.5 acres of scrub-shrub wetlands will border the emergent wetlands and 12.3 acres of forested wetlands will generally encircle the emergent and scrub-shrub wetlands.

Although it is acceptable to use this site for mitigation for the Phase 2 impacts in Lake and Porter Counties and for Segment 1A impacts in LaPorte County, it is not acceptable to mitigate for impacts for Segment 2A in LaPorte and St. Joseph Counties, which are in the Kankakee River Watershed and affect much higher quality wetlands. Restoration of the 70 acres from cropland to native habitats will help improve water quality in the Kemper/Carver Ditch system, which currently discharges pollutants into the East Branch Little Calumet River just upstream from the Heron Rookery Unit of the Indiana Dunes National Lakeshore. However, it will not compensate for the impacts to the wetlands north of the City of LaPorte, in the vicinity of Hudson Lake, and in St. Joseph County. In particular, it will not compensate for damages to a natural area quality wetland and ravine woodland at MP 517.5.

By copy of this letter, we are requesting that the U.S. Army Corps of Engineers address this proposed project under an individual Public Notice and permit rather than processing it under Nationwide Permit 12, Utility Line Discharges. We have been informed in the past by the Corps that they would address a project under an individual permit, even if it qualified for a Nationwide or Indiana Regional General Permit, if it was of sufficient scope to be controversial and/or affect a large number of landowners. This proposed project is both controversial and affects hundreds of landowners in 4 counties. In addition, the Detroit Corps of Engineers addressed both the ANR natural gas pipeline in Lake and Porter Counties (File No. 98-145-047-0) and the Vector natural gas pipeline in Lake, Porter, LaPorte, and St. Joseph Counties (File No. 97-200-016-0) under individual permits even though both projects had already been reviewed under full Environmental Impact Statements (EIS) by the Federal Energy Regulatory commission (FERC).

However, this proposed pipeline project, which is equal in scope to the Vector project and follows much of the same route through the 4 counties, has not been addressed under an EIS or any other comprehensive review. Originally, the Vector pipeline proposed to follow the entire Lakehead/Enbridge Line 6B route, including going around the north side of Hudson Lake, but the FWS, by letter of September 27, 1997, recommended that it follow the Wolverine right-of-way in northeastern LaPorte County and northwestern St. Joseph County due to greatly reduced wetland impacts from that of the Lakehead/Enbridge route. Vector, with encouragement from FERC, subsequently changed their route to the Wolverine alignment in order to reduce environmental impacts and avoid the high quality wetlands that are along the Lakehead/Enbridge right-of-way. The Section 404/401 permit process only reviews impacts to wetlands and streams and does not address impacts to upland forests or other significant habitats. Therefore, the total impacts of this very large project are not being reviewed by any agency at either the State or Federal level.

The Section 404(b) (1) Guidelines state that a proposed project must first avoid impacts to wetlands/waters, followed by minimization of impacts. Only after impacts have been avoided and minimized to the greatest extent practicable can mitigation for the remaining impacts be considered. In the case of this proposed pipeline, there is a viable alternative to the extensive wetland impacts in the Hudson Lake and northern St. Joseph County area, which is to follow the Wolverine/Vector pipelines right-of-way south of Hudson Lake, where there are few wetland impacts. In addition, the Wolverine/Vector route has been vetted by a full EIS under FERC. By proposing to follow the existing Enbridge Line 6B through the significant wetlands associated with Hudson Lake and the mostly forested wetland in northwestern St. Joseph County, the applicant has not attempted to avoid or minimize wetland impacts. The Wolverine/Vector route is both possible and practicable and has already been surveyed by Enbridge as Alternative S-2A-04.

It is our belief that avoidance of the wetland impacts in the Hudson Lake area is the only viable alternative. However, if Enbridge intends to follow the existing Line 6B route regardless of impacts and alternatives, we request that all the individual changes in construction methods, including using HDD to cross the entire Deep River floodplain and not just the river; the re-route to the ANR bypass right-of-way at South Haven/Salt Creek and the use of HDD to avoid the soils and fish blockage issues; the use of HDD to cross both the wetlands and stream at Coffee Creek; the use of the push-pull method and narrower temporary workspaces at significant wetlands in Porter, LaPorte, and St. Joseph Counties, with transportation of soils to upland croplands and no sidecasting into the wetlands; the re-route to the Vector right-of-way at the Camp To-Pe-Ne-Bee wetland; and the replanting of cleared upland forests, all be made conditions of the permit. In addition, remotely-operated isolation valves are needed at each stream crossing and significant wetlands and dual leak detection systems need to be installed. If the permit cannot be so conditioned, we request that it be denied due to significant adverse impacts to aquatic resources of national importance, specifically the wetland at Camp To-Pe-Ne-Bee, the wetlands associated with Hudson Lake, and the wetlands in northwestern St. Joseph County.

ENDANGERED SPECIES

The proposed project is within the range of the Federally endangered Indiana bat (Myotis sodalis), Karner blue butterfly (Lycaeides melissa samuelis), Mitchell's satyr butterfly (Neonympha mitchelli), and piping plover (Charadrius melodus), the threatened Pitcher's thistle (Cirsium pitcher), Mead's milkweed (Asclepias meadii), and northern copperbelly watersnake (Nerodia erythrogaster neglecta), and the candidate eastern massasauga rattlesnake (Sistrurus catenatus catenatus). By letter of February 27, 2012, we provided concurrence that the proposed project is not likely to adversely affect all of these species except the Indiana bat.

Subsequently, Enbridge hired consultants to survey the proposed project corridor to determine habitat suitability for the Indiana bat. The locations of potential Indiana bat roost trees were recorded; however, the suitability of the proposed project area in general for this species and the specific impacts to foraging habitat were not evaluated. The *Rare Species Habitat Assessment Report* provided by Stantec indicates that there are 449.3 acres of upland woodland "within the

proposed route portion of the project corridor", but does not explain what that means — the entire 250-foot study corridor or some narrower corridor? There also are 83.76 acres of forested wetlands, but again it is unclear what width is being discussed. The *Report* does not provide a description of the upland and wetland woodlands, such as their structure and species composition and whether they provide sufficiently open foraging habitat, or any recommendations concerning Indiana bats or their habitat, such as specific locations to avoid by reducing the width of the temporary workspace or altering the alignment slightly or significantly. The representative photographs provided both with the *Report* and with the permit application indicate suitable species composition and habitat structure for the Indiana bat. Enbridge's proposal to simply fence off potential roost trees while clearing all the woodlands around them is not protective of the habitat or the species.

No bat mist net surveys have been conducted along the Segment 2A portion of the proposed project in northern LaPorte and St. Joseph Counties, so we do not have any prior information of the likelihood of their presence. However, there is abundant potential habitat, and the U.S. Fish and Wildlife Service in Indiana considers this species to be present in suitable habitats unless proven otherwise. Based upon the limited information provided in the *Report* and the lack of specific actions proposed to reduce impacts to the potential habitat, we cannot at this time concur that tree cutting date restrictions alone are sufficiently protective of the species.

These endangered species comments constitute informal consultation only. They do not fulfill the requirements of Section 7 of the Endangered Species Act of 1973, as amended.

Thank you for the opportunity to review this Public Notice. Please keep us informed of actions taken on this matter. For further discussion, please contact Elizabeth McCloskey at (219) 983-9753 or elizabeth mccloskey@fws.gov.

Sincerely,

Scott E. Pruitt
Supervisor

Michael S. Litw.

cc: U.S. EPA Region V, Watersheds & NPS Programs Branch, WW-16J, Chicago, IL Andrew Blackburn, Regulatory Branch, Chicago District, USCOE, Chicago, IL Christie Stanifer, IDNR Division of Water, Indianapolis, IN Aaron Damrill, Michiana Branch Office, Detroit District, USCOE, South Bend, IN Supervisor, USFWS, East Lansing Field Office, East Lansing, MI Kim Ferraro, Hoosier Environmental Council, Valparaiso, IN Beth Wallace, National Wildlife Federation, Ann Arbor, MI Nicole Barker, Save the Dunes, Michigan City, IN