WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

SPP Project/Site:	С	Carlton ity/County:		2015-06-29 Sampling Date:			
Applicant/Owner: Enbridge			Minnesota State:	Sampling Point: CR162h2W			
ACM/ Investigator(s):		Secti	on. Township. Range:				
tandform (hillslope, terrace, etc.):	talf		Local Relief (concave, o	linear l convex, none):	Minnesota State		
Subregion (LRR or MLRA):		Latitude:	Lo	ongitude: Datum	:		
Soil Map Unit Name:				NWI Classification:			
Are climatic/hydrologic conditions Are Vegetation No	or Hydrology	o significantly disturb	ed? Are "Normal Circ	arks): Yes umstances" present?	es		
SUMMARY OF FINDINGS - Attac	ch site map show	wing sampling point loc	ations, transects, imp	ortant features, etc.			
Hydrophytic Vegetation Present?		Yes I	s the Sampled Area				
		Yes	•	Yes			
Hydric Soil Present?		—— Yes	within a Wetland?				
Wetland Hydrology Present?		——————————————————————————————————————	f yes, optional Wetlan	nd Site ID:			
Remarks: (Explain alternative proc	edures here or i	n a separate report.)					
HYDROLOGY Wetland Hydrology Indicators:				Secondary Indicators (minim	num of two required)		
Primary Indicators (minimum of on	ne is required; ch	neck all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	_	Water-Stained Leaves	(B9)	Drainage Patterns (B10)			
		Aquatic Fauna (B13)		Moss Trim Lines (B16)	Moss Trim Lines (B16)		
yes Saturation (A3)	-			Dry-Season Water Table	Dry-Season Water Table (C2)		
Water Marks (B1)			r (C1)	Crayfish Burrows (C8)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Sediment Deposits (B2) Oxidized Rhiz		s on Living Roots (C3)	Saturation Visible on Ae	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Drift Deposits (B3) Presence of Re		Iron (C4)	Stunted/Stressed Plants	Stunted/Stressed Plants (D1)		
Algal Mat or Crust (B4)	at or Crust (B4) Recent Iron Rec		in Tilled Soils (C6)	yes Geomorphic Position (D	yes Geomorphic Position (D2)		
Iron Deposits (B5)	Iron Deposits (B5) Thin Muck Surfa		7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Image	ery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief	Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surfa	ace (B8)			yes FAC-Neutral Test (D5)			
Field Observations:							
Surface Water Present?	<u>No</u>	Depth (inches)					
Water Table Present?	No	Depth (inches)					
Saturation Present?	<u>Yes</u>	Depth (inches)	<u>0</u>	Wetland Hydrology Present?	<u>Yes</u>		
(includes capillary fringe)					1		
Describe Recorded Data (stream ga	auge, monitorin	g weii, aeriai photos, pre	evious inspections), if a	avaliable:			
Remarks:							
The wetland is in a low spot and ha	as hydrophytic v	egetation. The soil is sa	turated at the surface				

	Absolute	Dominant	Indicator	Dominance Test worksheet:			
e Stratum (Plot Size: 30 ft	% Cover	Species?	Status	Number of Dominant Species			
		·		That Are OBL, FACW, or FAC: 4 (A)			
			_	Total Number of Dominant			
			_	4			
	·		_	Species Across All Strata: (B)			
			_	Percent of Dominant Species			
				100 That Are OBL, FACW, or FAC:(A/B)			
		_	_	Prevalence Index worksheet:			
			_	Total % Cover of: Multiply by:			
	0	= Total Cover		OBL species 75.00 x 1 75			
oling/Shrub Stratum (Plot Size: 15 ft)				FACW species 45.00 x 2 90			
Cornus alba	10.00	Yes	FACW	FACU species 12.00 x 3 0			
				UPL species 0 x 4 0			
				Column Totals 132 (A) 201 (B)			
			_	Prevalence Index = B/A = 1.52272			
	·			Hydrophytic Vegetation Indicators:			
		_		1 - Rapid Test for Hydrophytic Vegetation			
	·		_	yes 2 - Dominance Test is > 50%			
	10	= Total Cover	_	$\frac{yes}{yes} = 3 - Prevalence Index is \le 3.0^{1}$			
<u>b Stratum</u> (Plot Size: 5 ft)	<u></u>	= 10tal cover		4 - Morphological Adaptations (Provide			
Poa palustris	25.00	Yes	FACW	supporting data in Remarks or on a separate sheet)			
Scirpus microcarpus	25.00	Yes	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)			
Scirpus atrovirens	25.00	Yes	OBL	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Carex stipata	15.00	No	OBL				
Carex tenera	5.00	No	FAC	Definitions of Vegetation Strata:			
Glyceria grandis	5.00	No	OBL				
Ranunculus acris	5.00	No No	FAC	Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.			
Lysimachia ciliata	5.00	No	FACW				
Juncus effusus	5.00	No	OBL				
Impatiens capensis			_				
Rumex crispus	5.00	_ No	FACW				
Valeriana officinalis	2.00	No No	FAC	Herb - All herbaeceous (non-woody) plants, regardless of size, an woody plants less than 3.28 ft tall.			
valentaria officinaris	2.00	_ No	_	-			
20.6	124	= Total Cover		Woody vines - All woody vines greater than 3.28 ft in height.			
oody Vine Stratum (Plot Size: 30 ft)							
				-			
	_			Hydrophytic Vegetation			
			_	Present?			
				_			
	0	=Total Cover					
marks: (include photo numbers here or on a separate she	et.)						
egetation is dominated by bulrushes, fowl bluegrass, and se	dges.						

SOIL								Sampling Point: CR162h2W
Profile Description: (De	escribe to the depth	needed to	document the	indicato	r or con	firm the	absence of inc	dicators.)
Depth	h Matrix Redox Features							
(inches) Col	lor (moist) %	6 Co	lor (moist)	% 	Type ¹	Loc ²	Texture	Remarks
				_				
¹ Type: C=Concentration, D=	=Depletion, RM=Reduce	ed Matrix, MS	=Masked Sand Gr	ains.				² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:				0 6 (0)			Indicators for	Problematic Hydric Soil ³ :
Histosol (A1)			Polyvalue Below 149B)	Surface (SE	s) (LRR R,	MLRA	2 cm Mu	ck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)			Thin Dark Surfac	e (S9) (LRR	R, MLRA	149B)	Coast Pra	airie Redox (A16)(LRR K, L, R)
Black Histic (A3)			Loamy Mucky M	ineral (F1)	(LRR K, L)		5 cm Mu	cky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A	4)		Loamy Gleyed N	latrix (F2)			Dark Surf	face (S7) (LRR K, M)
Stratified Layers (A5)		Depleted Matrix	(F3)			Polyvalue	e Below Surface (S8) (LRR K, L)
Depleted Below Dar	k Surface (A11)		Redox Dark Surf	ace (F6)			Thin Dark	Surface (S9) (LRR K, L)
Thick Dark Surface (A	A12)		Depleted Dark S	urface (F7)			Iron-Mag	ganese Masses (F12) (LRR K, L, R)
Sandy Mucky Minera	al (S1)		Redox Depression	ons (F8)			Piedmont	Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix	x (S4)						Mesic Spo	odic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)							Red Pare	nt Material (F21)
Stripped Matrix (S6)							Very Sha	llow Dark Surface (TF12)
Dark Surface (S7) (LF	RR R, MLRA 149B)						Other (ex	xplain in remarks)
Restrictive Layer (if observe	ed):							
Туре:						H	ydric Soil Present?	Yes
Depth (inches):					$-\!\!\!\!+$,	
Remarks:								

Soils were not sampled due to the proximity of existing pipelines. Soils are assumed to be hydric based on the landscape position and dominance of hydrophytic vegetation.