

Technical Memorandum

То:	Karl Beaster, Enbridge Energy Limited Partnership
From:	Ryan Erickson, Alex Puetz
Subject:	Tank 8 Valve Release, Superior Terminal, Superior, Wisconsin
Date:	February 1, 2013
Project:	49161092
WDNR Spill Number:	20110405NO16-1
NRC Number:	972372

This memorandum describes the corrective action conducted in response to a crude oil release detected northeast of the Tank 8 berm at the Enbridge Energy Superior Terminal in Superior, Wisconsin on March 28, 2011. According to Enbridge, approximately 12 gallons of oil are estimated to have leaked from the valve.

Site Location and Information

The terminal operated by Enbridge Energy Limited Partnership is located at 2800 East 21st Street, Superior, Douglas County, Wisconsin (Figure 1). The surrounding land use is industrial, including oil refining and natural gas storage facilities at adjacent properties.

Tank 8 is located on the east side of the terminal (Figure 2). The nearest surface waters are the terminal fire protection ponds located 100 feet to the northeast, and the Nemadji River located approximately 0.25 miles to the east. The drainage ditches at the facility convey water to several individual overflow holding ponds and the closest one is located 450 feet to the southeast of the release (between the site and the river). Flume dam control structures are present in drainages between the overflow ponds and the Nemadji River to prevent impacted water which may reach the overflow ponds from migrating to the river.

Surficial geology in the vicinity of the site consists of glacial-lacustrine clay deposits that are over 150 feet thick (USGS Hydrologic Investigation Atlas HA-524, Water Resources of Wisconsin Lake Superior Basin). Sand fill material has been emplaced in some areas of the terminal as backfill around or below structures. Bedrock consists of sandstone of the Precambrian Bayfield Formation. Depth to groundwater at the terminal varies between approximately 1 and 8 feet below ground surface (bgs), dependent on location, as measured in monitoring wells located at the terminal.

Release and Response Background

Petroleum sheen was observed by Enbridge personnel on water within a drainage ditch to the northeast of the Tank 8 containment berm on March 28, 2011. They traced the sheen back to valve 221-V-SP1 (Figure 2) where a small volume of crude oil was found on the water surface around the valve stem. Enbridge personnel initiated response actions upon discovery of the release which included:

- Shutting off crude oil flow to the valve.
- Installing earthen berms and oil absorbent pads and booms in the adjacent ditch to recover crude oil from the water surface and prevent surface water migration.
- Excavating soil around the valve with a back hoe, a vacuum truck and hand tools to identify the source of the release and make the appropriate infrastructure repairs (Photo 1).
- Using a vacuum truck to remove pooled crude oil around the valve and in the excavation. Crude impacted water was reinjected into the pipeline system.
- Segregating excavated soil that exhibited obvious crude oil impacts (soil in contact with product, visible staining, and obvious odor) from soil without obvious crude oil impacts.
- Installing water management systems in the ditches to divert clean water from entering the excavation.

A pencil-sized corrosion hole in the valve was identified as the release source and a temporary repair was completed by Enbridge on April 10, 2011. Additional permanent repairs were planned for a later date. Enbridge reported the release to the Wisconsin Department of Natural Resources (WDNR) (WDNR Spill #: 20110405N016-1). Enbridge contacted Barr on March 29, 2011 to request assistance with documenting the environmental conditions observed at the release site, segregation of crude oil impacted soil and coordinating disposal of the crude oil impacted soil. Barr arrived on site on March 30, 2011.

Field Activities

Barr conducted the following field tasks:

• The drainage ditch was inspected upstream and downstream of the release point by Barr. Standing water was still present in the ditch upon Barr's arrival and no crude oil impacts (product, sheen, discoloration) were observed on the water or the ground surface. Enbridge reported that they had removed all observed crude oil impacts in the ditch with a vacuum truck and oil absorbent pads upon discovery of the release.

- Excavated soil was field screened with a photoionization detector (PID) using headspace procedures to determine whether crude impacts were present. Crude oil impacts such as odor, visual discoloration or sheen were also used for field screening purposes. Soil failing field screening criteria (headspace > 10ppm or obvious crude oil staining or odor) was hauled in the terminal stockpile area (Figure 2) until offsite disposal could be arranged. This task was completed during the different phases of the project that included the initial response excavation and the excavation to access the pipeline for the final repair work.
- Field screened soil from the temporary repair excavation extents to determine whether residual crude oil impacted soil remained in the sidewalls or bottom. Soil failing field screening criteria was excavated and stockpiled in the terminal stockpile area. Remedial excavation and field screening was limited by pipeline infrastructure and sheet piling installed along the western sidewall.

The final repair excavation was approximately 90 feet long by 25 feet wide by 7 feet deep (Figure 3; Photo 2) resulting in approximately 500 cubic yards of removed soil. Approximately 70 cubic yards of that volume was determined to be crude oil impacted. Groundwater and rainwater entering the excavation during the repair activities was periodically removed, as needed, by Enbridge and reinjected into the pipeline system.

Additional field screening and sidewall sampling were to be completed by Barr following the completion of the final valve repair and the removal of the sheet piling along the western sidewall. The repair was completed and the excavation was backfilled in April and May 2012 (Photo 3). Barr was not notified about the work however; therefore no sidewall or bottom samples were collected.

Geoprobe Boring Investigation

Since sidewall samples were not collected from the excavation to document whether additional crude oil impacted soil remained, on June 15, 2012, five soil Geoprobe soil borings were advanced around the valve release excavation area (Figure 3). One boring (SB-5) was advanced within the excavation footprint, as near to the release location as pipeline infrastructure allowed. The other four boring were

located to the northwest (SB-1), northeast (SB-2), southeast (SB-3), and southwest (SB-4) of the excavation limits.

Borings were advanced using push-probe methods, with recovery of continuous nominal 2-inch diameter core samples. Soil samples recovered from the borings were described in accordance with the Unified Soil Classification System. Soil was field screened with a photoionization detector (PID) following standard headspace procedures. Soil was also inspected for other evidence of crude oil impacts such as staining, obvious petroleum odor, and/or sheen. No crude oil impacts were detected with the PID or from the inspection. Boring logs are attached in Attachment A.

Analytical soil samples were collected at depth intervals of 5-6 feet and 14-15 feet bgs at SB-5, 3-4 feet bgs at SB-1, SB-2, and SB-3, and 5-6 feet at SB-4. The shallow sample depths were chosen to evaluate the direct contract risk and to analyze soil near the groundwater table The depths to groundwater at the closest permanent monitoring wells (MW-5, MW-11, MW-16) on the terminal property range from 2 to 6 feet bgs (Figure 4, Table 1). The sample depth of 14-15 feet bgs at SB-5 was chosen to analyze the soil below the vertical extent of the excavation.

The samples were submitted to Pace Analytical Services for laboratory analyses of diesel range organics (DRO) and petroleum volatile organic compounds (PVOCs). Analyte concentrations were less than detection limits with the exception of a DRO concentration of 14 mg/kg from the source boring SB-5 at 5-6 feet bgs (Table 2). The laboratory analytical report can be found in Attachment B. These results confirm that the extent of the contamination was limited to the area around the value and was adequately remediated during the response action activities described above.

Soil Disposal Coordination and Documentation

Crude oil impacted soil (headspace > 10ppm or obvious crude oil impacts) was excavated by backhoe and hydrovac and placed in the terminal soil containment area. Barr collected two analytical samples from the crude impacted soil stockpiles for laboratory analysis to characterize the soil for disposal. The sample was submitted to Legend Technical Services in St. Paul, MN for analysis of DRO and benzene, toluene, ethylbenzene, and xylenes (BTEX). Analytical results are shown in Table 1 and the Legend Lab report attached to the Waste Management waste profile application in Attachment C.

		Analytical Results (mg/kg)									
			BTEX								
Location ID	Date Completed	DRO	Benzene	Ethyl Benzene	Toluene	Xylene					
Stockpile-1	4/7/2011	190	<0.028	0.13	<0.028	0.29					
Stockpile-2	4/7/2011	1000	0.52	1.4	1.9	5.8					

Table 3Waste Characterization Soil Sampling Results Summary
Tank 24 Containment Basin Swale Excavation

Detections are reported in **Bold**

The laboratory results and a waste profile application were sent to and approved by the Waste Management Voyageur Landfill near Canyon, Minnesota. The soil was approved by the landfill under profile 102705MN. Enbridge solidified the hydrovac soil slurry with cement prior to hauling for transportation purposes. Approximately 98 tons of soil was hauled to the landfill. The landfill waste profile and hauling manifests are included in Attachment C.

Receptors

No product entered a surface water body during or after the release and no surface water receptors are currently at risk. There are no water supply wells within 1200 feet of the release location. The closest surface water feature, the Nemadji River, is located over ¹/₄ mile from the release location. Groundwater monitoring wells are present on terminal property and are periodically sampled to detect potential groundwater impacts migrating off the property. DRO and BETX compounds have not been detected in samples from the wells around the perimeter of the terminal.

Conclusions

Concentrations of DRO and PVOCs in samples collected during the soil boring investigation were below detection limits and/or less than NR 720 Generic Residual Contaminant Levels (GRCLs). No water supply wells are present within 1200 feet of the release location and the closest surface water feature is over ¹/₄ mile from the site. Soils with oil and residual crude oil impacts have been removed from the release location. Enbridge is recommending that no additional remedial action be taken for this release and requests that the WDNR close this spill site.

Attachments:

Site Photos: 1-3

Figure 1 – Site Location Map

Figure 2 – Site Map

Figure 3 – Site Detail Map

Table 1 – Monitoring Well Elevation Data

Table 2 – Soil Analytical Data Summary

Attachment A - Geoprobe Boring Logs

Attachment B – Analytical Reports

Attachment C – Waste Management Landfill Documents

- Waste Management Waste Profile Application with Legend Analytical Report
- Soil Hauling Manifests

Site Photos



Photo 1: Early valve repair excavation. Addition excavation work was required to locate the leak and complete the repairs. (4/6/2011)



Photo 2: Expanded excavation required for valve repair work. (12/6/2011)



Photo 3: Backfilled valve excavation. (5/3/2012)

Table

TABLE 1

Monitoring Well Elevation Data Enbridge Energy Terminal - Superior, Wisconsin

Location	Date	TOC Elevation (feet NGVD)	Grade Elevation (feet NGVD)	Depth to Groundwater from TOC (feet)	Groundwater Elevation (feet NGVD)	Depth to Groundwater from Grade (feet)
MVV-1	9/15/2008	665.19	663.15	9.43	655.76	7.39
	10/1/2009			6.90	658.29	4.86
	9/20/2010	665.22	663.46	5.61	659.61	3.85
	9/20/2011			6.23	658.99	4.47
MW-2	10/16/2008	659.42	656.96	4 04	655 38	1 58
	10/1/2009	000.42	000.00	7 25	652 17	4 79
	9/20/2010	659.37	657.06	4.81	654.56	2 50
	9/20/2011			6.74	652.63	4 43
	0,20,2011			0.11	002.00	1.10
MW-5	9/15/2008	645.43	642.85	6.32	639.11	3.74
	10/1/2009			7.50	637.93	4.92
	9/20/2010	645.37	642.85	6.26	639.11	3.74
	9/20/2011			7.55	637.82	5.03
MW-6	9/15/2008	648.03	646.07	7.51	640.52	5.55
	10/1/2009			8.98	639.05	7.02
	9/20/2010	648.01	645.79	7.65	640.36	5.43
	9/20/2011			7.94	640.07	5.72
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MW-10	9/20/2010	662.01	660.11	6.10	655.91	4.20
	9/20/2011			6.52	655.49	4.62
MW-11	9/20/2010	656.33	654.06	8.31	648.02	6.04
	9/20/2011			8.70	647.63	6.43
MW-12	9/20/2010	649.46	645.36	6.65	642.81	2.55
	9/20/2011			7.35	642.11	3.25
MM/ 4.2	0/07/2010	047.54	044.77	0.00	040.50	1.40
10100-13	9/27/2010	647.51	644.77	3.92	643.59	1.18
	9/20/2011			5.08	642.43	2.34
MW-14	9/20/2010	661.15	659.27	5.57	655.58	3.69
	9/20/2011			6.32	654.83	4.44
	1	1	1	1	1	1
MW-15	9/20/2010	660.88	659.10	3.50	657.38	1.72
	9/20/2011			5.03	655.85	3.25
M\W_16	0/20/2010	650.56	649.60	2.01	647.65	1.04
14144-10	9/20/2010	00.00	046.09	2.91	646.40	1.04
	9/20/2011			4.16	040.40	2.29

Notes:

NGVD = National Geodetic Vertical Datum TOC = Top of Casing

Table 2Soil Analytical Data SummaryPVOC and DROTank 8 Valve ReleaseEnbridge Energy Terminal - Superior, Wisconsin

	Effective Date	Chemical Name	Solids, percent	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl benzene	Toluene	Xylenes, total	Diesel Range Organics
Wisconsis Oceanis Desidual Oceatantia est										
Levels NR 720.09	09/01/2007	BOLD				0.0055 mg/kg	2.9 mg/kg	1.5 mg/kg	4.1 mg/kg	250 mg/kg
Sys Loc Code	Sample Date	Depth Interval (ft)								
				Geoprob	e Samples					
TK8-SB-1	6/15/2012	3 - 4	76.5 %	< 0.067 mg/kg	< 0.067 mg/kg	< 0.067 mg/kg	< 0.067 mg/kg	< 0.067 mg/kg	< 0.20 mg/kg	< 11.3 mg/kg
TK8-SB-2	6/15/2012	3 - 4	77.6 %	< 0.066 mg/kg	< 0.066 mg/kg	< 0.066 mg/kg	< 0.066 mg/kg	< 0.066 mg/kg	< 0.20 mg/kg	< 9.9 mg/kg
TK8-SB-3	6/15/2012	3 - 4	79.4 %	< 0.062 mg/kg	< 0.062 mg/kg	< 0.062 mg/kg	< 0.062 mg/kg	< 0.062 mg/kg	< 0.19 mg/kg	< 9.7 mg/kg
TK8-SB-4	6/15/2012	5 - 6	74.9 %	< 0.068 mg/kg	< 0.068 mg/kg	< 0.068 mg/kg	< 0.068 mg/kg	< 0.068 mg/kg	< 0.21 mg/kg	<10.6 mg/kg
TK8-SB-5	6/15/2012	5 - 6	76.5 %	< 0.074 mg/kg	< 0.074 mg/kg	< 0.074 mg/kg	< 0.074 mg/kg	< 0.074 mg/kg	< 0.22 mg/kg	14.0 mg/kg
TK8-SB-5	6/15/2012	14 - 15	67.3 %	< 0.077 mg/kg	< 0.077 mg/kg	< 0.077 mg/kg	< 0.077 mg/kg	< 0.077 mg/kg	< 0.23 mg/kg	< 12.0 mg/kg

Figures





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Approximate Release Location Geoprobe Boring Locations Terminal Property Boundary Terminal Pipeline Infrastructure Excavation Extent Drainage Ditch



1 Inch = 20 Feet

Figure 3

SITE DETAIL MAP Tank 8 Valve Release Enbridge Superior Terminal Superior, Wisconsin









Inferred Groundwater Flow Direction

Monitoring well groudwater elevations were measured on September 26, 2012

Note:

Monitoring well locations 17 and 18 are newly installed and were not used in groundwater contour modeling



1 Inch = 1,000 Feet Bing Imagery Circa August, 2011

Figure 4

Groundwater Elevations Superior Terminal Enbridge Energy, L.P. Superior, Wisconsin



Attachment A

Geoprobe Boring Logs

SOIL BORING LOG INFORMATION

Rev. 7-98

Form 4400-122

Route To:

Watershed/Wastewater
Remediation/Redevelopment

Waste Management
Other

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SOIL BORING	LOG INFORMATION
Form 4400-122	Rev. 7-98

Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopment Waste Management Other 🗌

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SOIL BORING LOG INFORMATION

Rev. 7-98

Form 4400-122	
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Watershed/Wastewater

Waste Management

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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Pat	Firm Barr Engineering	Tel: Fax:
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SOIL BORING LOG INFORMATION

Rev. 7-98

Form 4400-122	
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Route To: V

Watershed/Wastewater

Waste Management
Other

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Bol	b Gide	lings						0					Ģ	1				
Ma	trix E	nviro	nment	al				6/15	5/2012				6/15/2	2012		_ D	irect Push	
WLO	nique V	Vell No ⊥/ A	<u>.</u>		NR Well ID No.	Common Well Name	Final Sta	atic Wa	ter Lev	el	Surfac	e Eleva	tion		Bo	rehole	Diameter	
Local	Grid O	rigin	□ (e	stima	ated:) or Bori	IN/A	1				Ĺ	N/A	A Fee	t		2.0	inches	
State	Plane				N, I	E S/C/N		at <u>40</u>	<u>5° 41</u>	['	<u>11.9 "</u>	Local			т			
SW	1/4	of N	W 1	/4 of	f Section 31,	T 49 N, R 13 W	Lon	g <u>9</u> 2	20	<u> </u>	12.3 "		Feet		4		Feet 🗌 W	
Facili	y ID	2.0			County		County Co	ode	Civil T	own/C	ity/ or `	Village						
816	01058	30			Douglas		16	· · ·	Supe	rior			_					
Sar	nple												Soil	Prope	erties			
	& (ii)	ts	eet		Soil/Ro	ock Description												
r pe	Att	Jour	ln F		And Geo	ologic Origin For		20			l (i	/Sh	0				nts	
f Ty	ngth	MA	pth]		Each	1 Major Unit		G	phic	11 grar	dd)	ır/St	istur	/F %	or		D/	
anc	Lei Re	BI	De					n S	Gra	We	L III	po	C W	G/S	Col		Con	
1 GP	60 48			0-1	15': Clay, soft, red.									-				
											0.7	N/N/N	Moist	0/0/100	10R 4/4			
			-															
			-								}							
				4 5	El: Diesk samerie sier						0.7	N/Y/N	Moist	0/0/100	10R 4/4			
2	60		-5	4.	э. Біаск örganic clay	y.									ĺ			
GP	24	1	-									ļ						
				6.5	5': 2" lens of black or	ganic clay with organi	с											
			Ì	ma	aterial.			CL			0.6	N/NAN	Molet	0/0/100	100.4/4			
			-								0.0		TYROID.	0/0/100	101,444			
			-															
-				9.5	5-10': Some fine grav	vel.							Moist	5/0/95				
3 GP	60 60			10	-11': Black organic c	lay.							Moist	0/D/100				
								i										
			-															
ĺ			-								0.7	N/Y/N	Moist	0/0100	10R 4/4			
			-15	En	d of boring.			-									ſ	
	Í																	
												,						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signatura	C.1		/ There		
Signature	114		Firm	Barr Engineering	T.1.
	114.	11 -+-		Dan Engineering	1 el:
	Unit of the second seco	10451			Fax
					1 4/1.

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Rev. 7-98

Form 4400-122

Route To:

Watershed/Wastewater

Waste Management
Other

													Pa	ge 1	of	1
Facili	ty/Proje bridge	GP 7	ie Fank 8			License/I	?ermit/	Monito	ring N	umber		Boring	Numb	er o cr	. 5	
Borin	g Drille	d By: 1	Name of	f crew chief (first, last) ar	d Firm	Date Dri	lling St	arted		Di	ate Drill	ing Cor	nnleted	0-95	C-C Drill	ing Method
Bo	- b Gide	lings					0									ing mound
Ma	trix E	nviro	imenta	al			6/15	/2012				6/15/2	2012		Di	rect Push
WIU	nique V	Vell No	•	DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Lev	el	Surfac	e Eleva	tion		В	oreho le	Diameter
Local	T Grid O	V/A rigin		N/A stimated: \(\) or Bori	N/A	<u> </u>					N/.	A Fee	t		2.0	inches
State	Plane	iigiii		N,	E s/c/n	La	t <u>46</u>	<u>°</u> 41	<u>'</u>	<u>12.0 "</u>	Locar	ona Lo	cation	T		[] m
SW	1/4	of N	W 1	/4 of Section 31,	T 49 N, R 13 W	Long	92	° 3	3'	12.1 "		Feet		4	1	E E Feet T W
Facili	y ID			County		County Co	de	Civil T	own/C	ity/ or	Village					
816	501058	30		Douglas		16		Supe	rior							
<u>Sa</u>	nple	-										Soil	Prope	erties		
	B. &	ts	set	Soil/R	ock Description											
r e	Att	ouno	n Fe	And Ge	ologic Origin For) (i	/Sh	0				nts
Ty	igth	M O	pth]	Eac	h Major Unit		CS 2	phic	1] erar	da	r/St	istur	/F %	5		D/
Nu	Lei Rei	Blc	Dej				n s	Gra	We		opo	C Mo	G/S	CO		Con RQ
1 GPI	60			0-5': No recovery. Ad	vanced through gravel	laid					1					
					in neur bonnig looaton.											
			-													
			- i													
2	60		-5	5-15': Clay, soft, red.	Some gravel, small to											
GP	36		\vdash	medium sized.												
										10	N/N/N	Moist	10/0/90	108 4/4		
											,	Inota		1010404		
			-													
Ļ			-10				CL									
GP	24			Void spaces were sate	due to possible void sp urated.	baces.										
4				·												
GF	1		-													
			-							0.8	N/N/N	Moist	5/0/95	10R 4/4		
_			-15	End of boring.												
		_														

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Un 1	17.0	A	Firm	Barr Engineering	Tel:
	~ <u> </u>	inf	/			 Fax:

Attachment B

Analytical Reports



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

June 29, 2012

Andrea Nord Barr Engineering 4700 West 77th Street Minneapolis, MN 55435

RE: Project: 49161092.01 RESP 001 Enbridge Pace Project No.: 10195959

Dear Andrea Nord:

Enclosed are the analytical results for sample(s) received by the laboratory on June 19, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Andrea Opland

andrea.opland@pacelabs.com Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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Page 1 of 21



Pace Analytical Services, Inc. 1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

CERTIFICATIONS

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414 A2LA Certification #: 2926.01 Alaska Certification #: UST-078 Alaska Certification #MN00064 Arizona Certification #: AZ-0014 Arkansas Certification #: 88-0680 California Certification #: 01155CA EPA Region 8 Certification #: Pace Florida/NELAP Certification #: E87605 Georgia Certification #: 959 Idaho Certification #: MN00064 Illinois Certification #: 200011 Iowa Certification #: 368 Kansas Certification #: E-10167 Louisiana Certification #: 03086 Louisiana Certification #: LA080009 Maine Certification #: 2007029 Maryland Certification #: 322 Michigan DEQ Certification #: 9909 Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace Montana Certification #: MT CERT0092 Nebraska Certification #: Pace Nevada Certification #: MN_00064 New Jersey Certification #: MN-002 New Mexico Certification #: Pace New York Certification #: 11647 North Carolina Certification #: 530 North Dakota Certification #: R-036 North Dakota Certification #: R-036A Ohio VAP Certification #: CL101 Oklahoma Certification #: D9921 Oklahoma Certification #: 9507 Oregon Certification #: MN200001 Pennsylvania Certification #: 68-00563 Puerto Rico Certification Tennessee Certification #: 02818 Texas Certification #: T104704192 Washington Certification #: C754 Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS



SAMPLE SUMMARY

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10195959001		Solid	06/15/12 08:10	06/19/12 10:05
10195959002	TK8-SB-2_3-4'	Solid	06/15/12 09:05	06/19/12 10:05
10195959003	TK8-SB-3_3-4'	Solid	06/15/12 09:50	06/19/12 10:05
10195959004	TK8-SB-4_5-6'	Solid	06/15/12 11:00	06/19/12 10:05
10195959005	TK8-SB-5_5-6'	Solid	06/15/12 11:40	06/19/12 10:05
10195959006	TK8-SB-5_14-15	Solid	06/15/12 12:00	06/19/12 10:05
10195959007	Trip Blank	Solid	06/15/12 00:00	06/19/12 10:05

REPORT OF LABORATORY ANALYSIS

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Page 3 of 21



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SAMPLE ANALYTE COUNT

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10195959001		WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959002	TK8-SB-2_3-4'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959003	TK8-SB-3_3-4'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959004	TK8-SB-4_5-6'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959005	TK8-SB-5_5-6'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959006	TK8-SB-5_14-15	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270 by SIM	WJH	18	PASI-M
10195959007	Trip Blank	WI MOD GRO	KT1	7	PASI-M

REPORT OF LABORATORY ANALYSIS

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Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Method: WI MOD DRO

Description:WIDRO GCSClient:Barr EngineeringDate:June 29, 2012

General Information:

6 samples were analyzed for WI MOD DRO. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with WI MOD DRO with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/18913

- T6: High boiling point hydrocarbons are present in the sample.
 - TK8-SB-5_5-6' (Lab ID: 10195959005)
 - Diesel Range Organics

REPORT OF LABORATORY ANALYSIS

Page 5 of 21



Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Method: WI MOD GRO

Description:WIGRO GCVClient:Barr EngineeringDate:June 29, 2012

General Information:

7 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with TPH GRO/PVOC WI ext. with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 6 of 21



Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Method: EPA 8270 by SIM

Description:8270 MSSV PAH by SIMClient:Barr EngineeringDate:June 29, 2012

General Information:

1 sample was analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/18910

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10195959006

- M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
 - MS (Lab ID: 1221814)
 - Anthracene
 - Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Benzo(k)fluoranthene
 - Chrysene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Phenanthrene

REPORT OF LABORATORY ANALYSIS

Page 7 of 21



Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Method:	EPA 8270 by SIM
Description:	8270 MSSV PAH by SIM
Client:	Barr Engineering
Date:	June 29, 2012

QC Batch: OEXT/18910

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10195959006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Pyrene
- MSD (Lab ID: 1221815)
 - Anthracene
 - · Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - · Benzo(k)fluoranthene
 - Chrysene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Phenanthrene
 - Pyrene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS



Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 1019

No.: 10195959

Sample: TK8-SB-1_3-4'	Lab ID:	10195959001	Collected	: 06/15/1	2 08:10	Received: 06/	/19/12 10:05 Ma	atrix: Solid	
Results reported on a "dry-we	eight" basis								
			Report						- ·
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI M	OD DRO Pre	eparation I	Method:	WI MOD DRO			
Diesel Range Organics <i>Surrogates</i>	<11.3 r	ng/kg	11.3	1.2	1	06/20/12 12:29	06/22/12 20:10		
n-Triacontane (S)	86 %	6	50-150		1	06/20/12 12:29	06/22/12 20:10		
WIGRO GCV	Analytical	Method: WI M	OD GRO Pre	eparation I	Method	TPH GRO/PVO	C WI ext.		
Benzene	<0.067 n	ng/kg	0.067	0.0081	1	06/21/12 08:13	06/21/12 22:44	71-43-2	
Ethylbenzene	<0.067 n	ng/kg	0.067	0.011	1	06/21/12 08:13	06/21/12 22:44	100-41-4	
Toluene	<0.067 n	ng/kg	0.067	0.0081	1	06/21/12 08:13	06/21/12 22:44	108-88-3	
1,2,4-Trimethylbenzene	<0.067 n	ng/kg	0.067	0.0094	1	06/21/12 08:13	06/21/12 22:44	95-63-6	
1,3,5-Trimethylbenzene	<0.067 n	ng/kg	0.067	0.015	1	06/21/12 08:13	06/21/12 22:44	108-67-8	
Xylene (Total)	<0.20 n	ng/kg	0.20	0.022	1	06/21/12 08:13	06/21/12 22:44	1330-20-7	
Surrogates		0 0							
a,a,a-Trifluorotoluene (S)	99 %	6	80-125		1	06/21/12 08:13	06/21/12 22:44	98-08-8	
Dry Weight	Analytical	Method: ASTM	1 D2974						
Percent Moisture	23.5 %	6	0.10	0.10	1		06/19/12 00:00		
Sample: TK8-SB-2_3-4'	Lab ID:	10195959002	Collected	: 06/15/1:	2 09:05	Received: 06/	/19/12 10:05 Ma	atrix: Solid	
Results reported on a "dry-we	eight" basis								
	•		Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI M	OD DRO Pre	eparation I	Method:	WI MOD DRO			
Diesel Range Organics	<9.9 r	ng/kg	9.9	1.1	1	06/20/12 12:29	06/22/12 19:32		
Surrogates n-Triacontane (S)	76 %	6	50-150		1	06/20/12 12:29	06/22/12 19:32		

Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.

Benzene	<0.066 mg/kg	0.066	0.0079	1	06/21/12 08:13	06/21/12 23:43	71-43-2
Ethylbenzene	<0.066 mg/kg	0.066	0.011	1	06/21/12 08:13	06/21/12 23:43	100-41-4
Toluene	<0.066 mg/kg	0.066	0.0079	1	06/21/12 08:13	06/21/12 23:43	108-88-3
1,2,4-Trimethylbenzene	<0.066 mg/kg	0.066	0.0092	1	06/21/12 08:13	06/21/12 23:43	95-63-6
1,3,5-Trimethylbenzene	<0.066 mg/kg	0.066	0.014	1	06/21/12 08:13	06/21/12 23:43	108-67-8
Xylene (Total)	<0.20 mg/kg	0.20	0.021	1	06/21/12 08:13	06/21/12 23:43	1330-20-7
a,a,a-Trifluorotoluene (S)	98 %	80-125		1	06/21/12 08:13	06/21/12 23:43	98-08-8
Dry Weight	Analytical Method: A	STM D2974					
Percent Moisture	22.4 %	0.10	0.10	1		06/19/12 00:00	

Date: 06/29/2012 04:43 PM

WIGRO GCV

REPORT OF LABORATORY ANALYSIS

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Project: 49161092.01 RESP 001 Enbridge

Pace Project No.:

10195959

Sample: TK8-SB-3_3-4'	Lab ID:	1019595900	03 Collecte	d: 06/15/1	2 09:50	Received: 06/	19/12 10:05 Ma	atrix: Solid	
Results reported on a "dry-we	eight" basis		Depart						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytica	I Method: WI	MOD DRO P	reparation I	Method	: WI MOD DRO			
Diesel Range Organics <i>Surrogates</i>	<9.7 :	mg/kg	9.7	1.1	1	06/20/12 12:29	06/22/12 19:39		
n-Triacontane (S)	87 9	%	50-150		1	06/20/12 12:29	06/22/12 19:39		
WIGRO GCV	Analytica	I Method: WI	MOD GRO P	reparation I	Method	: TPH GRO/PVO	C WI ext.		
Benzene	<0.062	ng/kg	0.062	0.0074	1	06/21/12 08:13	06/22/12 00:02	71-43-2	
Ethylbenzene	<0.062	ng/kg	0.062	0.0099	1	06/21/12 08:13	06/22/12 00:02	100-41-4	
Toluene	<0.062	ng/kg	0.062	0.0074	1	06/21/12 08:13	06/22/12 00:02	108-88-3	
1,2,4-Trimethylbenzene	<0.062	ng/kg	0.062	0.0087	1	06/21/12 08:13	06/22/12 00:02	95-63-6	
1,3,5-Trimethylbenzene	<0.062	ng/kg	0.062	0.014	1	06/21/12 08:13	06/22/12 00:02	108-67-8	
Xylene (Total)	<0.19 r	ng/kg	0.19	0.020	1	06/21/12 08:13	06/22/12 00:02	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	97 9	%	80-125		1	06/21/12 08:13	06/22/12 00:02	98-08-8	
Dry Weight	Analytica	I Method: AS	TM D2974						
Percent Moisture	20.6	%	0.10	0.10	1		06/19/12 00:00		
Sample: TK8-SB-4 5-6'	Lab ID:	1019595900	04 Collecte	d: 06/15/1	2 11:00	Received: 06/	19/12 10:05 Ma	atrix: Solid	
Results reported on a "dry-we	eight" basis								
	9		Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytica	I Method: WI	MOD DRO P	reparation I	Method:	: WI MOD DRO			
Diesel Range Organics	<10.6	mg/kg	10.6	1.2	1	06/20/12 12:29	06/22/12 19:47		
n-Triacontane (S)	81 9	%	50-150		1	06/20/12 12:29	06/22/12 19:47		
WIGRO GCV	Analytica	I Method: WI	MOD GRO P	reparation I	Method	: TPH GRO/PVO	C WI ext.		
Benzene	<0.068	ng/kg	0.068	0.0082	1	06/21/12 08:13	06/22/12 00:21	71-43-2	
Ethylbenzene	<0.068	ng/kg	0.068	0.011	1	06/21/12 08:13	06/22/12 00:21	100-41-4	
Toluene	<0.068	ng/kg	0.068	0.0082	1	06/21/12 08:13	06/22/12 00:21	108-88-3	
1,2,4-Trimethylbenzene	<0.068	ng/kg	0.068	0.0096	1	06/21/12 08:13	06/22/12 00:21	95-63-6	
1,3,5-Trimethylbenzene	<0.068	mg/kg	0.068	0.015	1	06/21/12 08:13	06/22/12 00:21	108-67-8	
Xylene (Total)	<0.21 r	ng/kg	0.21	0.022	1	06/21/12 08:13	06/22/12 00:21	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99 9	%	80-125		1	06/21/12 08:13	06/22/12 00:21	98-08-8	

Analytical Method: ASTM D2974 25.1 % Percent Moisture 0.10 0.10 1 06/19/12 00:00

Date: 06/29/2012 04:43 PM

Dry Weight

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Project: 49161092.01 RESP 001 Enbridge

- -_

Pace Project No.:

10195959

Sample: TK8-SB-5_5-6'	Lab ID:	1019595900	05 Collecte	d: 06/15/12	2 11:40	Received: 06/	19/12 10:05 Ma	atrix: Solid	
Results reported on a "dry-we	eight" basis		Penort						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytica	I Method: WI	MOD DRO P	reparation I	Method	: WI MOD DRO			
Diesel Range Organics	14.0 r	ng/kg	10.6	1.2	1	06/20/12 12:29	06/23/12 09:30		Т6
n-Triacontane (S)	70 9	%	50-150		1	06/20/12 12:29	06/23/12 09:30		
WIGRO GCV	Analytica	I Method: WI	MOD GRO P	reparation I	Method	: TPH GRO/PVO	C WI ext.		
Benzene	<0.074 r	ng/kg	0.074	0.0088	1	06/21/12 08:13	06/22/12 00:41	71-43-2	
Ethylbenzene	<0.074 r	ng/kg	0.074	0.012	1	06/21/12 08:13	06/22/12 00:41	100-41-4	
Toluene	<0.074 r	ng/kg	0.074	0.0088	1	06/21/12 08:13	06/22/12 00:41	108-88-3	
1,2,4-Trimethylbenzene	<0.074 r	ng/kg	0.074	0.010	1	06/21/12 08:13	06/22/12 00:41	95-63-6	
1,3,5-Trimethylbenzene	<0.074 r	ng/kg	0.074	0.016	1	06/21/12 08:13	06/22/12 00:41	108-67-8	
Xylene (Total)	<0.22 r	mg/kg	0.22	0.024	1	06/21/12 08:13	06/22/12 00:41	1330-20-7	
a,a,a-Trifluorotoluene (S)	98 9	%	80-125		1	06/21/12 08:13	06/22/12 00:41	98-08-8	
Dry Weight	Analytica	I Method: AS	TM D2974						
Percent Moisture	23.5	%	0.10	0.10	1		06/19/12 00:00		
Sample: TK8-SB-5_14-15	Lab ID:	1019595900	06 Collecte	d: 06/15/12	2 12:00	Received: 06/	19/12 10:05 Ma	atrix: Solid	
Results reported on a "dry-we	eight" basis								
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytica	I Method: WI	MOD DRO P	reparation I	Method	: WI MOD DRO			
Diesel Range Organics	< 12.0 r	ng/kg	12.0	1.3	1	06/20/12 12:29	06/23/12 09:07		
n-Triacontane (S)	74 9	%	50-150		1	06/20/12 12:29	06/23/12 09:07		
WIGRO GCV	Analytica	I Method: WI	MOD GRO P	reparation I	Method	: TPH GRO/PVO	C WI ext.		
Benzene	<0.077 r	ng/kg	0.077	0.0092	1	06/21/12 08:13	06/22/12 01:00	71-43-2	
Ethylbenzene	<0.077 r	ng/kg	0.077	0.012	1	06/21/12 08:13	06/22/12 01:00	100-41-4	
Toluene	<0.077 r	ng/kg	0.077	0.0092	1	06/21/12 08:13	06/22/12 01:00	108-88-3	
1,2,4-Trimethylbenzene	<0.077 r	ng/kg	0.077	0.011	1	06/21/12 08:13	06/22/12 01:00	95-63-6	
1,3,5-Trimethylbenzene	<0.077 r	ng/kg	0.077	0.017	1	06/21/12 08:13	06/22/12 01:00	108-67-8	
Xylene (Total) Surrogates	<0.23 r	ng/kg	0.23	0.024	1	06/21/12 08:13	06/22/12 01:00	1330-20-7	
a,a,a-Trifluorotoluene (S)	98 9	%	80-125		1	06/21/12 08:13	06/22/12 01:00	98-08-8	
Dry Weight	Analytica	I Method: AS	TM D2974						
Percent Moisture	32.7	%	0.10	0.10	1		06/20/12 00:00		

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3550

<14.9 ug/kg 14.9 7.4 06/20/12 07:07 06/25/12 23:39 83-32-9 1 <14.9 ug/kg 14.9 7.4 06/20/12 07:07 06/25/12 23:39 208-96-8 1

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8270 MSSV PAH by SIM

Acenaphthene

Acenaphthylene

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Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Sample: TK8-SB-5_14-15	Lab ID	: 10195959006	Collected	I: 06/15/12	12:00	Received: 06/	19/12 10:05 Ma	atrix: Solid	
Results reported on a "dry-wei	ight" basis								
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytica	al Method: EPA 8	270 by SIM	Preparatio	n Meth	od: EPA 3550			
Anthracene	38.6	ug/kg	14.9	7.4	1	06/20/12 07:07	06/25/12 23:39	120-12-7	M1
Benzo(a)anthracene	122	ug/kg	14.9	0.51	1	06/20/12 07:07	06/25/12 23:39	56-55-3	M1
Benzo(a)pyrene	101	ug/kg	14.9	0.44	1	06/20/12 07:07	06/25/12 23:39	50-32-8	M1
Benzo(b)fluoranthene	138	ug/kg	14.9	2.3	1	06/20/12 07:07	06/25/12 23:39	205-99-2	M1
Benzo(g,h,i)perylene	61.9	ug/kg	14.9	0.49	1	06/20/12 07:07	06/25/12 23:39	191-24-2	M1
Benzo(k)fluoranthene	57.8	ug/kg	14.9	1.7	1	06/20/12 07:07	06/25/12 23:39	207-08-9	M1
Chrysene	129	ug/kg	14.9	0.48	1	06/20/12 07:07	06/25/12 23:39	218-01-9	M1
Dibenz(a,h)anthracene	<14.9	ug/kg	14.9	0.51	1	06/20/12 07:07	06/25/12 23:39	53-70-3	
Fluoranthene	264	ug/kg	14.9	0.55	1	06/20/12 07:07	06/25/12 23:39	206-44-0	M1
Fluorene	<14.9	ug/kg	14.9	7.4	1	06/20/12 07:07	06/25/12 23:39	86-73-7	
Indeno(1,2,3-cd)pyrene	50.4	ug/kg	14.9	0.43	1	06/20/12 07:07	06/25/12 23:39	193-39-5	M1
Naphthalene	<14.9	ug/kg	14.9	0.28	1	06/20/12 07:07	06/25/12 23:39	91-20-3	
Phenanthrene	148	ug/kg	14.9	0.43	1	06/20/12 07:07	06/25/12 23:39	85-01-8	M1
Pyrene	221	ug/kg	14.9	0.56	1	06/20/12 07:07	06/25/12 23:39	129-00-0	M1
Surrogates									
2-Fluorobiphenyl (S)	80	%	30-125		1	06/20/12 07:07	06/25/12 23:39	321-60-8	
Terphenyl-d14 (S)	87	%	30-146		1	06/20/12 07:07	06/25/12 23:39	1718-51-0	

 Sample: Trip Blank
 Lab ID: 10195959007
 Collected: 06/15/12 00:00
 Received: 06/19/12 10:05
 Matrix: Solid

 Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
							·	<u> </u>	
WIGRO GCV	Analytical	Method: WI	MOD GRO F	reparation	Method	TPH GRO/PVOC	; WI ext.		
Benzene	<0.050 r	ng/kg	0.050	0.0060	1	06/21/12 08:13	06/22/12 01:20	71-43-2	
Ethylbenzene	<0.050 r	ng/kg	0.050	0.0080	1	06/21/12 08:13	06/22/12 01:20	100-41-4	
Toluene	<0.050 r	ng/kg	0.050	0.0060	1	06/21/12 08:13	06/22/12 01:20	108-88-3	
1,2,4-Trimethylbenzene	<0.050 r	ng/kg	0.050	0.0070	1	06/21/12 08:13	06/22/12 01:20	95-63-6	
1,3,5-Trimethylbenzene	<0.050 r	ng/kg	0.050	0.011	1	06/21/12 08:13	06/22/12 01:20	108-67-8	
Xylene (Total)	<0.15 r	ng/kg	0.15	0.016	1	06/21/12 08:13	06/22/12 01:20	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	97 9	%	80-125		1	06/21/12 08:13	06/22/12 01:20	98-08-8	

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Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

METHOD BLANK: 1222948

QC Batch: GCV/9423 QC Batch Method:

Analysis Method: WI MOD GRO TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV Associated Lab Samples: 10195959001, 10195959002, 10195959003, 10195959004, 10195959005, 10195959006, 10195959007

Matrix: Solid

Associated Lab Samples: 10195959001, 10195959002, 10195959003, 10195959004, 10195959005, 10195959006, 10195959007

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	<0.050	0.050	06/21/12 20:09	
1,3,5-Trimethylbenzene	mg/kg	<0.050	0.050	06/21/12 20:09	
Benzene	mg/kg	<0.050	0.050	06/21/12 20:09	
Ethylbenzene	mg/kg	<0.050	0.050	06/21/12 20:09	
Toluene	mg/kg	<0.050	0.050	06/21/12 20:09	
Xylene (Total)	mg/kg	<0.15	0.15	06/21/12 20:09	
a,a,a-Trifluorotoluene (S)	%	99	80-125	06/21/12 20:09	

LABORATORY CONTROL SAMPLE &	LCSD: 1222949		12	22950						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	5	5.6	5.1	111	102	80-120	9	20	
1,3,5-Trimethylbenzene	mg/kg	5	5.6	5.2	112	103	80-120	8	20	
Benzene	mg/kg	5	5.5	5.2	109	104	80-120	5	20	
Ethylbenzene	mg/kg	5	5.6	5.2	112	105	80-120	7	20	
Toluene	mg/kg	5	5.5	5.2	110	104	80-120	6	20	
Xylene (Total)	mg/kg	15	16.7	15.5	111	103	80-120	7	20	
a,a,a-Trifluorotoluene (S)	%				97	99	80-125			

MATRIX SPIKE SAMPLE: 1222951 MS MS % Rec 10195951001 Spike Parameter % Rec Qualifiers Units Result Conc. Result Limits 1,2,4-Trimethylbenzene < 0.065 80-120 mg/kg 6.3 6.0 96 < 0.065 1,3,5-Trimethylbenzene mg/kg 6.3 6.1 97 80-120 < 0.065 mg/kg 5.7 80-120 Benzene 6.3 90 Ethylbenzene mg/kg < 0.065 6.3 6.0 95 80-120 Toluene mg/kg < 0.065 6.3 5.8 92 80-120 Xylene (Total) mg/kg <0.20 18.9 18.0 95 80-120 a,a,a-Trifluorotoluene (S) 98 80-125 %

SAMPLE DUPLICATE: 1222952

		10195951002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	<0.070	<0.066		20	
1,3,5-Trimethylbenzene	mg/kg	<0.070	<0.066		20	
Benzene	mg/kg	<0.070	<0.066		20	
Ethylbenzene	mg/kg	<0.070	<0.066		20	
Toluene	mg/kg	<0.070	<0.066		20	

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Pace Project No.: 10195959

SAMPLE DUPLICATE: 1222952						
		10195951002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Xylene (Total)	mg/kg	<0.21	<0.20		2	0
a,a,a-Trifluorotoluene (S)	%	97	100	3		

REPORT OF LABORATORY ANALYSIS

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Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

QC Batch:	MPRF	2/33090		Analysis Method:	ASTM D2974	
QC Batch Method:	ASTM	D2974		Analysis Description:	Dry Weight/Percent Moisture	
Associated Lab Samp	oles:	10195959001,	10195959002,	10195959003, 10195959004	10195959005	

SAMPLE DUPLICATE: 1221468

		10195942001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Percent Moisture	%	1.0	0.96	5	30	

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Project:	49161092.01 RES	P 001 Enbridge						
Pace Project No.:	10195959							
QC Batch:	MPRP/33113		Analysis Meth	iod:	ASTM D2974			
QC Batch Method: ASTM D2974			Analysis Description		Dry Weight/Perce	ent Moisture		
Associated Lab Sar	nples: 10195959	006						
SAMPLE DUPLICA	TE: 1222044							
			129022001	Dup		Max		
Paran	neter	Units	Result	Result	RPD	RPD	Qı	ualifiers
Percent Moisture		%	65.6	71	.4 8	3	30	
SAMPLE DUPLICA	TE: 1222115							
			10195984006	Dup		Max		
Paran	neter	Units	Result	Result	RPD	RPD	Qı	ualifiers
Percent Moisture		%	20.1	20	.4 2	2	30	

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Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

QC Batch: OEXT	/18910	Analysis Met	nod: EF	PA 8270 by SIM	
QC Batch Method: EPA 3	550	Analysis Des	cription: 82	70 Solid PAH by S	IM MSSV
Associated Lab Samples:	10195959006				
METHOD BLANK: 1221812	2	Matrix:	Solid		
Associated Lab Samples:	10195959006				
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Acenaphthylene	ug/kg	<10.0	10.0	06/26/12 14:11	
Anthracene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(a)anthracene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(a)pyrene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(b)fluoranthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(g,h,i)perylene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(k)fluoranthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Chrysene	ug/kg	<10.0	10.0	06/26/12 14:11	
Dibenz(a,h)anthracene	ug/kg	<10.0	10.0	06/26/12 14:11	
Fluoranthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Fluorene	ug/kg	<10.0	10.0	06/26/12 14:11	

	00				
Chrysene	ug/kg	<10.0	10.0	06/26/12 14:11	
Dibenz(a,h)anthracene	ug/kg	<10.0	10.0	06/26/12 14:11	
Fluoranthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Fluorene	ug/kg	<10.0	10.0	06/26/12 14:11	
Indeno(1,2,3-cd)pyrene	ug/kg	<10.0	10.0	06/26/12 14:11	
Naphthalene	ug/kg	<10.0	10.0	06/26/12 14:11	
Phenanthrene	ug/kg	<10.0	10.0	06/26/12 14:11	
Pyrene	ug/kg	<10.0	10.0	06/26/12 14:11	
2-Fluorobiphenyl (S)	%	74	30-125	06/26/12 14:11	
Terphenyl-d14 (S)	%	70	30-146	06/26/12 14:11	

LABORATORY CONTROL SAMPLE: 1221813

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Acenaphthene	ug/kg	33.3	25.3	76	48-125	
Acenaphthylene	ug/kg	33.3	24.7	74	47-125	
Anthracene	ug/kg	33.3	27.2	82	55-125	
Benzo(a)anthracene	ug/kg	33.3	23.6	71	57-125	
Benzo(a)pyrene	ug/kg	33.3	28.2	85	63-125	
Benzo(b)fluoranthene	ug/kg	33.3	29.8	89	52-125	
Benzo(g,h,i)perylene	ug/kg	33.3	29.3	88	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	28.0	84	60-125	
Chrysene	ug/kg	33.3	27.7	83	62-125	
Dibenz(a,h)anthracene	ug/kg	33.3	27.2	81	60-125	
Fluoranthene	ug/kg	33.3	30.4	91	63-125	
Fluorene	ug/kg	33.3	26.6	80	54-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	28.4	85	57-125	
Naphthalene	ug/kg	33.3	23.0	69	46-125	
Phenanthrene	ug/kg	33.3	29.1	87	53-125	
Pyrene	ug/kg	33.3	28.1	84	63-125	
2-Fluorobiphenyl (S)	%			75	30-125	
Terphenyl-d14 (S)	%			80	30-146	

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Pace Project No.: 10195959

MATRIX SPIKE & MATRIX S	PIKE DUPLICAT	E: 12218	14		1221815								
			MS	MSD									
10		195959006	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual	
Acenaphthene	ug/kg	<14.9	49.5	49.4	38.9	36.1	79	73	30-150	8	30		
Acenaphthylene	ug/kg	<14.9	49.5	49.4	37.9	35.3	77	72	30-127	7	30		
Anthracene	ug/kg	38.6	49.5	49.4	43.7	41.2	10	5	30-150	6	30	M1	
Benzo(a)anthracene	ug/kg	122	49.5	49.4	45.5	39.5	-155	-168	30-128	14	30	M1	
Benzo(a)pyrene	ug/kg	101	49.5	49.4	49.2	47.7	-104	-107	30-130	3	30	M1	
Benzo(b)fluoranthene	ug/kg	138	49.5	49.4	57.9	51.1	-161	-175	30-131	12	30	M1	
Benzo(g,h,i)perylene	ug/kg	61.9	49.5	49.4	49.1	45.8	-26	-33	30-149	7	30	M1	
Benzo(k)fluoranthene	ug/kg	57.8	49.5	49.4	47.7	43.7	-20	-29	30-149	9	30	M1	
Chrysene	ug/kg	129	49.5	49.4	52.5	44.7	-154	-170	30-150	16	30	M1	
Dibenz(a,h)anthracene	ug/kg	<14.9	49.5	49.4	41.3	39.7	56	53	30-150	4	30		
Fluoranthene	ug/kg	264	49.5	49.4	65.8	54.5	-401	-425	30-150	19	30	M1	
Fluorene	ug/kg	<14.9	49.5	49.4	41.5	39.7	84	80	40-125	5	30		
Indeno(1,2,3-cd)pyrene	ug/kg	50.4	49.5	49.4	47.9	43.8	-5	-13	30-150	9	30	M1	
Naphthalene	ug/kg	<14.9	49.5	49.4	32.4	31.3	65	63	32-125	3	30		
Phenanthrene	ug/kg	148	49.5	49.4	52.0	46.6	-193	-205	30-134	11	30	M1	
Pyrene	ug/kg	221	49.5	49.4	59.0	51.7	-327	-343	30-150	13	30	M1	
2-Fluorobiphenyl (S)	%						73	70	30-125				
Terphenyl-d14 (S)	%						82	80	30-146				

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Project:	49161092.01 RES	P 001 Enbridge									
Pace Project No.:	10195959										
QC Batch:	OEXT/18913		Analys	is Method:	W		RO				
QC Batch Method:	WI MOD DRO		Analys	is Descripti	on: W	IDRO G	CS				
Associated Lab San	nples: 10195959	001, 10195959002	, 10195959	003, 10195	959004, 1	0195959	005, 1019	95959006			
METHOD BLANK:	1222197		N	Aatrix: Solio	ł						
Associated Lab San	nples: 10195959	001, 10195959002	, 10195959	003, 10195	959004, 1	0195959	005, 1019	95959006			
			Blank	k Re	porting						
Paran	neter	Units	Resul	t	Limit	Ana	lyzed	Qualif	iers		
Diesel Range Orgar	nics	mg/kg	<	<10.0	10.0	06/22/	12 19:01				
n-Triacontane (S)		%		77	50-150	06/22/	12 19:01				
LABORATORY CON	NTROL SAMPLE &	LCSD: 1222198		1:	222199						
			Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Paran	neter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
Diesel Range Organ	nics	mg/kg	80	66.0	77.9	82	97	70-120	17	20	
n-Triacontane (S)		%				86	100	50-150			

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QUALIFIERS

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- T6 High boiling point hydrocarbons are present in the sample.

REPORT OF LABORATORY ANALYSIS

Page 20 of 21



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	49161092.01 RESP 001 Enbridge
Pace Project No .:	10195959

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10195959001	TK8-SB-1_3-4'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959002	TK8-SB-2_3-4'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959003	TK8-SB-3_3-4'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959004	TK8-SB-4_5-6'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959005	TK8-SB-5_5-6'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959006	TK8-SB-5_14-15	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959001	TK8-SB-1_3-4'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959002	TK8-SB-2_3-4'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959003	TK8-SB-3_3-4'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959004	TK8-SB-4_5-6'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959005	TK8-SB-5_5-6'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959006	TK8-SB-5_14-15	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959007	Trip Blank	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959001	TK8-SB-1_3-4'	ASTM D2974	MPRP/33090		
10195959002	TK8-SB-2_3-4'	ASTM D2974	MPRP/33090		
10195959003	TK8-SB-3_3-4'	ASTM D2974	MPRP/33090		
10195959004	TK8-SB-4_5-6'	ASTM D2974	MPRP/33090		
10195959005	TK8-SB-5_5-6'	ASTM D2974	MPRP/33090		
10195959006	TK8-SB-5_14-15	ASTM D2974	MPRP/33113		
10195959006	TK8-SB-5_14-15	EPA 3550	OEXT/18910	EPA 8270 by SIM	MSSV/8231

REPORT OF LABORATORY ANALYSIS

Page 21 of 21

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Chain of	Cust	ody					90			Number of Containers/Preservat					rvativ	ve					1 4			
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Location	Start	Stop	Depth Unit	Coll	ection	Collection	Matri	x Ty	ype	- H)	Cs (1 olved	l Mei sral (el R	lents		s (ta BTF) (tar	LIS (U Cs (U	C - N	I Nu			PACE	-
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^{3.} TK8 - SB-3	2	4				9:50	X	X									2		12	S	,			003
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#1 - Volatile Organics = BTEX, GR(#2 - Semivolatile Organics = PAHs, J	O, TPH, 8. PCP, Diox	260 Full . ins, 8270	List	Relinquis	hed By:	-7	O	n Ice?	2	Date		Tin	ie	Rece	ived	by:		~	- (Date		Time
#3 - General = pH, Chloride, Fluoric TDS, TS, Sulfate	ıs de, Alkalin	vity, TSS,		<u>Samples</u>	Shipped N	/IA: 🗌 Air Fi	reight [Ø N ∃Fede:	ral E	Expres	<u>/2</u> s [J [™] ; .] Samı	کار oler	Air I	5 7. 311 1	<u>ر کر</u> Numb	con er:	1pc	<u>e</u>			619.(5.7	e
#4 - Nutrients = COD, TOC, Phenol Nitrogen, TKN	ls, Ammor	<i>iia</i>	L			Other:																		

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Sample Condition Upon Receipt Form Revised Date: ToFeb2012 Sample Condition Upon Receipt Form Issuing Authority: F-MN-L-213-rev.02 Page 1 of 1 Sample Condition Document Number: Issuing Authority: F-MN-L-213-rev.02 Project # _////95957 Courier: Fed Ex UPS USPS Client Commercial Pace Other Project # _///95957 Courier: Fed Ex UPS USPS Client Commercial Pace Other Fempolity Tracking #: 74.964.32.04.30.84.14.64 Project # _///95.95.74 Custody Seal on Cooler/Box Present: yes / no Seals Intact: yes / no Ferrometer Used 0344042.07.805/447 Type of Ice: We' Blue None Samples on Ice, cooling process has begun Dete and Initials of parson examination Example on Ice, cooling process has begun Date and Initials of parson examination Temp should be above freezing to 6°C Comments: Comments: Date and Initials of parson examination Chain of Custody Filed Out: Øres Ilvo Ilvo Ilvo Ilvo Ilvo Ilvo Ilvo Ilvo
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Samples Arrived within Hold Time: Image:
Short Hold Time Analysis (<72hr):
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Correct Containers Used: Image: Section of the
-Pace Containers Used: Image: Section 10 and 1
Containers Intact: Image: Signal
Filtered volume received for Dissolved tests Image: Second se
Sample Labels match COC: Image: Superior Containers needing acid/base preservation have been checked. Noncompliance are noted in 13. Image: Superior Containers needing acid/base preservation have been checked. Noncompliance are noted in 13. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation have been checked. Noncompliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation have been checked. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservation are found to be in compliance with EPA recommendation. Image: Superior Containers needing preservatiners needing preservatiners needing preservation are found to be
-Includes date/time/ID/Analysis Matrix: SL All containers needing acid/base preservation have been checked. Noncompliance are noted in 13. □ Yes □No □N/A All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, □Yes □No □N/A H2SO4, HCL<2; NaOH >12)
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13. All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3,
All containers needing preservation are found to be in compliance with EPA recommendation(HNO3,YesNoZN/A
compliance with EPA recommendation
Initial when Lot # of added
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)
Headspace in VOA Vials (>6mm):
Trip Blank Rresent:
Trip Blank Custody Seals Present
Pace Trip Blank Lot # (if purchased):
Client Notification/ Resolution:
Person Contacted: Date/Time:
Comments/ Resolution:
Project Manager Review: Date: 01912
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification

د اور امری

Attachment C

Waste Management Landfill Documents

Requested Disposal Facility Voyageur La	Indfill, Canyon, MN Profile Number
WASTE MANAGEMENT Renewal for Profile Number	Waste Approval Expiration Date
A. Waste Generator Facility Information (must	t reflect location of waste generation/origin)
1. Generator Name: Enbridge Pipeline Limited Partnership, LLC	2
2. Site Address: Superior Terminal - Tank 8	7. Email Address: Karl.Beaster@enbridge.com
3. City/ZIP: Superior	8. Phone: <u>(715) 394-1430</u> 9. FAX: <u>(715) 394-1500</u>
4. State: <u>WI</u>	10. NAICS Code: <u>486110</u>
5. County: Douglas	11. Generator USEPA ID #: <u>486110</u>
6. Contact Name/Title: Karl Beaster, Environmental Analyst	12. State ID# (if applicable): NA
B. Customer Information 🛛 same as above	P. 0. Number: Tank 8 Superior Terminal - 4/2011 - 49161092
1. Customer Name: Enbridge Energy	6. Phone: <u>(715) 394-1430</u> FAX: <u>(715) 398-3223</u>
2. Billing Address: <u>1100 Louisiana Ave, STE. 3300</u>	7. Transporter Name: Various Transporters
3. City, State and ZIP: Houston, TX 77002	8. Transporter ID # (if appl.):
4. Contact Name: Karl Beaster, Hans Wronka (Barr Eng.)	9. Transporter Address:
5. Contact Email: karl.beaster@enbridge.com,haw@barr.com	10. City, State and ZIP:
C. Waste Stream Information	
1. DESCRIPTION	
a. Common Waste Name: Crude Impacted Soil	
State Waste Code(s):	
b. Describe Process Generating Waste or Source of Contami	ination:
Crude oil release	
c. Typical Color(s): Brown	
d. Strong Odor? 🖸 Yes 🗹 No Describe:	
e. Physical State at 70°F: 🗹 Solid 🗅 Liquid 🗅 P	owder 🛛 Semi-Solid or Sludge 🖵 Other:
f. Layers? 🗹 Single layer 🛛 Multi- layer 🔍 NA	A
g. Water Reactive? 🖸 Yes 🗹 No 🛛 If Yes, Describe:	:
h. Free Liquid Range (%): to 🗹 NA	A(solid)
i. pH Range: □ ≤2 □ 2.1-12.4 □ ≥12.5 ☑ NA	A(solid) 🛛 Actual:
j. Liquid Flash Point: □ < 140°F □ ≥ 140°F	🗹 NA(solid) 🛛 Actual:
k. Flammable Solid: 🛛 Yes 🖬 No	
l. Physical Constituents: List all constituents of waste stre	am - (e.g. Soil 0-80%, Wood 0-20%): 🔲 (See Attached)
Constituents (Total Composition Must be > 100%)	Lower Range Unit of Measure Upper Range Unit of Measure
2	
3	
4	
6	
2 ESTIMATED QUANTITY OF WASTE AND SHIPPING INFORMATI	 ON
a Signa Time Event Disse Disperse Event	
h. Estimated Annual Quantity: 75	Cubic Varde D Drume D Gallons D Other (cnecify):
c. Shipping Froquency:	ner 🗋 Month 🔲 Quarter 🗍 Voar 🕅 One Time 🗍 Other
d. In this all S. Department of Transportation (USDOT) U	per la montri la quarter la rear la one rime la other la prandous Material2 (If use answer a) \Box Vec. \mathbf{M} Ne
u. Is this a U.S. Department of Transportation (USDOT) Ha	azaruous materiat: (11 yes, answer e.) 🖵 tes 🖾 NO
e. USUUI Shipping Description (if applicable):	
\s. SAFELT REQUIREMENTS (Handling, PPE, etc.):	

Generator's Non-hazardous Waste Profile Sheet

	Generator's Non-nazardous waste Profile Sneet		
_	WASTE MANAGEMENT		
_	D. Regulatory Status (Please check appropriate responses)		\rightarrow
1. 2.	Is this a USEPA (40 CFR Part 261)/State hazardous waste? If yes, contact your sales representative. Is this waste included in one or more of categories below (Check all that apply)? If yes, attach supporting documentation. Delisted Hazardous Waste Excluded Wastes Under 40 CFR 261.4 Treated Upgradeus Waste	Yes Yes	⊻ No ∑ No
2	Is the waste from a Federal (40 CFR 300 Annendix B) or state mandated clean-un? If yes, see instructions		No.
4.	Does the waste represented by this waste profile sheet contain radioactive material?	Yes	No No
	a. If yes, is disposal regulated by the Nuclear Regulatory Commission?		
	b. If yes, is disposal regulated by a State Agency for radioactive waste/NORM?		
5.	Does the waste represented by this waste profile sheet contain concentrations of regulated Polychlorinated Biphenyls (PCBs)? a. If yes, is disposal regulated under TSCA?	🗅 Yes	No No
6.	Does the waste contain untreated, regulated, medical or infectious waste?	🗅 Yes	No No
7.	Does the waste contain asbestos? 🖸 Yes 🗹 No If Yes, 🖵 Friable	🗅 Non	Friable
8.	Is this profile for remediation waste from a facility that is a major source of Hazardous Air Pollutants (Site Remediation	n NESHAI	[,]
	40 CFR 63 subpart GGGGG)?	🗹 No	
	If yes, does the waste contain <500 ppmw VOHAPs at the point of determination? \Box Yes	🔾 No	
	E. Generator Certification (Please read and certify by signature below)		
Ву	signing this Generator's Waste Profile Sheet, I hereby certify that all:		
1.	Information submitted in this profile and all attached documents contain true and accurate descriptions of the waste material	:	
2.	Relevant information within the possession of the Generator regarding known or suspected hazards pertaining to this waste hazards	is been	
	disclosed to WM/the Contractor;		
3.	Analytical data attached pertaining to the profiled waste was derived from testing a representative sample in accordance with		
	40 CFR 261.20(c) or equivalent rules; and		
4.	Changes that occur in the character of the waste (i.e. changes in the process or new analytical) will be identified by the Gener	ator	
	and disclosed to WM (and the Contractor if applicable) prior to providing the waste to WM (and the Contractor if applicable).		
5.	Check all that apply:		
	Attached analytical pertains to the waste. Identify laboratory & sample ID #'s and parameters tested:	2121213	
	Legend Analytical, Stockpile-1, Stockpile-2, BTEX and DRO # Pa	jes:	
	Only the analyses identified on the attachment pertain to the waste (identify by laboratory & sample ID #'s and parameter Attachment #:	s tested).	
	Additional information necessary to characterize the profiled waste has been attached (other than analytical).		
	Indicate the number of attached pages:		
	I am an agent signing on behalf of the Generator, and the delegation of authority to me from the Generator for this signat	ure is	
	available upon request.		
	By Generator process knowledge, the following waste is not a listed waste and is below all TCLP regulatory limits.		
Ce	Title: Environmental Analyst		
Co	mpany Name: Enbridge Energy, Limited Partnership, LLC Name (Print): Karl Beaster		
Da	ote: 04/25/11		
	FOR WM USE ONLY		
М	anagement Method: 🗅 Landfill 🗅 Bioremediation Approval Decision: 🗅 Approved 🔾 Not	Approved	
	Non-hazardous solidification 🗅 Other: Waste Approval Expiration Date:		
М	anagement Facility Precautions, Special Handling Procedures or Limitation 🛛 🗅 Shall not contain free liquid		
01	approval: Shipment must be scheduled into a	lisposal fa	cility
	Approval Number must accompany	each ship	ment
	🖵 Waste Manifest must accompany lo	ad	
W	M Authorization Name / Title: Date:		
St	ate Authorization (if Required): Date:		
1			/



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GENERATOR ANALYTICAL CERTIFICATION FORM Appendix B

In o kno	completing this form, the Generator certifies that, unless otherwise indicated on the attached analytical, to the best of his/her wledge:
শ	This waste does not contain regulated concentrations of the following metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver.
₫	This waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4-D, or 2, 4, 5-TP (Silvex).
2	This waste does not contain regulated concentrations of the following organics: benzene, carbon tetrachloride, chlorobenzene, chloroform, o-cresol, m-cresol, p-cresol, cresol (total), 1, 4-dichlorobenzene, 1, 2-dichloroethane, 1, 1-dichloroethylene, 2, 4-dinitrotoluene, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, methyl ethyl ketone, nitrobenzene, pentachlorophenol, pyridine, tetrachloroethylene, trichloroethylene (TCE), 2, 4, 5-trichlorophenol, 2, 4, 6-trichlorophenol, or vinyl chloride.
₫	This waste does not exhibit the characteristic of ignitability.
₫	This waste does not exhibit the characteristic of reactivity.
₫	This waste does not exhibit the characteristic of corrosivity.
₫	This waste does not contain regulated concentrations of PCBs (Polychlorinated Biphenyls).
₫	This waste does not contain regulated concentrations of TPH (oil and grease).
₫	This waste does not contain infectious wastes as defined by Minnesota Rules, Chapter 7035.
Ger Cor	erator Name: Enbridge Energy, Limited Partnership, LLC
Titl	e: Environmental Analyst Date: 04/25/11
Cor	nmon Name of Waste: Crude impacted soil

Attachment A

Master Enbridge Energy Soil Disposal Profile

Enbridge Energy, Limited Partnership

Generating site Address or Site ID:

Estimated Quantity:

Representative Sample ID Numbers:_____

Requested Disposal Facility:_____

By completing this form the generator certifies that the waste is identical to that described on the Master Enbridge Energy Soil Disposal Profile signed on ______, is the result of spills and/or leaks in uncontaminated soil and is not a hazardous waste, does not contain regulated radioactive material or regulated concentrations of PCBs. Any spills and/or leaks in any area with potential for additional contamination will be identified and profiled separately.

Project Reference Number (to appear on invoice): ______

*project number and site ID must appear on the invoice



88 Empire Drive St Paul, MN 55103 Tel: 651-642-1150 Fax: 651-642-1239

April 19, 2011

Ms. Andrea Nord Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435

Work Order Number: 1101489 RE: 49161092

Enclosed are the results of analyses for samples received by the laboratory on 04/08/11. If you have any questions concerning this report, please feel free to contact me.

All samples will be retained by LEGEND, unless consumed in the analysis, for 30 days from the date of this report and then discarded unless other arrangements are made.

WI Certification #998022410

Prepared by, LEGEND TECHNICAL SERVICES, INC

eri a. alson

Terri Olson Client Manager II tolson@legend-group.com

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Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Barr Engineering Co.	Project:	49161092			
4700 W 77th St	Project Number:	49161092		Work O	rder #: 1101489
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord		Date Re	eported: 04/19/11
	ANALYTICAL R	EPORT FOR SAM	MPLES		
Sample ID		Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile-1		1101489-01	Soil	04/07/11 10:45	04/08/11 08:45
Stockpile-2		1101489-02	Soil	04/07/11 10:50	04/08/11 08:45
Shipping Container Informat	ion Temperature (°C):				
Received on ice: Yes Received on melt water: No Custody seals: No	Temperature blank w Ambient: No	vas not present	Receive Accepta	d on ice pack: No ble (IH/ISO only): N	0

Case Narrative:



Barr Engineering Co.	Project:	49161092		
4700 W 77th St	Project Number:	49161092	Work Order #:	1101489
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported:	04/19/11

DRO/8015B Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1101489-01) Soil	Sampled: 04/07/1	1 10:45	Receive	ed: 04/08/11	8:45					
Diesel Range Organics	190	8.6	1.4	mg/kg dry	1	B1D1406	04/14/11	04/17/11	WI(95) DRO	
Surrogate: C-30	90.5			70-130 %		"	"	"	"	
Stockpile-2 (1101489-02) Soil	Sampled: 04/07/1	1 10:50	Receive	ed: 04/08/11	8:45					
Diesel Range Organics	1000	78	13	mg/kg dry	10	B1D1406	04/14/11	04/18/11	WI(95) DRO	
Surrogate: C-30	84.1			70-130 %		"	"	"	"	

Barr Engineering Co.		Projec	ct:	49161092	2					
4700 W 77th St		Projec	ct Number:	49161092	2			Wo	rk Order #: 1	101489
Barr Engineering Co. Project: 49161092 4700 W 77th St Project Number: 49161092 Work Order #: 11014 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 04/19/ WI(95) GRO/8015B Legend Technical Services, Inc. Analyte Result RL MDL Units Dilution Batch Prepared Analyzed Method Nr Stockpile-1 (1101489-01) Soil Sampled: 04/07/11 10:45 Received: 04/08/11 8:45 Benzene <0.028 0.028 0.0043 mg/kg dry 1 B1D0801 04/08/11 WI(95) GRO Ethylbenzene 0.13 0.028 0.0027 mg/kg dry 1 " " " Toluene <0.028 0.028 0.014 mg/kg dry 1 " " " " Surrogate: 4-Fluorochlorobenzene 100 80-150 % " " " " " " Stockpile-2 (1101489-02) Soil Sampled: 04/07/11 10:50 Received: 04/08/11 8:45 %<				4/19/11						
			WI(9	95) GRO/	/8015B					
		Le	egend Te	chnical \$	Services	, Inc.				
Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1101489-01) Soil	Sampled: 04/07/1	1 10:45	Received	: 04/08/11	8:45					
Benzene	<0.028	0.028	0.0043	mg/kg dry	1	B1D0801	04/08/11	04/08/11	WI(95) GRO	
Ethylbenzene	0.13	0.028	0.0053	mg/kg dry	1		"	"	"	
Toluene	<0.028	0.028	0.0027	mg/kg dry	1		"	"	"	
Xylenes (total)	0.29	0.085	0.014	mg/kg dry	1				"	
Surrogate: 4-Fluorochlorobenzene	100			80-150 %		"	"	"	"	
Stockpile-2 (1101489-02) Soil	Sampled: 04/07/1	1 10:50	Received	: 04/08/11	8:45					
Benzene	0.52	0.031	0.0047	mg/kg dry	1	B1D0801	04/08/11	04/08/11	WI(95) GRO	
Ethylbenzene	1.4	0.031	0.0058	mg/kg dry	1		"		"	
Toluene	1.9	0.031	0.0030	mg/kg dry	1		"	"	"	
Xylenes (total)	5.8	0.093	0.015	mg/kg dry	1		"	"	"	
Surrogate: 4-Fluorochlorobenzene	130			80-150 %		"	"	"	"	



Barr Engineering Co.		Proje	ct:	49161092	2					
4700 W 77th St Project N				49161092	2			Wo	rk Order #: 1	101489
Minneapolis, MN 55435		Project Manager: Ms. Andrea Nord Date Reported: 04								4/19/11
PERCENT SOLIDS Legend Technical Services, Inc.										
Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4700 W 77th St Project Number: 49161092 Work Order #: 11 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 04 PERCENT SOLIDS Legend Technical Services, Inc. Analyte Result RL MDL Units Dilution Batch Prepared Analyzed Method Stockpile-1 (1101489-01) Soil Sampled: 04/07/11 10:45 Received: 04/08/11 8:45 % Solids 88 % 1 B1D1412 04/14/11 04/15/11 % calculation										
% Solids	88			%	1	B1D1412	04/14/11	04/15/11	% calculation	
Stockpile-2 (1101489-02) Soil	Sampled: 04/07/1	1 10:50	Received	: 04/08/11	8:45					
% Solids	81			%	1	B1D1412	04/14/11	04/15/11	% calculation	



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DRO/8015B - Quality Control Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1D1406 - Sonication (Wisc DRO)										
Blank (B1D1406-BLK1)				F	Prepared	: 04/14/11	Analyzed	: 04/16/11			
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: C-30	14.0			mg/kg wet	16.0		87.5	70-130			
LCS (B1D1406-BS1)				F	Prepared	: 04/14/11	Analyzed	: 04/16/11			
Diesel Range Organics	56.8	8.0	1.3	mg/kg wet	64.0		88.8	70-120			
Surrogate: C-30	14.4			mg/kg wet	16.0		89.8	70-130			
LCS Dup (B1D1406-BSD1)				F	Prepared	: 04/14/11	Analyzed	: 04/17/11			
Diesel Range Organics	60.6	8.0	1.3	mg/kg wet	64.0		94.6	70-120	6.38	20	
Surrogate: C-30	15.4			mg/kg wet	16.0		96.3	70-130			



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WI(95) GRO/8015B - Quality Control Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1D0801 - EPA 5035 Soil (Pure	e and Tra)									
Blank (B1D0801-BLK1)	- 7			1	Prepared	& Analvze	ed: 04/08/1	1			
Benzene	< 0.025	0.025	0.0038	mg/kg wet		,					
Ethylbenzene	< 0.025	0.025	0.0047	mg/kg wet							
Toluene	< 0.025	0.025	0.0024	mg/kg wet							
Xylenes (total)	< 0.075	0.075	0.012	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	23.7			ug/L	25.0		94.8	80-150			
LCS (B1D0801-BS1)				i	Prepared	& Analyze	ed: 04/08/1	11			
Benzene	98.7			ug/L	100	-	98.7	80-120			
Ethylbenzene	102			ug/L	100		102	80-120			
Toluene	91.7			ug/L	100		91.7	80-120			
Xylenes (total)	309			ug/L	300		103	80-120			
Surrogate: 4-Fluorochlorobenzene	25.5			ug/L	25.0		102	80-150			
LCS Dup (B1D0801-BSD1)				i	Prepared	& Analyze	ed: 04/08/1	11			
Benzene	94.4			ug/L	100	-	94.4	80-120	4.44	20	
Ethylbenzene	96.7			ug/L	100		96.7	80-120	5.77	20	
Toluene	87.0			ug/L	100		87.0	80-120	5.31	20	
Xylenes (total)	291			ug/L	300		97.2	80-120	5.77	20	
Surrogate: 4-Fluorochlorobenzene	24.3			ug/L	25.0		97.4	80-150			
Matrix Spike (B1D0801-MS1)	S	ource: 1	101429-	02	Prepared	& Analyze	ed: 04/08/1	11			
Benzene	98.4			ug/L	100	<	98.4	80-120			
Ethylbenzene	103			ug/L	100	0.532	102	80-120			
Toluene	89.0			ug/L	100	0.176	88.8	80-120			
Xylenes (total)	314			ug/L	300	2.83	104	80-120			
Surrogate: 4-Fluorochlorobenzene	26.1			ug/L	25.0		105	80-150			



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PERCENT SOLIDS - Quality Control Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1D1412 - General Preparation											
Duplicate (B1D1412-DUP1)	S	ource:	1101577-08		Prepared:	04/14/11	Analyzed:	04/15/11			
% Solids	90.0			%		88.0			2.25	20	
Duplicate (B1D1412-DUP2)	S	ource:	1101586-06	i	Prepared:	04/14/11	Analyzed:	04/15/11			
% Solids	97.0			%		98.0			1.03	20	
Duplicate (B1D1412-DUP3)	S	ource:	1101586-12		Prepared:	04/14/11	Analyzed:	04/15/11			
% Solids	98.0			%		98.0			0.00	20	



88 Empire Drive St Paul, MN 55103 Tel: 651-642-1150 Fax: 651-642-1239

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Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported:	04/19/11

Notes and Definitions

- < Less than value listed
- dry Sample results reported on a dry weight basis
- NA Not applicable. The %RPD is not calculated from values less than the reporting limit.
- MDL Method Detection Limit
- RL Reporting Limit
- RPD Relative Percent Difference
- LCS Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)
- MS Matrix Spike = Laboratory Fortified Matrix (LFM)

88 Empire Drive St Paul, MN 55103 Tel: 651-642-1150 Fax: 651-642-1239







INDUSTRIAL WASTE & DISPOSAL SERVICES AGREEMENT

Exhibit A

CUSTOMER INFORMATION	GENERATOR INFORMATION (If different from Customer Information)	PROFILE NUMBER: 102701MN
Enbridge Energy	Enbridge Pipeline Limited Partnership	DISPOSAL FACILITY: Voyageur Landfill
1100 Louisiana Avenue Suite 3300	Superior Terminal-Culvert Repair Tank 8	EXPIRATION DATE: 04/26/2012
Houston, TX 77002	Superior, WI	PO NUMBER: tank 8 superior terminal
Contact Name: Karl Beaster		
Contact Phone: 715-394-1430		

Service Information	Material / Ticke	t Description	Anticipated	l Vo	lume	Rate	e / UOM / Minimum
Disposal	Crude Impacted Soil		Ton			\$37.00/To	'n
Profile Fee	Profile Fee			-		\$125.00	
Tax	All applicable Taxes						
Fuel	*See Note Below						
Environmental	\$5.00/load-less than 2 tons, 3	\$10.00/load- more than 2					
Transportation							
Digout (frozen lo	oad): \$50.00/load	Washout Fee:	\$100.00/load		Certificate	of Burial / D	Pestruction: \$50.00/each event
Containers provided by WM:	Quantity:	Size:		Qua	ntity:		Size:
Additional Information/Special	Acceptance of waste is required analytical, Indus manifested. Confirmatio Prices guoted herein an	contingent upon the co strial Waste & Disposal n will be sent to custom e valid for 60 days from	mpletion, submittal Services Agreemen er upon approval to Tuesday, April 26,	t (IS) t (IS) shi 2011	approval of s A), and Exhib p into design unless Wast	special w it A. All ated faci e Manage	aste profile sheet, loads must be lity. ement is hired for this
Handling.	project prior to the expirative the Service Agreement	ation of this 60 day perio	od in which case pr	icing	remains vali	d in acco	ordance with the terms of
	- The fuel surcharge perc and DOE average. The a invoice is generated.	centage can fluctuate or ctual percentage rate ap	n a weekly basis; <u>wy</u> oplied to the total pr	ww.w	<u>m.com</u> provi t invoice will	des the c be deter	urrent Fuel Surcharge mined the week that the
	- If Waste Management (must ensure that the tran	or a Waste Management asporter is licensed and	contracted hauler) approved to haul the	is N he S	OT providing becial Waste	the trans or Hazard	portation services, you dous Waste.
	- Please see profile appro	oval form for special ha	ndling instructions.	_			

THE WORK CONTEMPLATED BY THIS EXHIBIT A IS TO BE DONE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE INDUSTRIAL SERVICES AGREEMENT OR OTHER CONTRACTUAL AGREEMENT BETWEEN THE PARTIES DATED:

COMPA By:	Waste Management of Wisconsin, Inc.		CUSTOM By:	IER Enbridge Energy	04/26/11
Name:	Becky Baumann	Date	Name:	Karl Beaster	Date
Title	Technical Service Representative		Title:	Environmental Analyst	
	(800)WMDisposal or (800) 963-4776				

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INDUSTRIAL WASTE SERVICES & DISPOSAL AGREEMENT

COMPANY:	Waste Management of Wiscons A Waste Management Compa	sin, Inc	CUSTOMER: Enbridge Energy	
Name: <u>Bec</u>	cky Baumann	Date	Name: Karl Beaster Title: Environmental Analyst	04/26/11 Date
			Initial Term: <u>36</u> months	

This Industrial Waste & Disposal Services Agreement, consisting of the terms and conditions set forth herein, and Exhibit A, and/or Confirmation Letter(s) and the Profile Sheet(s) entered into from and after the date hereof from time to time (all of the foregoing being collectively referred to as the "Agreement"), is made as of the Effective Date shown above by and between the Customer named above, on its and its subsidiaries and affiliates behalf (collectively, "Customer") and the Waste Management entity named above ("the Company").

TERMS AND CONDITIONS

1. SERVICES PROVIDED. The Company will provide Customer with collection, management, transportation, disposal, treatment, and recycling services ("Services") for Customer's non-hazardous solid waste, special waste, and/or hazardous waste (collectively "Industrial Waste") as described on Exhibit A and/or Confirmation Letter(s) and/or applicable Profile Sheets. Solid Waste means garbage, refuse and rubbish including those which are recyclable but excluding Special Waste and Hazardous Waste. Special Waste includes polychlorinated biphenyl ("PCB") wastes, industrial process wastes, asbestos containing material, petroleum contaminated soils, treated/decharacterized wastes, incinerator ash, medical wastes, demolition debris and other materials requiring special handling in accordance with applicable federal, state, provincial or local laws or regulations. Hazardous Waste means any toxic or radioactive substances, as such terms are defined by applicable federal, state, provincial or local laws or regulations. All Industrial Waste that is generated, handled and/or collected by Customer shall be managed exclusively by Company during the term of this Agreement. When Company handles special or hazardous waste for Customer, Customer will provide Company with a Generator's Waste Profile Sheet ("Profile Sheet") describing all special or hazardous waste, and provide a representative sample of such waste on request. In the event this Agreement includes transportation by Company, Customer shall, at the time of tender, provide to Company accurate and complete documents, shipping papers or manifests as are required for the lawful transfer of the special or hazardous waste under all applicable federal, state or local laws or regulations. Tender of delivery shall be considered nonconforming if not in accordance with this Paragraph.

2. CUSTOMER WARRANTIES. Customer hereby represents and warrants that all waste material delivered by Customer to Company shall be in accordance with waste descriptions given in this Agreement and shall not be or contain any Nonconforming Waste. "Nonconforming Waste" means: (a) nonhazardous Solid Waste that contains regulated Special Waste or Hazardous Waste; (b) waste that is not in conformance with the description of the waste in Exhibit A, the Confirmation Letter(s) or the Profile Sheet incorporated herein; (c) waste that is or contains any infectious waste, radioactive, volatile, corrosive, flammable, explosive, biomedical, biohazardous material, regulated medical or hazardous waste or toxic substances, as defined pursuant to or listed or regulated under applicable federal, state or local law, except as stated on the Profile Sheet or Confirmation Letter; or (d) waste that is prohibited from being received, managed or disposed of at the designated disposal facility by federal, state or local law, regulation, rule, code, ordinance, order, permit or permit condition. Customer (including its subcontractors) represents and warrants that it will comply with all applicable laws,

ordinances, regulations, orders, permits or other legal requirements applicable to the Industrial Waste.

3. TERM OF AGREEMENT; RIGHT OF FIRST REFUSAL. The Initial Term of this Agreement shall be 36 months, commencing on the Effective Date set forth above. This Agreement shall automatically renew thereafter for additional terms of twelve (12) months each ("Renewal Term") unless either party gives to the other party written notice of termination at least ninety (90) days prior to the termination of the then-existing term; provided however, that the terms and conditions of this Agreement shall remain in full force and effect, in accordance with its terms, with respect to any uncompleted or unfinished Service provided for in an Exhibit A, Confirmation Letter and/or Profile Sheet until such Service is completed. Customer grants to Company a right of first refusal to match any offer which Customer receives or intends to make after the completion of any Term of this Agreement relating to any services provided hereunder and further agrees to give Company prompt written notice of any such offer and a reasonable opportunity to respond to it.

4. INSPECTION; REJECTION OF WASTE. Title to and liability for Nonconforming Waste shall remain with Customer at all times. Company shall have the right to inspect, analyze or test any waste delivered by Customer. If Customer's Industrial Waste is Nonconforming Waste, Company can, at its option, reject Nonconforming Waste and return it to Customer or require Customer to remove and dispose of the Nonconforming Waste at Customer's expense. Customer shall indemnify, hold harmless (in accordance with Section 9) and pay or reimburse Company for any and all costs, damages and/or fines incurred as a result of or relating to Customer's tender or delivery of Nonconforming Waste or other failure to comply or conform to this Agreement, including costs of inspection, testing and analysis.

5. SPECIAL HANDLING; TITLE. If Company elects to handle, rather than reject, Nonconforming Waste, Company shall have the right to manage the same in the manner deemed most appropriate by Company given the characteristics of the Nonconforming Waste. Company may assess and Customer shall pay additional fees associated with delivery of Nonconforming Waste, including, but not limited to, special handling or disposal charges, and costs associated with different quantities of waste, different delivery dates, modifications in operations, specialized equipment, and other operational, environmental, health, safety or regulatory requirements. Title to and ownership of acceptable Industrial Waste shall transfer to Company upon its final acceptance of such waste.

6. COMPANY WARRANTIES. Company hereby represents and warrants that: (a) Company will manage the Industrial Waste in a safe and workmanlike manner in full compliance with all valid and applicable federal, state INDUSTRIAL WASTE & DISPOSAL AGREEMENT and local laws, ordinances, orders, rules and regulations; and (b) it will use disposal facilities that have been issued permits, licenses, certificates or approvals required by valid and applicable laws, ordinances and regulations necessary to allow the facility to accept, treat and/or dispose of Industrial Waste. Except as provided herein, Company makes no other warranties and hereby disclaims any other warranty, whether implied or statutory.

7. LIMITED LICENSE TO ENTER. When a Customer is transporting Industrial Waste to a Company facility, Customer and its subcontractors shall have a limited license to enter a disposal facility for the sole purpose of offloading Industrial Waste at an area designated, and in the manner directed, by Company. Customer shall, and shall ensure that its subcontractors, comply with all rules and regulations of the facility, as amended. Company may reject Industrial Waste, deny Customer or its subcontractors entry to its facility and/or terminate this Agreement in the event of Customer's or its subcontractors' failure to follow such rules and regulations.

8. CHARGES AND PAYMENTS. Customer shall pay the rates set forth on Exhibit A or a Confirmation Letter, which may be modified as provided in this Agreement. The rates may be adjusted by Company to account for: any increase in or to recoup all or any portion of, disposal, transportation, fuel or environmental compliance fees or costs; any change in the composition of the Industrial Waste; increased costs due to uncontrollable circumstances, including, without limitation, changes in local, state or federal laws or regulations, imposition of taxes, fees or surcharges and acts of God such as floods, fires, etc. Company may also increase the charges to reflect increases in the Consumer Price Index for the municipal or regional area in which the Services are rendered. Increases in charges for reasons other than as provided above require the consent of Customer which may be evidenced verbally, in writing or by the actions and practices of the parties. All rate adjustments as provided above and in Paragraph 5 shall take effect upon notification from Company to Customer. Customer shall pay the rates in full within 30 days of receipt of each invoice from Company. Customer shall pay a late fee on all past due amounts accruing from the date of the invoice at a rate of eighteen percent (18%) per annum or, if less, the maximum rate allowed by law.

9. INDEMNIFICATION. The Company agrees to indemnify, defend and save Customer harmless from and against any and all liability (including reasonable attorneys fees) which Customer may be responsible for or pay out as a result of bodily injuries (including death), property damage, or any violation or alleged violation of law, to the extent caused by Company's breach of this Agreement or by any negligent act, negligent omission or willful misconduct of the Company or its employees, which occurs (1) during the collection or transportation of Customer's Industrial Waste by Company, or (2) as a result of the disposal of Customer's Industrial Waste, after the date of this Agreement, in a facility owned by a subsidiary or affiliate of Waste Management, Inc., provided that the Company's indemnification obligations will not apply to occurrences involving Nonconforming Waste.

Customer agrees to indemnify, defend and save the Company harmless from and against any and all liability (including reasonable attorneys fees) which the Company may be responsible for or pay out as a result of bodily injuries (including death), property damage, or any violation or alleged violation of law to the extent caused by Customer's breach of this Agreement or by any negligent act, negligent omission or willful misconduct of the Customer or its employees, agents or contractors in the performance of this Agreement or Customer's use, operation or possession of any equipment furnished by the Company.

Neither party shall be liable to the other for consequential, incidental or punitive damages arising out of the performance of this Agreement.

10. UNCONTROLLABLE CIRCUMSTANCES. Except for the obligation to make payments hereunder, neither party shall be in default for its failure to perform or delay in performance caused by events beyond its reasonable control, including, but not limited to, strikes, riots, imposition of laws or governmental orders, fires, acts of God, and inability to obtain equipment, permit changes and regulations, restrictions (including land use) therein, and the affected party shall be excused from performance during the occurrence of such events.

11. ASSIGNMENT. This Agreement shall be binding on and shall inure to the benefit of the parties and their respective successors and assigns.

12. ENTIRE AGREEMENT. This Agreement represents the entire understanding and agreement between the parties relating to the management of waste and supersedes any and all prior agreements, whether written or oral, between the parties regarding the same; provided that, the terms of any national service agreement between the parties shall govern over any inconsistent terms herein.

13. TERMINATION; LIQUIDATED DAMAGES. Company may immediately terminate this Agreement, (a) in the event of Customer's breach of any term or provision of this Agreement, including failure to pay on a timely basis or (b) if Customer becomes insolvent, the subject of an order for relief in bankruptcy, receivership, reorganization dissolution, or similar law, or makes an assignment for the benefit of its creditors or if Company deems itself insecure as to payment ("Default"). Notice of termination shall be in writing and deemed given when delivered in person or by certified mail, postage prepaid, return receipt requested. In the event Customer terminates this Agreement prior to the expiration of any Initial or Renewal Term for any reason other than as provided herein, or in the event Company terminates this Agreement for Customer's Default, liquidated damages in addition to the Company's legal fees shall be paid and calculated as follows: 1) if the remaining Initial Term under this Agreement is six or more months, Customer shall pay its most recent monthly charges multiplied by six; 2) if the remaining Initial Term under this Agreement is less than six months, Customer shall pay its most recent monthly charges multiplied by the number of months remaining in the Term; 3) if the remaining Renewal Term under this Agreement is three or more months, Customer shall pay its most recent monthly charges multiplied by three; or 4) if the remaining Renewal Term under this Agreement is less than three months, Customer shall pay its most recent monthly charges multiplied by the number of months remaining in the Renewal Term. Customer acknowledges that the actual damage to Company in the event of termination is difficult to fix or prove, and the foregoing liquidated damages amount is reasonable and commensurate with the anticipated loss to Company resulting from such termination and is an agreed upon fee and is not imposed as a penalty. Collection of liquidated damages by Company shall be in addition to any rights or remedies available to Company under this Agreement or at common law.

14. MISCELLANEOUS. (a) The prevailing party will be entitled to recover reasonable fees and court costs, including attorneys' fees, in interpreting or enforcing this Agreement. In the event Customer fails to pay Company all amounts due hereunder, Company will be entitled to collect all reasonable collection costs or expenses, including reasonable attorneys fees, court costs or handling fees for returned checks from Customer; (b) The validity, interpretation and performance of this Agreement shall be construed in accordance with the law of the state in which the Services are performed; (c) If any provision of this Agreement is declared invalid or unenforceable, then such provision shall be deemed severable from and shall not affect the remainder of this Agreement, which shall remain in full force and effect; (d) Customer's payment obligation for Services and the Warranties and Indemnification made by each party shall survive termination of this Agreement.

Agreed & Accepted

COMPANY

Signed:

CUSTOMER

Signed:

1/1

NON-HAZARDOUS	WASTE MANIFEST 5650
WASTE MANAGEMENT If waste is NOT asbestos waste, con	mplete only Sections 1,2,3,4, and 5. Manifest No.
SECTION 1 GENERATOR INFORMATIO	ON (generator to complete)
a) Generator's Name: Enbridge Pipelines () Ge	serating Location (Name): Enbridge Apelines
b) Generator's Address: Various k) Add	19161092 Superios Serminal - 1/2011-
c) Generator's Representative: Dennis Weelon d) Tel	ephone Number: (7/5) 398 8323
d) Telephone Number: (715) 398 832 5	
B. Common Name of Waster C. C. Wolf IM Discreted Soil minas	hestos ONLY - Friable: Both;
a) Description of Waster	Non-friable; N/A /
n) Typ A) Long Tons Other Other	e of Containers: T R How many / TYPE OF CONTAINERS TR - TRUCK DM - METAL DRUM DP - PLASTIC DRUM BA - BAG
 o) I hereby warrant that the above named material is the same material as represented identified by the above Waste Management Code and such material was deliver. 	ated on the Special Waste Disposal Application ed to the transporter on the shipment date referenced BC - 12 MIL. PLASTIC BAG
Dennis Weden Danis	m. Nedan - 3-5-11
Generator's Authorized Agent Name (print/type) Signature of Cen	SECTION 3 TRANSFER FACILITY - (Complete if applicable)
SECTION 2 TRANSPORTENT	
a) Transporter's Name:	a) Transfer Facility's Name:
b) Transporter's Address:	b) Transfer Facility's Address:
c) Telephone Number: (19 219 30 30	c) Telephone Number: ()
d) Vehicle License No /State:	d) Vehicle License No./State:
e) Trailer or Container No.:	e) Trailer or Container No.:
n Name of Driver (print/type)EFF flefflef	Authorized Agent (print/type)
g) I hereby warrant that the above named and described material was received from the generator on the date of delivery referenced below.	(a) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Disposing of Driver / Date of Receipt h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.	 n) individual warming that the above named and described material was universed to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Driver Date of Delivery	Signature of Transfer Facility's Authorized Agent Date of Delivery
SECTION 4 TRANSPORTER 2 - (Complete if applicable)	SECTION 5 DESTINATION (Disposal Facility)
a) Transportar's Name:	a) Disposal Facility's Name: CANYON LANDFILL Permit No.
h) Transporter's Ardraes:	b) Physical Address: 6830 Hwy 53, CANYON, MN 55717
b) Transporters Autoress.	c) Telephone Number; (218) 345-6303
c) relephone Number: ()	d) Mailing Address
d) Vehicle License No./State:	e) Name of Disposal Facility's
e) Trailer or Container No.:	1) The material delivered by the Transporter has been received at the Disposal
f) Name of Driver (print/type)	Facility anen Mali 5-5-11
(9) I hereby warrant that the above named and described material was received on the date of receipt referenced below. Date of Descript	Signature of Disposal/Facility's Authorized Agent Date of Receipt g) The material delivered by the Transporter has been rejected at the Disposal at the Disposal Facility.
h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.	Signature of Disposal Facility's Authorized Agent Date of Rejection
Signature of Driver	Signature of Driver Date of Rejection
SECTION 6 ASBESTOS (operational de la contraction de la contractio	tor to complete)
"Operator" is defined as the company which owns, leases, operates, controls, renovation operation or both.	or supervises the facility being demolished or renovated, or the demolition or
a) Operator's Name: C) Tele	
b) Operator's Address:	
 d) Recommended special handling instructions and additional information: 	
e) Operator's Certification: I hereby warrant and declare that the contents of this and are classified, marked, and labeled, and are in all respects in proper cond law, regulations, ordinances, orders, rules and/or standards.	consignment are fully and accurately described above by proper shipping name tition for transport by highway according to applicable international and domestic
Operator's Name (print/type) Signature of Operator's	Authorized Agent Date
f) Responsible Agency Name and Address: Metro 651-296-6300 Out of State 1-800-657-3864	St. Paul, MN 55155
WHITE DESTINATION (Disposal Facility) CANARY-GE	NERATOR PINK-TRANSPORTER GOLD-GENERATOR

NON-HAZARDOUS	VASTE MANIFEST
If waste is asbestos waste	complete all Sections. Manifest No. 2007
STE MANAGEMENT If waste is NOT asbestos waste, com	plete only Sections 1,2,3,4, and 5.
TION 1 GENERATOR INFORMATIC	N (generator to complete)
enerator's Name: Enbridge Pipelines)) Ger	erating Location (Name): Enbridge hpelines
enerator's Address: Vacious k) Add	161093
Dennis Herlen di Tele	phone Number: (7/5) 398 8323
anerator's Representative: <u>Derring Weblan</u> of role	prove reason () .)
ASTE MANAGEMENT APPROVAL CODE	
mmon Name of Waster Crienter im aschool soil miAst	estos ONLY - Friable; Both;% friable% non-friable
escription of Wester	Non-friable; N/A
n) Typ	e of Containers: TR How many TR - TRUCK
	DM - METAL DRUM
D'Cubic YardsOther	BA - BAG
hereby warrant that the above named material is the same material as represen	ted on the Special Waste Disposal Application BB - 6 MIL. PLASTIC BAG BC - 12 MIL. PLASTIC BAG
dentified by the above Waste Management Code and such material was delivered	d to the transporter on the shipment date referenced
Dennis Wedan Abrais	M. 11eaan 5-3-11
enerator's Authorized Agent Name (print/type) Signature of Gene	irator's Authorized Agent Snipment Date
CTION 2 TRANSPORTER 1	SECTION 3 THANSFER PACIENT Complete in applicable)
ransporter's Name: AJS Lawneans	a) Transfer Facility's Name:
ransporter's Address: 6386 Hwy 2 Du hot mo	b) Transfer Facility's Address:
elephone Number: (2/8) 779-4686	c) Telephone Number: ()
Abicle License No /State: PAH5361 Mas	d) Vehicle License No./State:
frailer or Container No.:	e) Trailer or Container No.:
Name of Driver (print/type) Passault Prov	Authorized Agent (print/type)
hereby warrant that the above named and described material was received rom the generator on the date of delivery referenced below.	g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
gnature of Driver Date of Receipt hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.	Signature of Transfer Facility's Authorized Agent Date of Receipt h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Bite of Delivery	Signature of Transfer Facility's Authorized Agent Date of Delivery
CTION 4 TRANSPORTER 2 - (Complete if applicable)	SECTION 5 DESTINATION (Disposal Facility)
	a) Discosal Facility's Name: CANYON LANDFILL Permit No.
Iransporter's Name:	b) Physical Address: 6830 Hwy 53, CANYON, MN 55717
Transporter's Address:	 a) Tolophone Number (218) 345-6303
Telephone Number: ()	d) Mailing Address:
Vehicle License No./State:	e) Name of Disposal Facility's
Trailer or Container No.:	1) The material delivered by the Transporter has been received at the Disposal
Name of Driver (print/type)	Facility Mari 5-5-11
on the date of receipt referenced below.	Signature of Disposal Facility's Authorized Agent Date of Receipt 9) The material delivered by the Transporter has been rejected at the Disposal at the Disposal Facility's Authorized Agent
ignature of Drivor Date of Receipt I hereby warrant that the above named and described material was delivered on the delivery date referenced below.	Signature of Disposal Facility's Authorized Agent Date of Rejection
Date of Delivory	Signature of Driver Date of Rejection
Agnature of Driver ASBESTOS (opera	tor to complete)
Derator" is defined as the company which owns, leases, operates, controls, inovation operation or both.	or supervises the facility being demolished or renovated, or the demolition or
Operator's Name: c) Tele	phone Number: ()
Operator's Address:	
Recommended special handling instructions and additional information:	
Operator's Certification: I hereby warrant and declare that the contents of this and are classified, marked, and labeled, and are in all respects in proper condi law, regulations, ordinances, orders, rules and/or standards.	consignment are fully and accurately described above by proper shipping name tion for transport by highway according to applicable international and domestic
Objective of Occupied	uthorized Apant Date
Signature of Operator's	Date Date
Operator's Name (printrype) Operator's Name (printrype)	St Paul MN 55155
Derator's Name (phintype) Responsible Agency Metro 651-296-6300 Out of State 1-800-657-3864	St. Paul, MN 55155

NON-HAZARDOUS	WASTE MANIFEST
WASTE MANAGEMENT	e, complete all Sections maintee and Sections 1224 and 5 Manifest No. 5658
If waste is NOT asbestos waste, con GENERATOR INFORMATIC	piete only Sections 1,2,3,4, and 5.
SECTION 1	Entrados Apelinos
a) Generator's Name: <u>Control generator</u> j) Gen	erating Location (Name):
b) Generator's Address: Varians k) Add	19/6/092
c) Generator's Representative: Dennis Wedan d) Tele	(phone Number: (715) 398 8323
d) Telephone Number: (715) 398 8323	
e) WASTE MANAGEMENT APPROVAL CODE	
f) Common Name of Waste: CT nove Impacted Soll m) Ast	estos ONLY - Friable; Both; % friable % non-friable Non-friable; N/A
b) Diseased Volume: n) Typ	be of Containers: TR How many TR - TBUCK
	DM - METAL DRUM
Number of Containers:	BA - BAG
 o) I hereby warrant that the above named material is the same material as represented and the same material as represented as the same material as represented as the same material as represented as the same material as the same	ted on the Special Waste Disposal Application BB - 6 MIL. PLASTIC BAG BC - 12 MIL. PLASTIC BAG
identified by the above Waste Management Code and such material was delivered	to the transporter on the shipment date referenced
Dennis Weden Dennie	arator's Authorized Agent Shipment Date
Generator's Authorized Agent Name (print/type) Signature of Gene	SECTION 3 TRANSFER FACILITY - (Complete if applicable)
SECTION 2 THANSPORTER I	
a) Transporter's Name:	a) Transfer Facility's Name:
b) Transporter's Address:	b) Transfer Facility's Address:
c) Telephone Number: ()	c) Telephone Number: ()
d) Vehicle License No./State: DAU 3283 mm	d) Vehicle License No./State:
o) Trailer or Centainer No.: 393	e) Trailer or Container No.:
f) Name of Driver (print/type) Koss Kump Ki	Authorized Agent (print/type)
g) I hereby warrant that the above named and described material was received from the generator on the date of delivery referenced below.	g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Odjustule of Driver Date of Receipt h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.	Stanature of Transfer Facility's Authorized Agent Date of Receipt h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery reference below.
Date of Delivery	Signature of Transfer Facility's Authorized Agent Date of Delivery
Signature of Driver SECTION 4 TRANSPORTER 2 - (Complete if applicable)	SECTION 5 DESTINATION (Disposal Facility)
A Transmission Manage	a) Disposal Facility's Name: CANYON LANDFILL Permit No.
a) Transporter's Name.	b) Physical Address: 6830 Hwy 53, CANYON, MN 55717
D) Transporter's Address	c) Telephone Number; (218) 345-6303
c) Telephone Number: ()	(f) Mažing Address:
d) Venicie License No./State:	e) Name of Disposal Facility's Authorized Acent (crint/hope)
e) Trailer or Container No.:	I) The material delivered by the Transporter has been received at the Disposal
 Name of Driver (print/type) Name of Driver (print/type) 	Facility anew Mula 5-5-11
on the date of receipt referenced below.	Signature of Disposal Facility's Authorized Agent Date of Receipt 9) The material delivered by the Transporter has been rejected at the Disposal at the Disposal Facility
Eignature of Driver Date of Receipt h) I hereby warrant that the above named and described material was delivered	Signature of Disposal Facility's Authorized Agent Date of Rejection
	Signature of Driver Date of Beledion
Signature of Driver Date of Delivery	light to complete)
SECTION 6 ASBESTOS (opera	or supervises the facility being demolished or renovated, or the demolition or
"Operator" is defined as the company which owns, leases, operates, controls, renovation operation or both.	whone Number (
a) Operator's Name: c) tele	
b) Operator's Address:	
 d) Recommended special handling instructions and additional information: 	service with and ecourately described above by pro
 Operator's Certification: I hereby warrant and declare that the contents of this and are classified, marked, and labeled, and are in all respects in proper condi law, regulations, ordinances, orders, rules and/or standards. 	consignment are fully and accurately described above by proper snipping name kion for transport by highway according to applicable international and domestic
Operator's Name (print/type) Signature of Operator's	Authorized Agent Date
Minnesota Pollution Control Agency, 520 Lafayette Rd. N.,	St. Paul, MN 55155
Hesponsible Agency Metro 651-296-6300 Out of State 1-800-657-3864 WHITE-DESTINATION (Disposal Facility) CANARY-GE	NERATOR PINK-TRANSPORTER GOLD-GENERATOR
WHITE DESTINATION (Disposal racindy) Contract OF	

If waste is asbestos was	te, complete all Sections. Mani	69893
If waste is NOT asbestos waste, co	ON (generator to complete)	
SECTION 1 Enbridge Pineline Limited Partnership	Enbridge Pipeline Lin	nited Partnership
) Generator's Name: .)) G	anerating Location (Name):	
Various Locations	Tank 28 Superior Ten	minal-4/2011-1916
) Generator's Address: k) A	dress:.	11111111-112011-1010
	8	
d) Generator's Representative: d) To	lephone Number: 715.300.9333	
Dennis vyedan	110-000-0020	
MARTE MANAGEMENT APPROVAL CODE		
102777WIN		
Common Name of Waste: m)A	ibestos ONLY - C Friable; Both;	able % non-friable
Description of Waste: Crude Impacted Soil	Non-friable; N/A	
n) Disposal Volume: n) T	pe of Containers: How many	TYPE OF CONTAINE
30117 The Cubic Varde Other		DM - METAL DRUM
Number of Containers:		BA - BAG
) I berefy warrant that the above named material is the same material as represent	ented on the Special Waste Disposal Application	BB - 6 MIL. PLASTIC BA
Identified by the above Waste Management Code and such material was delive	rec to the transporter on the shipment date referenced	DO - TE MIL. PDAOTIO B
below. Dennis wedan prince	LM. 7 Lean 5/9/11	-
Generator's Authorized Agent Name (print/type) Signature of Ge	serator's Authorized Agent Shipment Date	
SECTION 2 TRANSPORTER 1	SECTION 3 TRANSFER FACILITY - (Complete if)	applicable)
) Transporter's Name CRL	a) Transfer Facility's Name:	
Transporter's Artifrass	b) Transfer Facility's Address:	
Talanhana Number: TS21700	c) Telephone Number:	
	d) Vehicle License No /State:	
b) Venicle License No. State: 456 424 WVA	e) Trailer or Container No	
a) Trailer or Container No.:	f) Name of Transfer Facility's	
) Name of Driver (print/type)	a) I bereby warrant that the above named and describe	d material was received
from the generator on the date of delivery referenced below.	from the transporter on the date of receipt reference	ed below.
Date of Beceint	Signature of Transfer Facility's Authorized Agent Date	e of Receipt
Signature of Driver Date of Receipt b) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.	Signature of Transfer Facility's Authorized Agent Date h) I hereby warrant that the above named and describe to the transporter without incident or contamination referenced below.	e of Receipt ad material was delivered a on the date of delivery
Signature of Driver Date of Receipt)1 hereby warrant that the above named and described material was delivered without includent or contamination on the date of oblivery referenced below. Signature of Driver Date of Delivery	Signature of Transfer Facility's Authorized Agent Date h) I hereby warrant that the above named and describe to the transporter without incident or contamination referenced below. Signature of Transfer Facility's Authorized Agent Date	e of Receipt ed material was delivered a on the date of delivery a of Delivery
Sprainford of Oriver) Interview and that the above named and described material was delivered without insiderit et c-contamingtion on the date of delivery referenced below. Signature of Oriver Sectory 4 TRANSPORTER 2 - (Complete It applicable)	Signature of Transfer Facility's Authorized Agent Date (h) I hereby warrant that the above named and describe to the transporter without incident or contamination referenced below. Signature of Transfer Facility's Authorized Agent Date SECTION 5 DESTINATION (Disposal Facility)	e of Receipt ed material was delivered n on the date of delivery a of Delivery lity)
Spratig of Dhip: Date of Peocopt I hanning warmat that the above named and described material was delivered without lackenin or contamination on the date of delivery ("Withmose below." Signature of Dhiver Date of Delivery SECTION 4 TRANSPORTER 2 - (Complete If applicable) I Transporter Kamer	Signature of Transfer Facility's Authorized April Dek 1) I bendy warren that it be above named and describ to the transporter without incident or contemination referenced below. Signature of Transfer Facility's Authorized Agont Dek SECTION 5 DESTINATION (Disposal Facil e) Disposal Facility's Name:	e of Receipt ed material was delivered on the date of delivery e of Delivery lity)
Softation of Driver Date of Driver without instant are softation to the date of delivered without instant or exoftatington on the date of delivery offermage below. Segneture of Driver Date of Delivery Date of Delivery Date of Delivery Date of Delivery Date of Delivery TRANSPORTER 2 - (Complete II applicable) 1) Transporter's Name:	Signature of Transfer Facility Authorised Agent Data (1) Identity warms that the back are attacked of describ- tio the transporter without incident or contamination referenced below. Signature of Transfer Facility's Authorized Agent Data BEECTION 6 DESTINATION (Disposel Facil a) Disposal Facility's Name: D Physical Address: Voyageur Landfill (1)	o of Receipt ed material was delivered on the date of delivery a of Delivery lity) SW-428)
Softation of Driver Date of Drecotet Difference of Drecotet Difference of Drecotet Difference of Drecotet Signature of Dreve Signature of Dreve Date of Delivery Date	Signature of Transfer Facility & Authorised April Data In hereby smarth that he above mand and describ- to the transporter without Incident or contamination referenced below. Signature of Transfer Facility & Authorized April Data SECTON 5 DESTINATION (Disposal Facility Disposal Facility's Name: Voyageur Landfill (Disposal Facility's Name: Voyageur Landfill (Disposal Facility's Science of Society So	of Receipt ed material was delivered on the date of delivery a of Delivery litty) SW-428) son, MN 55717
Softation of Driver Date of Record without incident or containington on the date of delivery delivered without incident or containington on the date of delivery. Difference Software Sectory of Driver Sectory of Driver Transporter's Name:) Transporter's Adosses:) Transporter's Adosses:) Transporter's Adosses:	Signatus of Transfer Facility & Mutholds Aprol. Dist In the transport with the the down mends and described In the transporter without incident or contamination referenced below. Signature of Transfer Facility & Mutholds Aprox. BECTION 5 DESTINATION (Disposal Facil O Disposal Facility Name: O Disposal Facility Name: O Disposal Facility Name: O Signature of Transfer Facility Automotive Aprox. O Signature of Transfer Facility Automotive Aprox. Disposal Facility Name: O Signature of Transfer Facility Automotive Aprox. O Signature of Transfer Facility Automotive Aprox. O Signature of Transfer Facility Automotive Aprox. Disposal Facility Name: O Signature of Transfer Facility Automotive Aprox. O Signature of Transfer Facility Automotive Aprox. O Signature of Transfer Facility Automotive Aprox. Disposal Facility Automotive Aprox. O Signature of Transfer Facility Automotive Aprox. O Signature of Transfer Facility Automotive Aprox. Disposal Facility Automotive Aprox. O Signature of Transfer Facility Aprox. O Signature of Transfer Facility Aprox. O Signature of Transfer Facility Aprox. O Signature of Transfer Aprox. O Signature of Transfer Aprox. O Signature of Tr	of Receipt of material was delivered on the date of delivery of Delivery lity) SVV-428) con, MN 55717
Sofatilizé of Driver Date of Peocold 1) Interjev jeureszite ti the above named and described material was oblivered without leadent or containington on the date of delivery ("differences balow." Signature of Driver SectorOxi & TRANSPORTER 2 - (Complete if applicable) 1) Transporter's Name: 1) Transporter's Address: 1) Transporter's Address: 1) Transporter's Address: 1) Transporter's Address: 1) Transporter's Address:	Bipphare of Transfer Facility's Autorities April Toxis Toxis and a second sec	of Receipt of material was delivered on the date of delivery a of Delivery lity) SW-428) son, MN 55717
Signalia of Dher Date of Peocolt Difference of Dher Difference of Dher Signature of Dher Signature of Dher Signature of Dher Date of Delivery Date o	Signature of Transfer Facility & Authorised April Data In the transporter without Incident or communited Interby warms that the above mand and describ- to the transporter without Incident or communited Interby and the answer of the answer of the answer of the Signature of Transfer Facility's Authorized April Data SECTOR 5 DESTINATION (Disposal Facil Disposal Facility's Name: Waing Address: Woyageur Landfill (3 Signature of Transfer Facility's Mailing Address: 218-345-6303 Mailing Address: Mainer of Disposal Facility's Mainer of Disposa	o of Receipt of material was delivered on the date of delivery a of Delivery lity) SVV-428) Ron, MIN 55717 received at the Disposel
Softation of Driver Softation of Driver without incident or containington on the data of desired desired without incident or containington on the data of delivery (offernance before Signifum of Driver Secretary of	Signature of Transfer Facility's Autoritiest April Date In Jonetary summarial that the above named and describ- to the transporter without incident or contaminated referenced before. Constraints of Control Control Control Control Signature of Transfer Facility's Autorized Againt Date State State State Signature of Transfer Facility's Autorized Againt Date State State Signature of Transfer Facility's Autorized Againt Date State State Signature of Transfer Facility's Autorized Againt Date State State Signature of Transfer Facility's Autorized Againt Date State State Signature of Transfer Facility's Autorized Againt Date State State Signature of Transfer Facility's Signature of Transfer Facility's The Againt Address: Signature of Transfer Facility's The Againt Address Signature of Transfer Facility's The Againt Address	o of Receipt of material was delivery of Delivery Itty) SW-428) con, MN 55717 received at the Disposal 3 - 5-10
Softation of Driver Date of Record Johandy avancement Date of Record Johandy avancement Date of delivering delivering abeliance Softation of Driver Date of delivering deliveri	Signature of Transfer Facility's Autoritists April 1 Dist Horeby services and an describe to the transporter without incident or contaminated referenced before. Calify's Autoritist Appin 1 Dist Bectron 8 Distance of Transfer Facility's Autoritist Appin 1 Dist Bectron 8 Distance of Transfer Facility's Autoritist Appin 1 Distance Number: 218-3345-3303 Distance of Disclosed Facility's Autoritist Appin 1 Distance of Disclosed Facility's Autoritist Appin 1 Dispature of Disclosed Facility's Autoritists Appin 1 Dispating Acidities 1 Dispating Acidities 1 Dispating Acidities 2 Dispating Acidities 2 Dispating Acidities 2	o of Receipt of material wave delivered on the date of delivery or the date of delivery of Delivery lifty) SW-428) Ron, MN 55717 received at the Disposal of Receipt rejected at the Disposal
Softation of Driver Date of Recoipt Date of Approximation of Driver of	Signature of Transfer Facility & Authorised April Data In the transporter without Incident or communitation Intervoly warms that the above manad and describ- In the transporter without Incident or communitation Intervolution of the transfer Facility & Authorized April Data Section 5 DESTINATION (Oligoposal Facil Disposal Facility's Name: Voyageur Landfill (3 Disposal Facility's Name: Voyageur Landfill (3 Disposal Facility's Name: Voyageur Landfill (3 Signature of Disposal Facility's Name: Jistephone Number: 218-345-6303 Voyageur Landfill (3 Voyageur Landfi	of Record on the date of delivery on the date of delivery of Delivery lifty SW-428) SW-428 SW-48
Softation of Driver Date of Drever Date of Drever Date of Drever Date of Drever Signifum of Drever Signifum of Drever Signifum of Drever Date of Delivery Date of Delivery Difference of Delivery Date of Receipt Difference of Delivery Date of Receipt Difference of Delivery Date of Receipt Difference of Delivery Difference of Delivery Date of Receipt Difference of Delivery Difference of Delivery Date of Receipt Difference of Delivery Date of Receipt Difference of Delivery Difference	Bighnare of Transfer Facility's Autorities April Data The Transfer Facility's Autorities April Data The Transfer Facility's Autorities April Data The Transfer Facility's Autorities April Data Disposal Facility's Name: Voyageur Landfill (Disposal Facility's Name: Disposal Pacility's Name: Disposal	of Pacoda de nameral was delivered on the date of delivery of Delivery tity) (55%-42.8) con, MN 55717 received at the Disposal of Receipt of Receipt of Receipt of Receipt of Receipt
Softation of Driver Date of Recoipt Details of Driver Date of Accoipt Details of Details The date of details and each child and ea	Signature of Transfer Facility & Authoritiest April Data I) Instructive manufacture facility & Authoritiest April Data I) Instructive manufacture facility & Authoritiest April Data Signature of Transfer Facility & Authoritiest April Data BECTON & DESTINATION (Disposal Facility & Authoritiest April 1 and 1	Lot Receipt on the date of delivery on the date of delivery of Delivery IIIty SV-428) SV-428) SV-428) SV-428) SV-428) Toron, MN 55717 received at the Disposal of Receipt rejection of Receipt
Sophatic of Driver Date of Record J harbay warrants that the back one and described material was delivered without instant or e containington on the date of delivery offerences before. Signifum of Driver Date of Delivery BecTrotyl at the back one and the scribed material was delivered without instants. Date of Delivery BecTrotyl at the back one and the scribed material was delivered without instants. Date of Delivery I Transporter's Name: I Transporter's Name: J Transporter's Name: I State of Driver (print/type) J Name of Driver (print/type) I State of Driver (print/type) J Name of Driver (print/type) Date of Perceipt Inference back. Signiture of Driver (print/type) Date of Becorpt Inference back. Signiture of Driver (print/type) Date of Becorpt Inference back. Signiture of Driver (print/type) Date of Becorpt Inference back. Signiture of Driver (print/type) Date of Becorpt Inference back. Signiture of Driver (print/type) Date of Delivery Signiture of Driver (print/type)	Signature of Transfer Facility's Autoritiest April Dis device warms that the above amend and describe to the transporter without incident or contamination referenced before. Signature of Transfer Facility's Autoritiest Apain. Dis Destination (Disposed Facility's Autoritiest Apain. Disposed Facility's Name: Voyageur Landfill (Disposed Facility's Name: Voyageur Landfill (Disposed Facility's Name: Voyageur Landfill (Disposed Facility's Name: TeleShore Name: Disposed Facility's Nam	Ind Paceda of matrixed was delivered on the data of delivery of Delivery titly) SSV-428) non, MiN 55717 received at the Disposal 3 - 5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Softating of Driver Date of Record and Softation Softati	Signature of Transfer Facility's Autoritiest April Dispose I) Instructive structure that the above streamed and describe to the transporter without incident or contemmented referenced below. Signature of Transfer Facility's Autoritiest April 2018 Stortion 5 DESTMATING (Dispose) Facility's Autoritiest April 2018 Disposel Facility's Name: (a) Disposel Facility's Name: Yoygegeur Landfill (1) Provide Address: (b) Physical Address: 218-345-6303 Disposel Facility's Autoritiest April 2018 (b) Marting Address: 218-345-6303 Disposel Facility's Autoritiest April 2018 (b) Marting Address: 218-345-6303 Disposel Facility's Autoritiest April 2018 (b) Marting Address: 218-345-6303 Disposel Facility's Autoritiest April 2018 (c) The magnet of Disposel Facility's Autoritiest April 2018 Disposel Facility's Autoritiest April 2018 (c) Disposel Facility's Autoritiest April 2018 Disposel Facility's Autoritiest April 2018 (c) Disposel Facility's Autoritiest April 2018 Disposel Facility's Autoritiest April 2018 (c) Disposel Facility's Autoritiest April 2018 Disposel Facility's Autoritiest April 2018 (c) Disposel Facility's Autoritiest April 2018 Disposel Facility's Autoritiest April 2018 (c) Disposel Facility's Autoritiest April 2018 <td>of Paced of another and a delivery of the data of delivery or the data of delivery litty SV-428) con, MM 55717 received at the Disposal 3</td>	of Paced of another and a delivery of the data of delivery or the data of delivery litty SV-428) con, MM 55717 received at the Disposal 3
Sontailing of Driver Date of Record Sontailing of Driver Date of delivery offernoge below. Signifue of Driver Date of delivery offernoge below. Signifue of Driver Date of Delivery Detropy warms of Driver Date of Delivery Detropy of Driver Date of Delivery Detropy of Driver TRANSPORTER 2 - (Complete III applicable) 1) Transporter's Name:) 1) Tarter container No:	Signature of Transfer Facility's Autoritiest April Disk I) hereby service with the the above stamed and describe to be transfer and and describe to be the transfer and and describe to be the transfer and and describe to be transfer and and transfer and transfer and and and transfer and and the transfer	or d Pacodi de material available or of believey of Delivery titly SSW-428) con, MN 55717 received at the Disposal 5-5-5-7 of Pacodat the Disposal of Rejection of Rejection of Rejection
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