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OCT 21 2008

PUBLIC SERVICE COMMISSION

October 22, 2008

Mr. Patrick Fahn
Chief Engineer, Public Utilities Division
North Dakota Public Service Commission
600 East Blvd.
Bismarck, ND 58505-0480

RE: Enbridge Pipelines (North Dakota) LLC
Trenton to Beaver Lodge Pipeline (PU-06-330) & Station Construction Project (PU-06-349)

Dear Mr. Fahn;

The purpose of this letter is threefold:

- 1) to provide the status of restoration and revegetation efforts for the above-referenced cases;
- 2) to identify project areas where vegetative cover or weed proliferation may require corrective actions; and
- 3) to provide the status of tree and shrub restoration.

Restoration and Revegetation Status

The Trenton to Beaver Lodge pipeline construction right-of-way was inspected August 16-19, 2008. The inspection was conducted by Dan Timm, the environmental inspector during the construction phase of the pipeline project. During the investigation, Mr. Timm documented vegetation and weed cover and photographed various locations along the pipeline right-of-way. Observations and information collected during the inspection was compiled and provided to Enbridge in an inspection report (see appendix A). Revegetation status is summarized in the attached report.

Areas Requiring Potential Corrective Measures

The inspection report identified 27,380 lineal feet (55 acres) of construction right-of-way that may require weed control. The inspection report also identified about 11,550 lineal feet (25 acres) that may require seeding. The locations of these areas are provided in the attached report (appendix A). Enbridge is currently determining a course of action to ensure these areas are restored to preconstruction conditions.

Tree and Shrub Restoration Status

Enbridge has contracted the Williams County Soil and Water Conservation District (SWCD) to conduct tree and shrub plantings. The SWCD provided a status report in fall 2008 identifying the number of trees planted in 2008, their survival success, and areas where plantings will be conducted in 2009. The SWCD's status report is provided in appendix B.

To date, plantings have been conducted on three of the twelve properties requesting tree replacement. These plantings were conducted in spring 2008 and were monitored in fall 2008. One-half of the 141 trees planted on landowner tract 35 survived. The remaining plantings had a high survival rate.

The remaining nine properties will be planted in 2009 according to the Amended Tree and Shrub Restoration Plans submitted for the above referenced cases on April 4, 2008 and approved, with conditions, by the PSC on April 23, 2008.

For landowners that did not want trees restored on their property, additional land is required to replace trees and shrubs removed during construction. The SWCD has identified 18 areas where donated trees and shrubs can be planted. Additional areas to plant donated trees are still required and are being sought by the SWCD.

Tree and shrub reestablishment within the construction right-of-way was documented by Dan Timm during the August pipeline right-of-way inspection. A report summarizing his findings is provided in appendix C. Nearly 6,000 shrubs were found growing within the construction right-of-way. Only one tree (cottonwood) was observed growing within the right-of-way.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Mackenthun", with a large, sweeping flourish at the end.

Jeff Mackenthun, Merjent, Inc.

cc: Kris Benson, Enbridge Energy
Ty France, Rooney Engineering, Inc.

Attachments

Appendix A

Pipeline Right-of-Way Inspection Report
August 16-19, 2008

Final Report of the Revegetation Assessment on the Pipeline ROW

Enbridge Pipelines (North Dakota) Trenton to Beaver Lodge Line Loop

*Dan Timm
Environmental Inspector
August 29, 2008*

Portions of the 51.7 mile ROW were seeded primarily to grass in late April and early May 2008. CI Al Olson reported a total of 230 seeded acres. I inspected the ROW for revegetation and summarized my findings August 16-19, 2008. Observations were documented with field notes and photos. The attached Table summarizes observations by landowner tract number. I judged all road/borrow ditches acceptable.

Similar to 2007, below average precipitation fell during the spring and summer. Long term average rainfall for Williston during May – August is 8.0” and in 2008 5.26” of rain fell in May thru August 19. The current soil conditions are dry and all wetlands on the ROW are dry. However, rain must have occurred at opportune times because the overall seed germination and plant growth was good.

Fertilizer was broadcast immediately before seeding and the effects were obvious. Grass and weeds on the ROW had a much deeper green color than vegetation off-ROW. Fertilizer had a two-edged sword at some locations; it stimulated grass growth but it also stimulated weed growth. Besides weeds, there has undoubtedly been competition for water and nutrients by the fall-planted winter wheat cover crop on part of the ROW, and winter wheat that volunteered from straw mulch on other parts of the ROW. However, perhaps balancing competition was top soil erosion protection during the winter and spring.

A common practice of assessing revegetation success is estimating or measuring the percent of grass canopy cover over the ground surface. However, when weeds are high and/or dense, this becomes impractical and very time consuming. Although percent grass cover was estimated when practical, I also judged percent plant growth, plant height and vigor as revegetation indicators. Grass was drilled in rows 8” apart and at 100% growth plants occurred at 2” to 3” intervals within the rows.

Weeds are of significant concern for successful revegetation. Although they provide shade during hot/dry days and hold snow until spring melt, they vigorously compete for nutrients and water, and can provide too much shade for grass. I judged weed abundance by estimating their percent canopy cover and height, and these criteria are explained in the attached table.

I contacted Mr. Dennis Froemke of the NRCS about weeds and replanting. His summarized advice is:

- Clip or chemically treat actively growing weeds before maturity, late summer/fall is the best time. If clipped, mow above the grass - 12” to 18” - so the grass gets more sun, grass is still protected and weed stems catch snow this winter.

Most weeds, especially the heavy and tall kochia, are still actively growing and have not dispersed seeds. Kochia is still pollinating.

- Weeds will be less of a problem next year if the ground is not disturbed.
- Weed debris may have to be removed next spring by haying to get an effective replanting.
- The NRCS uses a transect and grid system to quantify suspect replanting areas; >5 plants per square foot for bunch grasses indicate that no reseeding is necessary.

Assuming a liberal 2 rows of grass spaced 8" apart both fall within a square foot grid, and plants are spaced on average 2.5" apart, NRCS criteria would indicate at least 50% plants within the grid, comparable to my estimate of "plant growth." For all of my recommended replanting areas, growth is far less than 50%.

Recommendations

I recommend that 27,380 lineal feet of ROW be treated for weeds and 11,550 lineal feet be replanted. Considering my low estimate last fall of ROW acres to be seeded, at least 55 acres would be treated for weeds and at least 25 acres reseeded. I believe that if weed control can be accomplished soon, far less ROW would require reseeding next spring. There's a 2-3 week window right now for the most effective weed control. A decision to reseed this fall, or spring, or if at all may perhaps be better made just prior to seeding time.

A 1,300' portion of Tract W-76 was the only area where significant alkali had deposited on the soil surface. Grass had initially germinated and grown well, but about 80% had died with no apparent association to weed cover or height. I recommend that the land owner be asked what the off-ROW seed mix is, or ask the NRCS for a recommended seed mix more adaptable to alkali/high ph. The NRCS recommends dormant seeding in saline areas.

A concentration of leafy spurge exists in a 900'- 1,000' area of Tract W-14B. The infestation extended several hundred feet off-ROW, across the ROW and into a wetland. Because of the abundance off-ROW and in proximity to a wetland, spraying was not recommended, but topsoil was stripped across the full ROW. Leafy spurge was present on the ROW in August 2008, but at less than 10% of the abundance off-ROW. Re-seeding is unnecessary on this tract and I recommend that no additional action be taken at this site.

2008 Weed Control and Seeding Location – Trenton to Beaver Lodge Line Loop Project

Tract	Station Number Range	Grass			Weeds		Weed Control	Re-seed	Comments
		% Growth	Height	Vigor	% Canopy	Height*			
1A	4+50 - 25+00	60 to 75	to 12"	good	70 to 90	med	X		
1B	37+00 - 40+00	60 to 70	to 12"	good	70 to 90	med	X		300' of grass in swale
2	74+00 - 75+00	60 to 70	to 12"	good	60 to 90	med	X		
6A	182+00 - 202+50	60 to 70	to 16"	good	80 to 100	med/tall	X		farmer hayed most of the grass in swale
6B									
7	221+00 - 227+00	50 to 70	to 12"	good	90 to 100	tall	X		Stay off steep hill east side of wetland, mow to Mile 4 sign.
7	236+00 - 244+00	50 to 60	to 10"	fair	90 to 100	tall	X		wide/steep water channel bottom of hills
7	255+00 - 275+00	40 to 50	to 7"	fair	90 to 100	tall	X		
9	275+00 - 284+00	50 to 60	to 7"	fair	90 to 100	tall	X		mow to 2nd small shelter belt
9	305+00 - 311+00	40 to 60	to 7"	fair	90 to 100	med	X		Olson's drive to Beaver Creek
10			short	good	< 25%	small			west of Sheldon's drive. 70-75% cover
11		70 to 80	to 16"	good	50 to 75	med			swales, drainages associated with wetlands
12	395+00 - 448+00		to 12"	good	< 5	small			State land looks great. 50-60% cover.
14A /14B	501+00 - 555+00			good	< 5	small			Leafy spurge infestation between 520+00 and 530+00. 60-70% cover.
24	936+00 - 942+00	50 to 60	to 14"	good	70 to 90	med	X		state land, both sides of 123rd
28	1025+00 - 1032+00	45-60	to 12"	good	80 to 90	med/tall	X		state land looks great despite being grazed. 75% cover.
28	1032+00 - 1079+00	45-60	to 4"	good	< 5	short			CRP around beaver dam area. 80% cover.
29	1078+00 - 1085+00		to 24"	good	< 15	short/med			
37	1427+00 - 1435+00	0 to 40	to 10"	good	95 to 100	tall	X		reseed west of 130th to top of steep hill
37	1435+00 - 1453+00	ave 80	to 14"	good	to 90	tall	X		west from top of steep hill
38	1466+00 - 1472+00	60 to 90	to 15"	good	to 80	small			East of mile marker 27.
39	1481+00 - 1522+00	<10	0 to 1"	0 to poor	<10	small			top of side slope hill W to beyond water bar
39	1507+00 - 1508+50	<10	0 to 1"	0 to poor	<10	small	X		top of side slope hill W to beyond water bar
40A	1522+00 - 1535+00	95+	to 5"	good	< 10	small			
41	1567+00 - 1592+00	0 to 90	to 15"	good	to 100	med/tall	X		center 35' +- of ROW from block valve to HDD tie-in was not seeded
41	1597+00 - 1604+00	ave.30	to 8"	good	to 100	med/tall	X		west of L. Muddy
42	1605+00 - 1654+00	0 to 80	to 8"	fair to	90 to 100	med/tall	X		CRP No seeding from Blk Valve 250' west & from 400' E of house drive to 300' W of drive. Reseeding ends about 1000' west of Marker 31.
42	1654+00 - 1668+00	80 to 100	to 12"	good	to 40	small			Reseeding ends about 1000' west of Marker 31
43	1668+00 - 1726+00	90 to 100	to 15"	good	< 25	small			State land/school, a few small thin spots
44	1729+00 - 1738+00	75 to 100	to 15"	good	30 to 85	mod	X		just west of HY 2/85
45 & 46	1766+00 - 1784+00	30 to 100	to 12"	good	40 to 100	sm to tall			Swales/int. streams/side slope south of feed lot.

2008 Weed Control and Seeding Location – Trenton to Beaver Lodge Line Loop Project

Tract	Station Number Range	Grass		Weeds		Weed Control	Re-seed	Comments
		% Growth	Height	% Canopy	Height*			
46	1784+00 - 1790+00	70 to 100	to 3"	< 25	small			cattle have grazed
46	1810+00 - 1818+00	60 to 100	to 4"	< 25	small			cattle have grazed
46	1818+00 - 1833+00	ave 80	to 15"	50 to 90	med	X		from PI turning west at Marker 34
48	1895+00 - 1900+00	ave 30	small	ave 60	sm to tall	X	X	Alfalfa
48	1900+00 - 1912+00	ave 80	to 18"	to 80%	med/tall	X		
48	1912+00 - 1920+00	80 to 100	small	40 to 75	med	X		Alfalfa
49	1926+00 - 1979+00		5" to 16"	<10%	small			wetlands and west thru hills to marker 37
51	1986+00 - 1991+00	50 to 100	to 16"	10 to 70	sm/med			thru wetland
51	2002+00 - 2023+00	ave 55		60 to 90	med	X		
55	2114+00 - 2116+00	0		90+	med	X		no grass found, swale
56	2142+00 - 2191+00	95+	1" to 4"	< 5	small			Pls south, grazed, isolated thin spots. 50% cover.
57	2218+00 - 2239+00	90+	1" to 3"	< 5	small			heavily grazed. 45-50% cover.
57	2239+00 - 2243+00	5 to 10	to 8"	80 to 90	med	X	X	from E/W fence to 57th St.
59(adi)	2267+00 - 2297+00	35 to 45	to 9"	50 to 60	small			Landowner Mr. Nordtug said he's OK with seeding and "natural seeding will take care of the rest and weed control unnecessary."
61	2310+00 - 2324+00	75+	to 12"	30 to 50	small			54th St. is on south end of tract
63	2350+00 - 2377+00	60 to 100	to 18"	10 to 30	sm - med			Arch. Site on hill. Poor vigor on hill top, good down slope.
68	2473+00 - 2479+00	60+	ave. 5"	to 30	small			"duck pond"
69	2495+00 - 2501+00	70+	to 12"	to 35	sm - med			45% cover.
70/71	2510+00 - 2531+50	80+	to 12"	to 15	small			Reseed from 200' south of tractor tire to 150 south of the east-west fence.
70/71	2531+50 - 2539+00	0-25	0	to 15	small		X	50+ cover.
70/71	2539+00 - 2566+00	90 to 100	to 12"	to 15	small			Swale, int. stream, hills, side slope
74-A	2589+00 - 2593+00	to 25	to 12"	to 100	med			Vegetated hills, int. streams, curlex over 80% of slopes on last hills south - stable.
75/75H	2605+00 - 2617+00	to 60	to 12"	10 to 100	sm - med			Reseed from top of hill to the north side of the wetland. Alkali concentration. <10% cover.
76	2638+00 - 2651+00	ave 20	to 6"	10 to 50	sm-med		X	
76	2651+00 - 2656+00	70 to 100		<20	sm-med			
78	2709+00 - 2722+00	90+	to 8"	<2	small			Looks great. 45-55% cover.

* Weed Height: Small = 0 - 12"; medium = 12 - 36"; tall = >36"

Note: Station numbers are rounded to the nearest 100 feet because exact locations on the ROW often could not be determined

Appendix B

Tree & Shrub Restoration - Planting Status Report

Williams County Soil and Water Conservation District

2008 ENBRIDGE REPORT

I have 3 producers who planted in 2008. One of these three used some donated trees. I have evaluated these three plantings this fall.

At this time, I have 7 producers that are planning to plant in 2009. One or two may end up donating the trees.

I have 18 producers and organizations using the donated trees for planning plantings in 2009.

Signed

A handwritten signature in cursive script that reads "Gwenda Freed". The signature is written in black ink and is positioned above the printed name.

Gwenda Freed

Williams County Soil Conservation District Technician

TREES PLANTED IN 2008

<u>Tract</u>	<u>Trees</u>	<u>Donated</u>	<u>Condition Fall 2008</u>	<u>Reason</u>
1	104		Some dead especially Juneberry and cherry	very dry early
17	12		Good condition	producer TLC
35	<u>116</u>	<u>25</u>	About 50% survival	very dry early
	232	25		

TREES DONATED

Tract	Trees
2	2
7	2750
11	520
19	102
29	4
33	6
37	80
49	4190
57	6
74	98
50	<u>948</u>
	10,506

ENBRIDGE TREE REQUESTS

	Requested	Rewarded
Anderson	282	212
Cemeteries	157	157
Skaare	250	250
City of Epping	830	750
Westphal	965	965
Didier	175	175
Forsberg	134	101
Owan	970	728
Hartsoch	184	184
Goebel, Larry	869	652
Ellis, Michael	293	220
Bloch	460	345
Donner	570	428
Haskins	666	0 Divide County
Moen	2189	1000
Sletvold	404	303
Beckett	376	282
Vallevik	2059	1000
Erickson	440	440
	<u>12832</u>	<u>8192</u>

Producers in first batching, cemeteries, Robert Erickson, and towns received 100% up to 1000 trees

Producers in second batch received 75% up to 1000 trees

John Haskins received no trees because the land lies in Divide County

Appendix C

Tree and Shrub Reestablishment Report

Dan Timm - August 16-19, 2008

TREE AND SHRUB COUNT
ENBRIDGE PIPELINES (NORTH DAKOTA)
TRENTON TO BEAVER LODGE LINE LOOP

Dan Timm
Environmental Inspector
August 29, 2008

During August 16-19, 2008 I inspected the right-of-way for revegetation and concurrently counted trees and shrubs that have re-grown since construction ended. Trees and shrubs were inventoried pre-construction because the North Dakota Public Service Commission ordered that trees and shrubs removed by construction be replaced on a 2:1 basis.

The attached table summarizes the August counts. Trees and shrubs were tabulated according to their location on the permanent easement (PE) -- 25' either side of centerline -- and temporary workspace (TWS). The counts were documented by field notes and photos, both pre-and post-construction.

Eight species of trees and ten species of shrubs totaling 331 and 10,624, respectively, were counted pre-construction on 21 different landowners. During the August 2008 count I found one cottonwood sapling and two species of shrubs totaling 5,981 shrubs on 11 different landowners. Wolf Berry represented 86.5% of the shrubs found pre-construction and 91.1% in August. Chokecherry represented 6.4% of the shrubs pre-construction.

Chokecherry was found only in TWS on all but one land tract. Less of the right-of-way was stripped of topsoil in TWS and presumably more vigorous root stock remained for quick re-growth in TWS. Proportionately more Wolf Berry than Chokecherry was found in the PE, perhaps because berries remained on plants during topsoil stripping and many of these, besides rootstock, grew new plants this spring.

Although I remembered where trees and shrubs were removed last year, my counts of re-growth this summer were not complete because of the time devoted to them, and in some areas because of weed growth.

Tract Number	Wolf Berry			Chokecherry			Total Shrubs	Cottonwood TWS
	PE	TWS	Total	PE	TWS	Total		
W-6A /7	290	776	1066	47	21	68	1134	1 (sapling)
W-9	58		58				58	
W-11		205	205				205	
W-14B	28	211	239				239	
W-46	899	619	1518		120	120	1638	
W-49	163	732	895		2	2	897	
W-51	137	248	385		38	38	423	
W-63		34	34				34	
W-74A	380	135	515		33	33	548	
W-75/75H	62	317	379		267	267	646	
W-76	115	44	159				159	
Totals	2132	3321	5453	47	481	528	5981	1 sapling