Notice of Alteration Form



File No. :	Environment Act Licence No.: 1339R	
Legal name of the Licensee: Canadian	n Kraft Paper Industries Ltd.	
Name of the development: Canadian	n Kraft Paper Industries Ltd.	
Category and Type of development per Cla	lasses of Development Regulation:	
Forestry	▼ <select></select>	
Licensee Contact Person: Lisa Jones		
Mailing address of the Licensee: PO Box	ox 1590	
City: The Pas	Province: MB Postal Code: R9A 1L4	
Phone Number:(204) 623-8450 Fax:	Email: lisa.jones@ckpi.com	
Name of proponent contact person for pu	urposes of the environmental assessment (e.g. consultant):	
Phone:	Mailing address:	
Fax:	3	
Email address:		
	oject on Canaidian Kraft Paper's Millsite	OTO MATERIAL SOCIETY
Alteration fee attached: Yes:	No: 🗸	
Date: 2024-07-30	nature:	
Prin	nted name: Lisa Jones	
A complete Notice of Alteration (NoA) consists of the following components: Cover letter Notice of Alteration Form 1 electronic copy of the NoA deta (see "Information Bulletin - Altera Developments with Environment Act Licences") \$500 Application fee, if applica payable to the Minister of Finance	Toll-Free: 1-800-282-8069 Phone: 204-945-8321 Fax: 204-945-5229 https://www.gov.mb.ca/sd/ permits_licenses_approvals/eal/_licence/ index.html	
Note: Per Section 14(3) of the Envir submission of an Environment Act P	ronment Act, Major Notices of Alteration must be filed thr Proposal Form (see "Information Bulletin – Environment Act	ough

July 30, 2023

TM-10087 Code #09-LF-009

Agnes Wittmann,
Director
Environmental Approvals Branch
Manitoba Environment and Climate
14 Fultz Boulevard
Winnipeg, Manitoba
R3Y 0L6

Re: Canadian Kraft Paper Biosolids Landspreading Project – 2024 Continuation

Dear Ms. Wittmann:

Since October 2017 Canadian Kraft Paper Industries (CKP), with the approval of Manitoba Environment and Climate (MEC), has undertaken a Landspreading Pilot Study Project which involves removing biosolids from the effluent treatment system and applying it to industrial lands on CKP's millsite. The initial Pilot Study approval was valid until April 30, 2022. On May 25, 2023, CKP submitted an Environmental Act License Proposal (EALP) to continue with the land application of biosoilds on site. While the Environmental Act License approval process was taking place CKP was advised by MEC to submit a NoA to carry out landspreading in 2023, as such a NoA was submitted on July 31, 2023 and later approved. With the EAL approval process still ongoing, CKP is requesting a NoA for 2024 to carry out landspreading onsite this summer/fall. This will allow for the removal of primary biosolids from the effluent treatment system in order to maintain the system's treatment efficiency. A summary of volumes landspread in 2023 can be found in Table 1.

Table 1: 2023 Landspreading Volume and Location

Year	Site	# Hectares	Rate (BDT/Ha)	Bone Dry Tons of Material (BDT)	Source of Biosolids
	Capped Landfill 1				
2023	Zone 4	5.06	1113.38	2900.28	North Settling Basin
2023	North of Sawmill	1.41	1100.44	249.81	North Settling Basin
Total				3150.09	

NOTE: Only a portion of North of Sawmill was used in 2023

For 2024, primary biosolids from the South Settling Basin (SSB) will be dredged in order to maintain the health of the effluent treatment system. Based on previous years, it is estimated that roughly 3000 BDT will be removed from the settling basin. The plan is to spread this material on approved sites at the millsite.

Biosolids Landspreading in 2024:

MEC has approved the spreading of an additional layer of biosolids on previously landspread sites, with the stipulation that phosphorus concentrations in the soil are less than 60 ppm. As such, CKP plans to landspread an additional layer of biosolids on some sites where phosphorus concentration is below the 60 ppm limit. Based on fall 2023 testing of the landspreading sites, CKP is requesting to landspread biosolids on Site 2B, Site 2A Zone 2, North of Sawmill, and South of Water Treatment (Figure 1, Figure 2). The approval of these 4 sites will ensure ensure that sufficient area is available to landspread the material removed from the settling basin.

Table 2: 2024 Proposed Landspreading Sites (hectares estimated from Google Earth)

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Source of	Site	#Hectares	Rate	Bone Dry			
Biosolids in 2024				Tonnes of			
				Material			
SSB	Site 2B	0.72	691.4 Tonne/Ha	498			
			or 1' in depth				
SSB	Site 2A Zone 2	1.18	691.4 Tonne/Ha	684			
			or 1' in depth				
SSB	North of Sawmill	0.99	691.4 Tonne/Ha	975			
			or 1' in depth				
SSB	South of Water	2.13	691.4 Tonne/Ha	1,473			
	Treatment		or 1' in depth				
Total		5.02		3,630			



Figure 2: Proposed Landspreading Site South of Water Treatment.



Table 3 lists the available phosphorus from 15 and 30 cm depths (composite samples) on landspreading sites at CKP. Note that the results from the control areas and site 2D, are all background soil values (no biosolids were applied on these sites). The remaining results are from sites with biosolids were applied over bare soils, as such the samples would contain a combination of both native soils and biosolids. There are several sites, that include Site 2A/2B, North of Sawmill, South of Water Treatment, and portions of CLF1, where available phosphorus levels are currently below 60 ppm after biosolids application. Based on the data collected between 2017 to 2023, CKP believes that the fall sampling data is indicative of current nutrient levels, as land management practices have not changed and there is a general downward trend of phosphorus levels over time. With 3-5 years of weathering and plant growth on these sites, biosolid depths have reduced to 3-4" in some locations from the initial depth of 1 foot. In some locations the overlying biosolids have become nearly homogenous with the underlying soils.

Table 3: Available P for all Landspreading Sites from 2017-2023

Site	Depth (cm)	Year	Source of Biosolids/Material	2017	2018	2019	2020	2021	2022	2023
Site 2A – Zone 1	0-15	2017	North Basin/South Basin	1.8	35.3	25.1	25.0	-	30.4	45.8
Site 2A – Zone 2	0-15	2018	South Basin	1.8	118	58.5	36.8	18.4	-	-
Site 2A – Zone 3	0-15	2018	South Basin/Yard Waste	1.8	45.8	18.5	41.8	32.4	28.1	52.9
Site 2A Control	0-15	-	-	-	<1.0	<1.0	<1.0	<2.0	50.6	-
Site 2B	0-15	2018	South Basin	1.8	58.1	42.9	21.5	21.8	-	-
Site 2B Control	0-30	ı	-	-	1.3	2.3	1.5	1.9	<1.0	2.4
CLF1 – Zone1	0-30	2018	South Basin	3.6	55.7	69.7	83.1	85.6	-	-
CLF1 – Zone 2	0-30	2019/2021	North basin/ Aerated Lagoon	3.6	-	49.4	72.0	103	195	132
CLF1 – Zone 3	0-30	2018/2019	Aerated Lagoon	3.6	113	244	137	166	249	-

CLF1 – Zone 4	0-30	2020	South basin	-	-	-	56.2	39.2	42.4	39.6
CLF2	0-30	2020	South Basin/ Aerated Lagoon	1.6	ı	ı	49.7	68.1	61.3	74.2
Site 2D	0-15	-	-	-	-	-	<1.0	-	ı	-
North of Sawmill	0-15	2021	North Basin	-	-	2.8	-	27.0	36.4	36.2
South of Water Treatment	0-15	2021	North Basin	1.6	-	-	-	30.9	22.4	26.9

NOTE: That there is some variation in levels due to changing sample locations.

Each site listed in Table 2 that will receive biosolids will be bermed prior to application in order to capture any potential run-off. A formal monitoring program is in place, specifically, weekly inspections of the landspread areas will take place. This includes ensuring the integrity of the berms and removal of any standing water (using a vacuum truck) that has the potential to breach the berms. Any water removed from inside the berm will be taken to the effluent treatment system for disposal.

CKP has scheduled a contractor to begin dredging the settling basin in mid-August, landspreading would also start at this time. In order to successfully complete dredging and landspread the material in a timely matter CKP is requesting a response regarding this NoA by August 9, 2024. This would ensure that there is no delay in the planned work and align with the contractor's availability.

Sincerely,



Lisa Jones Environmental Team Lead

Attach.

cc: Robert Boswick, Environmental Approvals Branch, Winnipeg
Siobhan Burland Ross, Environmental Approvals Branch, Winnipeg
Cristal Huculak, Environmental Compliance and Enforcement, The Pas
Halle Fines, Environmental Compliance and Enforcement, The Pas
Leigh Johnston, Mill Services Manager
Minsoo Kim, Environmental Coordinator
Tamsin Patience, Director of Mill Services

Appendix A

Photograph 1: North of the Sawmill, June 26, 2024



Photograph 2: Site 2A Zone 2, July 12, 2024



Photograph 3: Site 2B, July 12, 2024



Photograph 4: South of Water Treatment, July 12, 2024

