

ALTERNATIVE A5

2031 option 2	Sludge produced by SEWPCC	178,479 m3/y	7,355 DryT/y
	Sludge produced by WEWPCC	83,290 m3/y	3,332 DryT/y
	Sludge produced by NEWPCC	232,648 m3/y	9,306 DryT/y
	TOTAL for treatment	494,417 m3/y	19,992 DryT/y
	TOTAL for disposal	79,968 m3/y	19,992 DryT/y

@ 4.12 % concentration

Sludge production increase	
169,417 m3/y	52%

Increase in CAPEX and OPEX

OPEX for sludge treatment in NEWPCC	2.60 M CAD/y	(50% proportional to the volume increase and 50% proportional to dry solids increase)
Hauling SEWPCC sludges to NEWPCC	0.77 M CAD/y	
Hauling WEWPCC sludges to NEWPCC	0.24 M CAD/y	
Disposal transportation NE to landfill	0.35 M CAD/y	
Landfill tipping fees	0.25 M CAD/y	
TOTAL OPEX (all sludges)	4.21 M CAD/y	Among which 1.93 M CAD/y for SEWPCC
CAPEX	7.6 M CAD	
NPV 30 years	33.91 M CAD	

Data from Stantec's PDR (2008)		
Raw price	10.43 MCAD	For 27.57 DryT/d in 2031
Quantity ratio	0.73	Based on Dry solids quantities
Reduction ratio	0.96	for consistency with respect to the estimation allowance used
Inflation	1.04	

2031 option 4	Sludge produced by SEWPCC	278,973 m3/y	8,908 DryT/y
	Sludge produced by WEWPCC	83,290 m3/y	3,332 DryT/y
	Sludge produced by NEWPCC	232,648 m3/y	9,306 DryT/y
	TOTAL for treatment	594,910 m3/y	21,545 DryT/y
	TOTAL for disposal	86,181 m3/y	21,545 DryT/y

@ 3.19 % concentration

Sludge production increase	
269,910 m3/y	83%

Increase in CAPEX and OPEX

OPEX for sludge treatment in NEWPCC	2.96 M CAD/y	(50% proportional to the volume increase and 50% proportional to dry solids increase)
Hauling SEWPCC sludges to NEWPCC	1.21 M CAD/y	
Hauling WEWPCC sludges to NEWPCC	0.24 M CAD/y	
Disposal transportation NE to landfill	0.37 M CAD/y	
Landfill tipping fees	0.25 M CAD/y	
TOTAL OPEX (all sludges)	5.04 M CAD/y	Among which 2.89 M CAD/y for SEWPCC
CAPEX	10.54 M CAD	
NPV 30 years	49.25 M CAD	

50% of CAPEX is assessed to be volume proportional and 50% to be dry solid quantity proportional