COST ANALYSIS OF A: **Traditional Landfill**

Each spreadsheet in this workbook contains information necessary to estimate the
costs associated with this type of landfill. In each sheet, the yellow boxes represent info. to be inputted.
The following is a summary of the information used in this analysis:

ASSUMPTIONS

Construction:
1. Cell is being filled for 5 yrs, during which all construction costs are paid.
2. No bioreactor period.
Airspace Recovery:
3. No gain associated with this.
Operation and Maintenance:
4. Gas collection occurs after the landfill has been capped.
Leachate
5. All leachate generated must be treated.
Closure:
6. All closure costs occur during year 6.
Monitoring:
7. No monitoring equipment is required.

Landfill Properties:

Waste Receipt/day =	550	ton/day
Volume =	4000000	yd^3
Density =	1100	lb/yd^3
Waste:Soil =	4	:1
Area of the landfill =	33	acres
Tipping Fee =	40	$/ton of waste

Summary of Information in this Workbook:

Type of Landfill = **Traditional Landfill**

Type of Cost		YEARS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total Construction Costs =		($4,529,884)	($4,529,884)	($4,529,884)	($4,529,884)	($4,529,884)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Monetary Gain from AirSpace Recovery =																$0
Total Operation and Monitoring Costs =		($1,122,700)	($1,156,381)	($1,191,072)	($1,226,805)	($1,263,609)										
Total Leachate Treatment Costs =	On-Site	($1,116,572)	($1,150,069)	($1,184,571)	($1,220,108)	($1,256,711)										
	Off Site	($2,853,461)	($2,939,064)	($3,027,236)	($3,118,053)	($3,211,595)										
Total Monetary Gain by Reusing CH4 =		$0	$0	$0	$0	$0	$178,783	$163,407	$148,633	$134,439	$120,800	$107,697	$95,107	$83,010	$71,388	$60,221
Sinking Fund Temp Closure Cost =		$0	$0	$0	$0	$0										
Sinking fund for FINAL closure =		($1,257,232)	($1,257,232)	($1,257,232)	($1,257,232)	($1,257,232)										
Sinking Fund PCC Cost =	On-Site	($348,599)	($348,599)	($348,599)	($348,599)	($348,599)										
	Off-Site	($489,345)	($489,345)	($489,345)	($489,345)	($489,345)										
Total Monitoring Costs =		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL COSTS =	On-Site Cost	($8,374,987)	($8,442,165)	($8,511,359)	($8,582,628)	($8,656,035)	$178,783	$163,407	$148,633	$134,439	$120,800	$107,697	$95,107	$83,010	$71,388	$60,221
	Off-Site Costs	($10,252,622)	($10,371,907)	($10,494,771)	($10,621,320)	($10,751,666)	$178,783	$163,407	$148,633	$134,439	$120,800	$107,697	$95,107	$83,010	$71,388	$60,221
TOTAL PRESENT VALUE COSTS =	On-Site Cost	($7,976,178)	($7,657,293)	($7,352,432)	($7,060,949)	($6,782,230)	$133,411	$116,130	$100,601	$86,660	$74,161	$62,968	$52,959	$44,022	$36,056	$28,968
	Off-Site Costs	($9,764,402)	($9,407,626)	($9,065,777)	($8,738,186)	($8,424,211)	$133,411	$116,130	$100,601	$86,660	$74,161	$62,968	$52,959	$44,022	$36,056	$28,968
TOTAL COST =	**On-Site**	**($36,093,146)**														
	Off-Site	**($44,664,267)**														