

Cost Estimate Spreadsheet Update for Solid Waste Facility Closure and Post Closure

• LDEQ – Carson Schexnaider, Engineer, Waste Permits



Common Issues Regarding Cost Estimates

- Multiple back and forth NOD letters
- Confusion on DEQ expectations
- Questions regarding prices
- Vague guidance





Purpose of Update

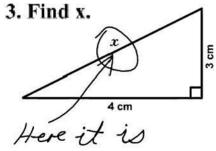
- Reduce Notice of Deficiencies letters
- Improve Department and Facility understanding
- Provide clarity on cost estimating
- Create common discussion points





Resolving the Issues

- Work group put together to standardize facility cost estimating
 - Discuss how facility closures vary
 - Determine reasonable costs
 - Create a spreadsheet for all to use
- Develop guidance document for completing cost estimates
 ^{3. Find x.}





Implementation and the Future

- Implement on future applications and renewals; date undetermined
- Increases to account for inflation
- Update costs every five years
- Working document



Glimpse at the Spreadsheet

Surface Impoundment Information							
ITEM	QUANTITY	UNITS	Source				
Does the facility have a Surface Impoundment?		Yes or No	Permit or COC				
Is the Surface Impoundment closed?		Yes or No					
How many years left on post closure? (Close in Place Only)		Years					
Is the facility "Clean Closing?"		Yes or No	Permit				
If Closing in-Place Does the Facility have Soil Available to Close?		Yes or No	Permit or Facility				
If soil is NOT available on-site, what is the haul distance?		Miles	Permit or Facility or Google Maps				
Will the facility use a pump for dewatering and fly ash for sludge solidification? (If no, please input alternative information in the "Alternative Table" to the right)		Yes or No					
Number of Days to Complete Closure		Days	Permit				
Surface Area of surface Impoundment		Acres	Permit				
Depth of Surface impoundment		Feet	Permit				
Sludge Bottom Thickness		Feet	Permit				
Does The Surface impoundment have Geomembrane?		Yes or No	Permit				
Specify landfill to be used for disposing of sludge (Clean Closure Only)							
Distance to landfill to be utilized		Miles	Google Maps				
Type III Land	fill Information						
ITEM	QUANTITY	UNITS	Source				
Does the facility have Type III landfill?		Yes or No	Permit or COC				
Is the landfill closed		Yes or No	Permit or COC				
How many years left on post-closure		Years	Permit				
Will/Was Hydroseed, grass seed, or both be used for closure?							
Current constructed cell area WITHOUT final cover		Acre	Permit or COC				
Current constructed cell area WITH final cover		Acre					
Will the facility use soil for the landfill cap?		Yes or No					
What is the proposed final height?		Feet					
Is soil available on-site to apply final cover?		Yes or No	Permit or Facility				
If soil is NOT available on-site, what is the haul distance?		Miles	Permit or Facility or Google Maps				



Glimpse at the Spreadsheet

Type I/II Landfill Closure Costs									
ITEM	QUANTITY	UNITS	UNIT	COST	Regional Factor		COST	SUBTOTALS	SOURCE OF UNIT COST INFO or NA
Low Permeability Soil Layer									
Mobilization (Tiered cost based on facility size)	0.00	EVENT	\$	-	0.0%	\$	-		Third Party Estimates
Complete soil contouring and grading for final cover	0.00	ACRE	\$3,	,150.00	0.0%	\$	-		RSMeans Page 245; 31 22 13.20 0250
Clay, On-site									
Clay, On-Site (excavate, transport, place)	0.00	C.Y.	\$	2.97	0.0%	\$	-		Third Party Estimates
Haul onsite	0.00	С.Ү.	\$	2.90	0.0%	\$	-		RSMeans Page 274; 31 23 23.20 4016
Clay, Off-site									
Clay Price	0.00	C.Y.	\$	2.97	0.0%	\$	-		Third Party Estimates
Haul onsite (20% Swell Factor)	0.00	C.Y.	\$	2.00	0.0%	\$	-		RSMeans Page 274; 31 23 23.20 4050-4086
Compaction	0.00	E.C.Y	\$	1.50	0.0%	\$	-		RSMeans Page 286; 31 23 23.23 6020
No Alternative Low Permeability Layer from Facility	###	UNITS	###				#VALUE!		Provided by Facility
Low Permeability Soil Layer Subtotal								#VALUE!	
Geomembrane and Drainage Layer									
Drainage materialsand	0.00	C.Y.	\$	20.00	0.0%	\$	-		Third Party Estimates
Drainage materialgeocomposite	0.00	S.F.	\$	0.76	0.0%	\$	-		Third Party Estimates
Geomembrane	0.00	S.F.	\$	0.60	0.0%	\$	-		Third Party Estimates
Exposed Geomembrane	0.00	S.F.	\$	0.70	0.0%	\$	_		Third Party Estimates
FML w/ Artificial Turf	0.00	S.F.	\$	2.50	0.0%	\$	-		Third Party Estimates
No Alternative Geogrid from Facility	###	UNITS	###				#VALUE!		Provided by Facility
Geomembrane and Drainage Layer Subtotal								#VALUE!	



Glimpse at the Spreadsheet

Total Cost Summary						
Type I/II Landfill Closure	\$-					
Type I/II Landfill Post-Closure	\$ -					
Surface Impoundment Closure	\$ -					
Surface Impoundment Post-Closure	\$-					
Type III Landfill Closure	\$-					
Type III Landfill Post-Closure	\$-					
Geology Closure/Post-Closure	\$-					
Geology Well Maintenance	\$-					
Total Facility Costs	\$-					

Inflationary Factor Line



Thank you for your time today!



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