

Steinwinder, Thomas

Subject: FW: Dredging Estimate

From: Darrell Turner [mailto:dturner@headwaters.com]

Sent: Friday, July 09, 2010 5:09 PM

To: Mecredy, Michael

Subject: RE: Dredging Estimate

Michael.

Sorry for the slow response.

Here is our preliminary estimate based on limited amount of data provided.

It should be considered accurate to within minus 25% to plus 0%. Meaning, it's the high end of range.

This would include;

- Mobilization
- All Equipment, dredges, tanks, belt presses, conveyors, trucks, lighting
- All Labor
- All polymers
- Demobilization

Does not include:

- Electric Costs
- Fresh Water Costs (if any)

	Pond 1	Pond 2	Pond 3	Pond 4	Total
Surface Area of Sludge (Acres)	500	123.5	235.3	158.8	517.6
Average Depth of Sludge (ft)	0.68	0.45	0.35	0.72	
Sludge Volume (gallons)	110,984,735	34,080,247	18,029,793	29,017,118	192,111,893
Slurry Density (lbs/gallon)					
Percent Solids (by weight)	3.90%	1.20%	13.90%	0.80%	
Dry Tons	66,898	760	1,233	1,564	70,455

No. Belt Presses	4
Operational Hrs/Day	19.2
Dry Tons per Hour per press	2
Total Daily Production (dry tons)	153.6
Days Required	459
Days per Week	6
Weeks	76
Average Cake Solids	35%
Average Wet Tons Daily	439
Total Wet Tons Disposed	201,300

ESTIMATE	Units	Unit Rate	Unit	Total
Mobilization	1	\$175,000	Lump Sum	\$175,000
Dredge & Dewater	70,455	\$57.50	Dry Ton	\$4,051,163
Hauling to Landfill (onsite)	201,300	\$2.00	Wet Ton	\$402,600
Onsite Disposal Fee	201,300	\$6.00	wet ton	\$1,207,800
Total ESTIMATE				\$5,836,563

Hope this helps.

Darrell.