

Munster Cost Comparison Summary

		Snowfluent		Pipeline		Rotordisk	
		Low	High	Low	High	Low	High
	Capital Cost (per Dec 2002 report)	\$3,300,000	\$3,700,000	\$6,600,000	\$7,600,000	\$3,500,000	\$4,300,000
	20-y Life Cycle Costing (LCC) (per Dec 2002 report)						
	<i>Capital Present Worth</i>	\$3,303,000	\$3,733,000	\$6,600,000	\$7,575,000	\$3,525,000	\$4,319,000
	<i>O&M Present Worth</i>	\$1,666,000	\$1,666,000	\$1,005,000	\$1,005,000	\$2,162,000	\$2,162,000
	LCC Sub-Total	\$4,969,000	\$5,399,000	\$7,605,000	\$8,580,000	\$5,687,000	\$6,481,000
(A)	Capital Cost (amended April 2003, updated following review of Dec 2002 RVA report. Wastewater hauling removed from pipeline cost and totalled below in separate line item.)	\$3,300,000	\$3,700,000	\$6,100,000	\$7,100,000	\$3,500,000	\$4,300,000
	20-y Life Cycle Costing (LCC) (amended April 2003)						
	<i>Capital Present Worth</i>	\$3,303,000	\$3,733,000	\$6,100,000	\$7,100,000	\$3,525,000	\$4,319,000
	<i>O&M Present Worth</i>	\$1,666,000	\$1,666,000	\$1,005,000	\$1,005,000	\$2,162,000	\$2,162,000
(B)	LCC Sub-Total	\$4,969,000	\$5,399,000	\$7,105,000	\$8,105,000	\$5,687,000	\$6,481,000
	60-y Life Cycle Costing (LCC)						
	<i>Capital Present Worth</i>	\$4,668,000	\$5,085,000	\$6,680,000	\$7,492,000	\$4,641,000	\$5,514,000
	<i>O&M Present Worth</i>	\$2,400,000	\$2,400,000	\$1,477,000	\$1,477,000	\$3,133,000	\$3,133,000
(C)	LCC Sub-Total	\$7,068,000	\$7,485,000	\$8,157,000	\$8,969,000	\$7,774,000	\$8,647,000
	90-y Life Cycle Costing (LCC)						
	<i>Capital Present Worth</i>	\$4,693,000	\$5,127,000	\$6,384,000	\$7,160,000	\$4,651,000	\$5,478,000
	<i>O&M Present Worth</i>	\$2,474,000	\$2,474,000	\$1,528,000	\$1,528,000	\$3,234,000	\$3,234,000
(D)	LCC Sub-Total	\$7,167,000	\$7,601,000	\$7,912,000	\$8,688,000	\$7,885,000	\$8,712,000
	Other costs to implement						
	<i>Hydrogeological studies etc.</i>	\$250,000	\$250,000				
	<i>Noise study</i>	\$25,000	\$25,000				
	<i>Land Costs</i>	\$0	\$32,000				
	<i>Sludge disposal</i>	\$200,000	\$200,000				
	<i>Refurbishing existing irrigation fields</i>	\$250,000	\$250,000				
	<i>Nutrient management / compensation plan</i>					\$25,000	\$50,000
	<i>Additional EA costs</i>	\$50,000	\$50,000			\$50,000	\$50,000
	<i>Wastewater hauling costs</i>	\$1,500,000	\$1,500,000	\$1,000,000	\$1,000,000	\$1,500,000	\$1,500,000
(E)	"Other" costs Sub-Total	\$2,275,000	\$2,307,000	\$1,000,000	\$1,000,000	\$1,575,000	\$1,600,000
(A)+(E)	Totals <i>(These totals include the capital and O&M LCC shown above, plus the other implementation costs)</i>						
	Total anticipated capital costs	\$5,575,000	\$6,007,000	\$7,100,000	\$8,100,000	\$5,075,000	\$5,900,000
(B)+(E)	Total 20-y LCC	\$7,244,000	\$7,706,000	\$8,105,000	\$9,105,000	\$7,262,000	\$8,081,000
(C)+(E)	Total 60-y LCC	\$9,343,000	\$9,792,000	\$9,157,000	\$9,969,000	\$9,349,000	\$10,247,000
(D)+(E)	Total 90-y LCC	\$9,442,000	\$9,908,000	\$8,912,000	\$9,688,000	\$9,460,000	\$10,312,000