

SOIL TECHNOLOGY:		Bioventing			
RACER PARAMETERS	Scenario A	Scenario B	Scenario C	Scenario D	
	Small Site		Large Site		
	Easy	Difficult	Easy	Difficult	
Type of Installation	Vertical Well	Vertical Well	Vertical Well	Vertical Well	
Soil Type	Sand-Silt/Sand-Clay Mixture	Silt/Silty-Clay mixture	Sand-Silt/Sand-Clay Mixture	Silt/Silty-Clay mixture	
Safety Level	D	D	D	D	
Surface Area of Contamination (SF)	450	450	9,000	9,000	
Depth to Base of Contamination (ft)	5	5	5	5	
Contaminated Volume (Cubic Feet)	2,250	2,250	45,000	45,000	
Contaminated Volume (Cubic Yards)	83	83	1,667	1,667	
Drilling					
Avg. Well Depth (ft)	5	5	5	5	
Formation type	Unconsolidated	Unconsolidated	Unconsolidated	Unconsolidated	
Safety Level	D	D	D	D	
Well Diameter (in)	2	2	2	2	
Drilling Method	Hollow Stem	Hollow Stem	Hollow Stem	Hollow Stem	
Well Construction Material	PVC Schedule 40	PVC Schedule 40	PVC Schedule 40	PVC Schedule 40	
Avg. # of soil samples per well	1	1	1	1	
Contaminant of interest	SVOCs	SVOCs	SVOCs	SVOCs	
Extraction Well Spacing (ft)	35	22	35	22	
# of Vapor Extraction Wells	1	2	10	24	
Avg. Vapor Flow Rate per well (CFM)	3.0	1.5	3.0	1.5	
Total Vapor Flow Rate (CFM)	3.0	3.0	30.0	36.0	
Bioventing Marked-up Costs	\$16,547	\$18,919	\$41,044	\$76,171	
Additional Costs:					
O&M	\$40,237	\$40,237	\$53,954	\$53,954	
Years of O&M	2.0	2.0	5.0	5.0	
Remedial Design	\$2,317	\$2,649	\$5,336	\$9,141	
TOTAL MARKED-UP COSTS	\$59,101	\$61,805	\$100,334	\$139,266	
COST PER CUBIC FOOT	\$26	\$27	\$2	\$3	
COST PER CUBIC METER	\$928	\$970	\$79	\$109	
COST PER CUBIC YARD	\$709	\$742	\$60	\$84	