

Cost Estimates for Passive Flux Monitoring

COST CATEGORY	Subcategory (10 wells – 100 linear ft)	Costs (\$)
FIXED COSTS		
CAPITAL COSTS	Operator Training—for passive flux meter installation and sampling. Cost of \$2,500 per person. Amortize over 10 deployments.	\$500
	Planning/preparation (assume 8 hours, \$80/hr) Organizing supplies, site access, deployment duration, sorbent/tracers selection and approval	\$640
	Equipment: Sorbent preparation mixing equipment and PFM packing equipment (\$10,000 capital) amortize over 10 major deployments	\$1,000
	Environmental safety training (\$1,000/yr/person). Amortize over 10 deployments for two people	\$200
Subtotal		\$2,340
VARIABLE COSTS		
OPERATING COSTS	Operator labor—two people required to construct and install passive flux meters and to collect, prepare, and ship samples. One day for deployment and a second day for retrieval. (8hr/day X 2 people X 2 days X \$80/hr)	\$2,560*
	Mobilization/demobilization—assumes two trips to and from the site, each requiring 0.5 days of travel plus travel costs for two people. \$80/hour labor, air fare, travel costs up to ~\$800 per person.(4 trips X 4hrs/trip X 2 people X \$80/hr + 4 X ~\$800)	\$5,760*
	Hotel for 2 people for 2 nights during PFM deployment and 2 nights during PFM retrieval assuming \$150/night per diem. (4 nights X 2 people X \$150/night)	\$1,200
	Raw materials—sorbent and resident tracers (\$166.70/well)	\$1,667
	Consumables, supplies—sorbent, socks, ancillary components of the PFM, and sample vials (\$183.33/well)	\$1,833
	Residual waste handling—consumed sorbent and socks (\$333.33/well)	\$3,333
	Sampling and analysis for contaminants and resident tracers retained on passive flux meter sorbent (\$100/sample or \$1,000/well)	\$10,000*
	Subtotal	
OTHER COSTS	Data analysis—6 hours required (\$160/well)	\$1,600
Subtotal		\$30,293
TOTAL TECHNOLOGY COST		\$30,293
Unit cost per linear foot (ft)		\$303/ft

* Mobilization/demobilization, labor, and analytical costs can vary up to 50% as principal cost drivers

Source: ESTCP 2007