

Typical Cost Comparison- Small Community Water Treatment System

SECTOR MUNICIPAL – SMALL COMMUNITY WATER TREATMENT PLANTS	EARTHGARD PRODUCT SMALL COMMUNITY WTP-1MGD (Note 1)	TYPICAL CLARIFIER FOLLOWED BY SAND FILTRATION (Note 1)	CROSS FLOW MEMBRANE TECHNOLOGY (Note 1)
Complete System Includes	Clarifier (possible) plus 70 – 140 R3F Columns	Clarifier followed by sand filters	Clarifier or pre-filters (possible) plus 70 – 140 micro-filtration membranes
Capital Cost	\$250,000 – \$400,000 depends if a clarifier is required which is dependent on the influent water quality	\$550,000 but likely more depending on extra treatment for pathogen removal	\$800,000 – \$1,000,000
Operation & Maintenance	\$75,000 – 100,000	\$75,000 – \$100,000	\$115,000 – \$135,000
Level of Operator Expertise	Basic	Basic	High technical and control system capability
Floor space requirements based on 1.0 being the traditional system	0.5	1.0	1.25
Ability to remove crypto sporidium and giardia	Will satisfy standards	May satisfy standards	Excellent – will exceed standards
Facilitates Expansion/Redundancy	Excellent	Poor	Good but costly
Backwash Volume where Typical Clarifier Option is based at 1.0	0.75	1.0	1.30

Note 1: System used as an example is for 1.0 million gallons/day, which should treat approximately 10,000 people. The 10,000-person threshold is the definition threshold of a small community in the U.S. The factors for price differences will be accentuated for lower populations. Assumes Earthgard Partner will retail R3F Column at 50% margin.