

Unique Market Opportunities for the Manz Slow Sand Filter™ (MSSF) and the Manz Polishing Sand Filter™ (MPSF)

Treatment of Saline and Brackish Water: Saline and brackish water both have very high total dissolved solids and they may have all of the water quality problems associated with surface water. The final stage in treatment to remove dissolved solids requires a membrane technology. However before use of the membrane technology the water must be treated to remove the other impurities, particularly suspended solids (lower the S.D.I.). The MSSF/MPSF technology is able to compete effectively with the alternate treatment technologies.

Treatment of Grey Water: Treatment systems have been developed to treat grey water to reusable condition to be used in toilets, for laundry and gardening.

Treatment of Wastewater Treated to Secondary or Tertiary Standards: Secondary or tertiary effluent from wastewater treatment plants may be further treated to remove residual particulate matter and pathogens. The water is then easily disinfected for possible reuse or disposal. Where required phosphorous removal may also be achieved.

Industrial Applications: There are many industrial applications for polishing filters such as the MPSF technology whenever the removal of particulate matter that contributes to excess Chemical Biological Oxygen Demand (CBOD) and Total Suspended Solids (TSS) are a concern.

Stormwater Treatment: Stormwater runoff may be captured and treated using either the MSSF or MPSF technology to efficiently remove particulate matter prior to discharge into sensitive receiving water bodies or for reuse.

Agriculture: Applications in agriculture include pre-treatment prior to drip irrigation and treatment of water used in greenhouses (fresh and recycled water typical of systems used in modern large scale operations). Other applications include treatment of fresh and wastewater associated with fish farming.

Food Processing: There are a great many food processing plants that use large quantities of clean water to wash produce prior to processing. The MPSF technology is ideally suited for removing particulate matter (including colloidal sized particles) such that the water can be reused within the plant.

Mining: There are considerable opportunities for the MPSF in treatment of wastewater from operations to remove silt and clay as well as dissolved heavy metals. There are also several opportunities for treatment of water in existing tailings ponds for reuse or safe disposal.

Oil and Gas: Opportunities are available to treat many wastewater streams in exploration and production of oil and gas resources where other treatment technologies are typically too expensive to implement.

Recreation: Opportunities may be available to economically treat water from small lakes and large swimming pools.