

# EGFE GREENSAND Filters

## Iron, Manganese, Hydrogen Sulfide Removal



### Iron

Iron is a common element found in most water supplies, particularly well water. In concentrations over 0.3 mg/L (ppm) iron causes deposits on pipelines, pressure tanks, water heaters and water softeners, reducing the available water flow and pressure. It affects the flavour and colour of food and water. It may react with tannins in coffee, tea and some alcoholic beverages to produce a black sludge, which affects both taste and appearance. Iron causes reddish-brown staining of laundry, porcelain, dishes, utensils and even glassware.



### Manganese

Manganese is most often present in iron-laden waters. In concentrations over 0.05 mg/L (ppm), it causes black deposits on plumbing fixtures and laundry.



### Hydrogen Sulfide (Sulphur)

Hydrogen Sulfide gives water an obnoxious “rotten egg” odour that can make it unbearable to drink, cook with or bathe in. It also promotes corrosion and tarnishes silver. Higher concentrations are flammable & poisonous.

### Removing the Troublesome Trio !

Rainfresh Greensand Filters are based on the technology of oxidation and filtration. They incorporate a special high-oxidant media called Manganese Greensand. When water flows through the Greensand filter system, dissolved iron and manganese are oxidized to insoluble precipitates by contact with the greensand media, and simultaneously filtered out. Hydrogen Sulfide is reduced to an insoluble sulphur precipitate, which is also filtered in the bed.

#### ADVANTAGES

- Prevents red stains
- Prevents black stains
- Reduces “Rotten Egg” sulfur odor

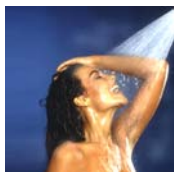


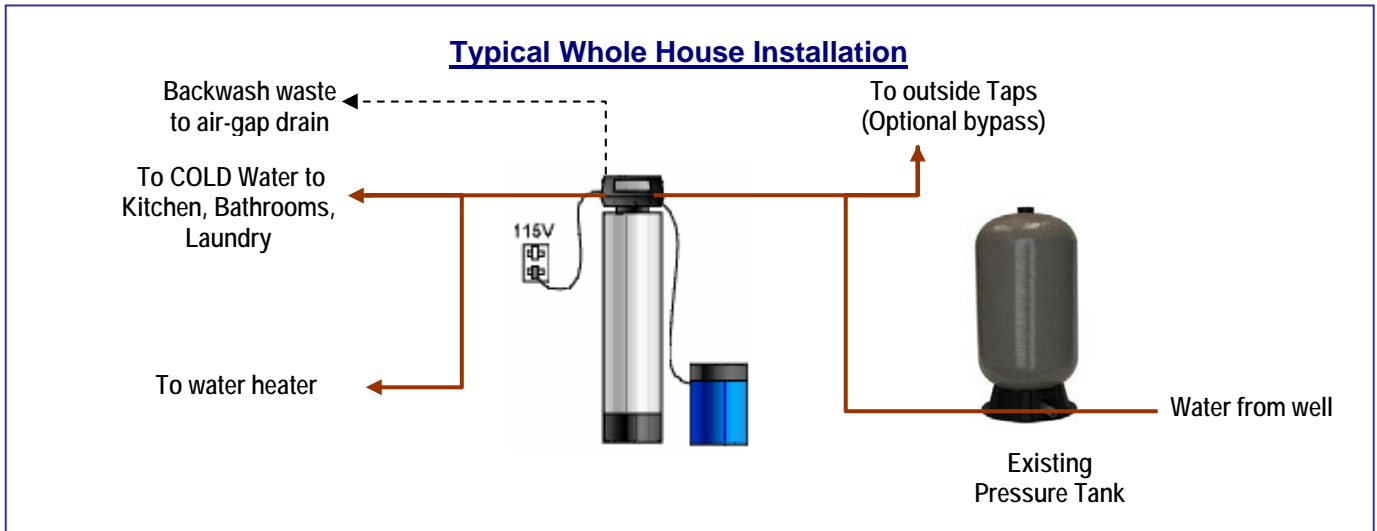
Water coming out of the greensand filter is virtually free of iron, manganese and hydrogen sulphide.

When the oxidizing capacity of the greensand bed is exhausted, the system automatically backwashes to rid it of the trapped iron, manganese & hydrogen sulfide and regenerates using potassium permanganate which is stored in a separate small container.

### Advantages

- Automatic backwash & regeneration !
- Prevents reddish-brown or black staining on bathroom & kitchen fixtures
- Prevents stains in washing machines and laundry
- Clothes are cleaner and whites are whiter
- Prevents staining on dishes dishwashers
- Clearer water at every tap including showers
- Low maintenance





### MODEL Specifications

Model No.	Rated Service Flow US GPM*	Peak Flow Rate US GPM*	Backwash Flow Rate Required US GPM*	Inlet / Outlet	Drain Connection
EGFE 948	3 (11.3 lpm)	4 (15.1 lpm)	4.5 (17 lpm)	3/4" Male NPT	1/2" Hose
EGFE 1054	5 (18.9 lpm)	8 (30 lpm)	5.5 (20.8 lpm)	3/4" Male NPT	1/2" Hose

\* - 1 US Gallon = 0.8327 Imperial gallon  
 Max Water Temperature: 80°F (26.7°C)  
 Max practical limit of iron or manganese in raw water = 15 ppm  
 Max practical limit of hydrogen sulfide in raw water = 5 ppm

All models are equipped with by-pass valve, drain line connections and automatic electronic metered control valve. Call Rainfresh for custom sizes and options.

### ABOUT RAINFRESH/ENVIROGARD

For over 50 years, Envirogard has been leading the water treatment industry in Canada by providing high quality products and solutions at affordable prices. "Rainfresh" products are used by homeowners across Canada and in over 40 countries worldwide.



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