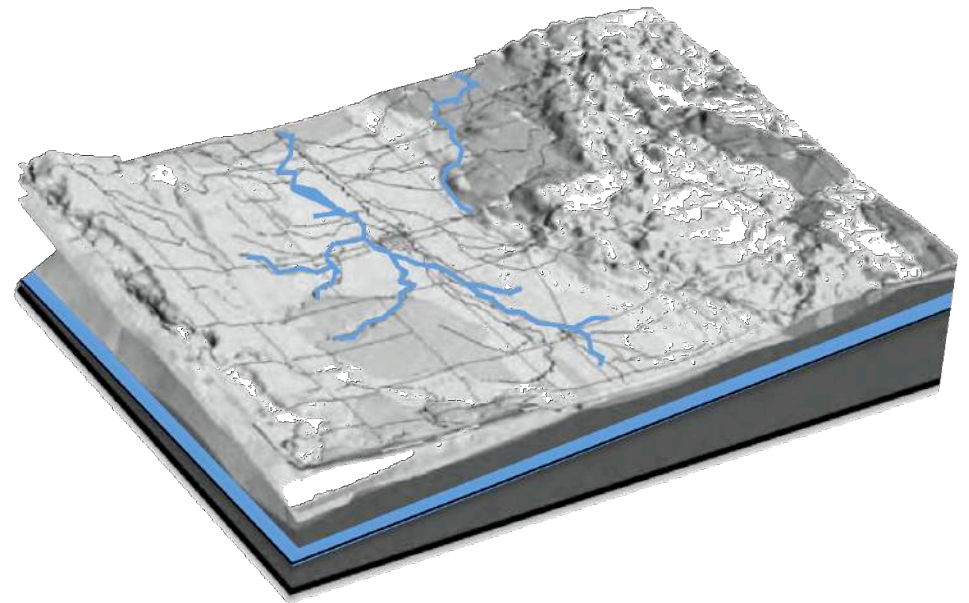


Groundwater Remediation with PoreLogix Ultrafiltration Systems

PoreLogix Ultrafiltration Systems with the PAN Hollow Fiber membrane provides an effective, economical solution to treating contaminated ground water.

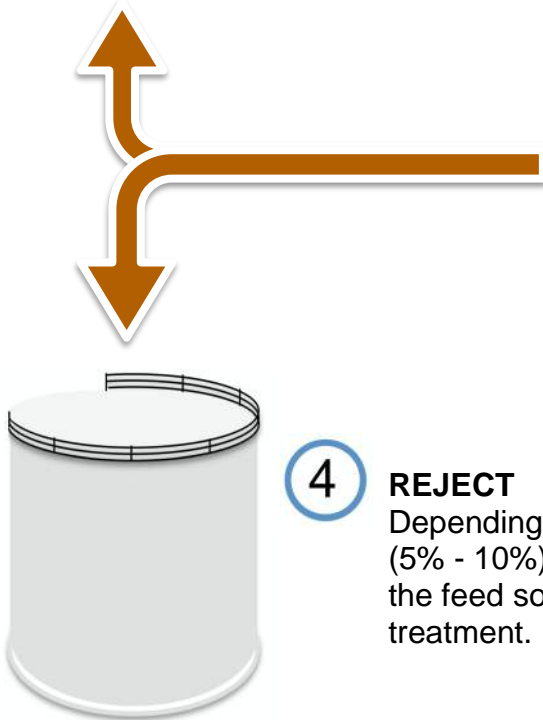
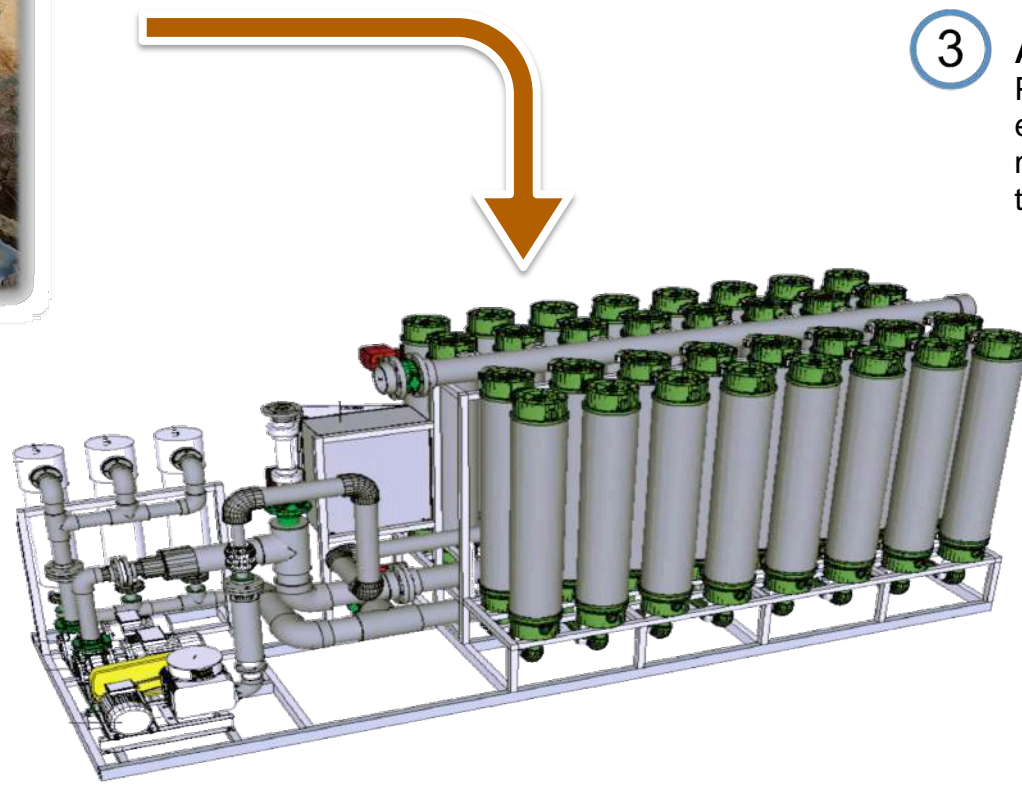


- 1 CONTAMINATION**
Groundwater can become polluted or contaminated as a result of natural occurrences or human activities.



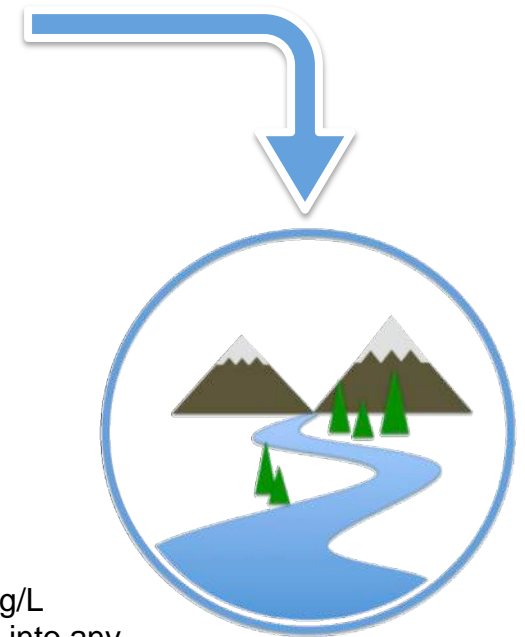
- 2 FILTRATION**
PoreLogix Ultrafiltration Systems provide a robust, mobile filtration system capable of separating oil and water by removing 99.99% of the total suspended solids.

- 3 ADVANTAGES**
PoreLogix Ultrafiltration Systems are cost effective, energy efficient, low maintenance, and 1/3rd the size of traditional treatment technologies.



- 4 REJECT**
Depending on the application, reject (5% - 10%) is either flushed back into the feed source or collected for further treatment.

- 5 DISCHARGE & RECYCLING**
The high quality permeate (<5mg/L TSS) can be discharged directly into any water source or be reused in an industrial process.



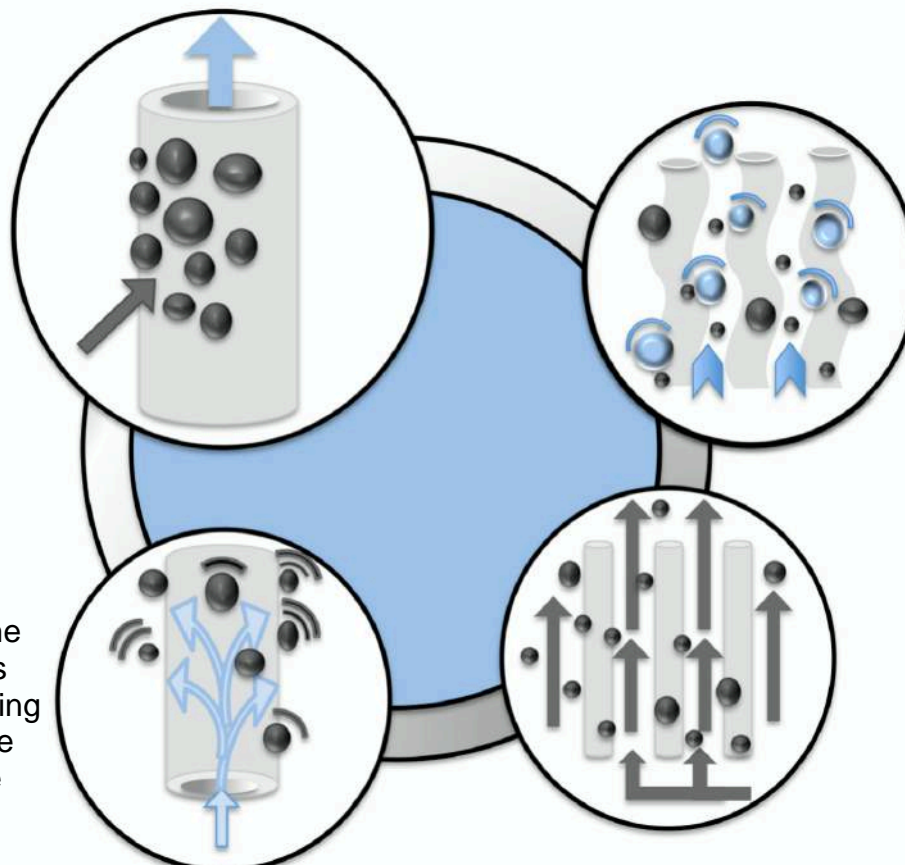
PORELOGIX ULTRAFILTRATION SYSTEMS FILTRATION PROCESS

FILTRATION PROCESS (OUT - IN FLOW)

Filtration process is via an Out-In flow configuration where feed water is in contact with the exterior of the fibers and the filtrate (product water) is drawn from the inside of the hollow fibers (lumen). This configuration has the distinctive advantage of a larger membranes surface area, which translates to a higher flow.

BACK FLUSH

After the Forward Flush process has removed the majority of the solids from the cartridge, Porelogix Ultrafiltration systems will engage in a Back Flush process utilizing filtrate to Back Flush from the inside of the hollow fibers, hence dislodging any of the remaining solids attached to the outer surface of the fiber.



AIR SCOURING

During both the Forward Flush and Back Flush process, air bubbles are injected into the cartridge dislodging suspended solids from the hollow fiber membrane. This enables the Forward and Back Flush process to effectively remove the solids from the cartridge to prevent build-up.

FORWARD FLUSH

On a preset time frame or upon reaching a predetermined transmembrane pressure (TMP), Porelogix Ultrafiltration systems will engage in a regeneration process. Beginning with the Forward Flush process, 95% of the solids are removed with the feed water without TMP constriction.