

Digested Organic’s **Two-Step Reverse Osmosis™ (TSRO)** process converts landfill leachate into clean water suitable for discharge and concentrated leachate for hauling offsite. We provide this cutting-edge technology as a skid-mounted or containerized package that is easy to install, highly automated, and requires little operator attention. It is available for purchase or can be setup on a fee-per-gallon service plan so there is no capital outlay and your facility immediately recognizes cost savings. Typically, we can recover greater than 95% of leachate volume as clean water.



Concentrated Leachate and Clean Water

Results from recent testing with leachate from a landfill in Michigan are shown in the table below. Our TSRO process generated water that met discharge requirements at a rate of >95% of the incoming leachate. Notably, the TSRO removed PFOA and PFOS (along with 22 other analyzed PFAS compounds) to below detectable levels.

Parameter	Leachate	TSRO Permeate	% Removal
Total solids (mg/L)	10,500	1,170	89%
BOD (mg/L)	N/A	<9	N/A
Total Kjeldahl Nitrogen (mg/L)	963	22	98%
Ammoniacal Nitrogen (mg/L)	928	21	98%
Organic nitrogen (mg/L)	35	1.3	96%
Phosphorus (mg/L)	4.8	0.10	98%
Potassium (mg/L)	551	7.5	99%
Sulfur (mg/L)	1,350	<0.5	100%
Calcium (mg/L)	79	0.22	99.7%
Magnesium (mg/L)	138	<0.1	100%
Sodium (mg/L)	2,120	468	78%
Iron (mg/L)	7	0.06	99%
Manganese (mg/L)	0.12	<0.005	100%
Zinc (mg/L)	0.10	<0.01	100%
Copper (mg/L)	0.08	<0.01	100%
Conductivity (mS/cm)	17	2.72	84%
pH S.U.	6.55	5.69	N/A
<b>PFOA + PFOS (ppt)</b>	<b>1,612</b>	<b>&lt;2.0</b>	<b>100%</b>



TSRO System

***Please inquire today for a customized proposal for your facility and to schedule pilot testing at our facility in Farmington Hills, Michigan.***