

## CASE STUDY #1

### Milking Parlor (Milking Shed) ~2m<sup>3</sup>/d Wastewater Treatment Prototype



Location	Israel
Built	Aug 2016
Type	Dairy farm
Cows	350 heads
Flow	~2 m <sup>3</sup> /d (~530 gal/d).
DM	3-4 % <sup>§</sup>
Technology	AD-BNR

<sup>§</sup> Mixing of milking parlor slurry (~1%DS) and holding area manure (~15%DS)

Sustainable Green Technologies (SGTech) is a multi-disciplinary R&D CleanTech & Renewable Energy company, specializing in Nutrient Recovery, Biogas solutions and Water Recycling for Livestock. SGTech developed a game-changing **chemical-free** economical feasible waste treatment producing treated water at quality for discharge into the sewage.

The technology was successfully tested in a prototype in an Israeli dairy farm for ~2m<sup>3</sup>/d (~530 gal/d) of a 1-2% DM waste. Table 1 & Figure 1 summarizes the system performance. Figure 2 illustrates the treated water qualities.

FIGURE 2: Treated water qualities

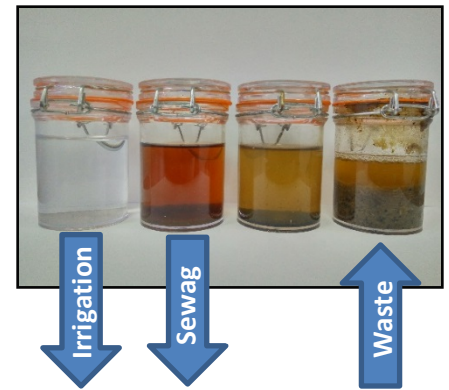
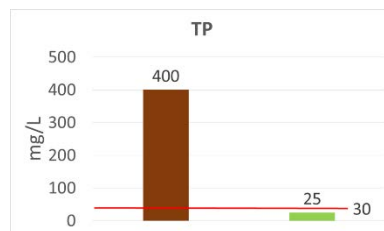
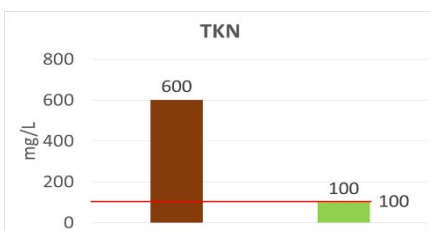


TABLE 1: System performance

Parameter	Units	Influent	Effluent	Sewage discharge levels <sup>§</sup>
<b>COD</b>	mg/L	~40,000	1,500 +/- 125	< 2,000
<b>TSS</b>	mg/L	~40,000	480 +/- 210	< 1,000
<b>TKN</b>	mg/L	~600	100 +/- 10	< 100
<b>TP</b>	mg/L	~400	25 +/- 2	< 30
<b>Ammonia</b>	mg/L	~500	12 +/- 3	-
<b>pH</b>	-	~6	7.4 +/- 0.76	6-10

<sup>§</sup>According to the Israeli regulations



■ Influent ■ Effluent ■ Sewage discharge levels

FIGURE 1: System performance

