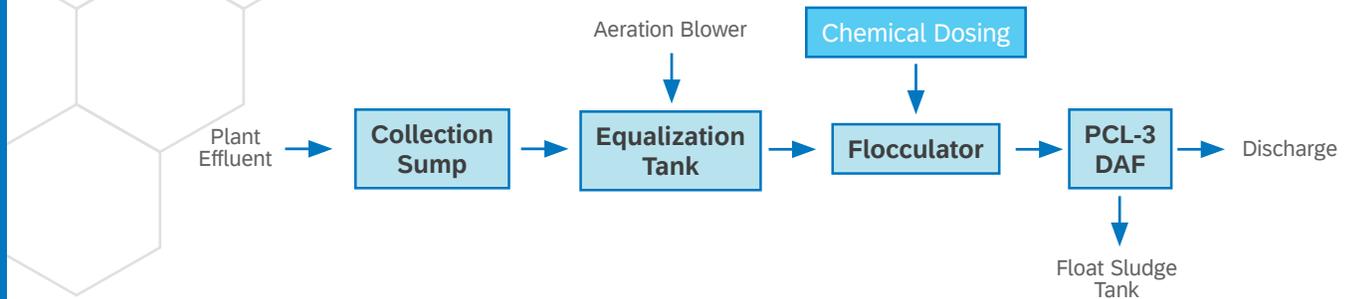


Liquid Condiments



The facility processes various fruit and vegetable ingredients into household branded jams, jellies, and syrups.

17,000 gallons of wastewater is generated as equipment and the production area is washed and sanitized. The wastewater is laden with organic solids, oils, and cleaning chemicals.

The wastewater treatment system is designed to process the day's flow in approximately eight hours and includes preliminary screening, flow equalization, physical/chemical treatment, and sludge collection equipment.

	Design Parameters	Discharge Requirements
Flow	17,000 GPD	
TSS	3500 mg/L	100 mg/L
FOG	250 mg/L	50 mg/L

Equipment Supplied

- 17,000 gal Aerated EQ Tank
- PCL-3 DAF System
- F-2 Flocculator
- Chemical Dosing Panels
- Electrical Control Panel

DAF Sizing Calculations

Hydraulic Surface Loading Rate

$$= \frac{\text{Feed Flow} + \text{Recycle Flow in gpm}}{\text{Effective Surface Area in sqft}}$$

$$= \frac{40 + 14 \text{ gpm}}{x \text{ sqft}} = 1 \text{ gpm/sqft}$$

$$= 54 \text{ sqft required}$$

Solids Loading Rate

$$= \frac{\text{Weight of TSS in feed in lbs/hr}}{\text{Free Surface Area in sqft}}$$

$$= \frac{21 \text{ lbs/hr}}{x \text{ sqft}} = 4 \text{ lbs/sqft/hr}$$

$$= 5.25 \text{ sqft required}$$

