

# **Rethink Wastewater with Side Streaming**

Treating wastewater at the source to manage challenges

# What is side streaming?

**Side-streaming** is the practice of isolating and treating high-strength wastewater at the point of generation rather than combining it with lower-strength streams for centralized treatment.

# High-concentration streams (discarded product, CIP rinse, product spill drains) Onsite wastewater treatment Discharge to utility Combine in wastewater tank

### Why do it?

Wastewater isn't created equal, especially in a production environment. Mixing everything together creates more complexity, more volume, and more variability.

# Combining flows:

- X Requires larger systems
- X Increases energy, chemical use, and sludge
- X Makes compliance and performance harder to manage

# A new approach to side streams

# Conventional systems are not designed to handle high-concentration streams directly.

To compensate, the industry standard has been to combine all wastewater flows regardless of strength to create a large, diluted volume that traditional treatment systems can manage.

Aquacycl provides a new way to treat wastewater by being most efficient at taking high concentration, low volume streams and treating them to discharge levels.



# **Point-Source Treatment:**Place treatment system directly at the source of

wastewater production.

- Plug-and-play, containerized design
- ✓ Handles >150,000 mg/L BOD without dilution
- Maintains efficiency under production spikes and low-flow conditions

### It's simpler than you think:

Based on your current facility's set up, here are three ways to separate streams without large overhauls or additional infrastructure. Aquacycl makes it simple.



**by timing** production schedules, batch cycles



**by location** P, crusher effluent, tank wash



**by byproduct** digestate, sludge

# The value of side streaming

# For Engineers:

- Win projects others walk away from due to complexity or footprint limitations
- Offer a differentiated, flexible, and proven approach
- Speed up permitting and construction timelines
- Open up new verticals previously untreatable with onsite systems

## **For Facility Owners:**

- Cut hauling and surcharge costs by isolating high-BOD waste
- Stay compliant with less risk of system upset
- Scale treatment capacity with production growth
- Reduce operational costs across energy, chemicals, maintenance, and sludge disposal



We found just 3% of volume contained over 60% of BOD at a bottling facility.

Treating just the small, concentrated volume onsite drastically reduced their costs.

# Side-streaming isn't a workaround. It's a better way forward.

- Prevents system overloading
- Reduces chemical and energy use
- Improves system reliability and consistency
- Minimizes sludge and emissions
- Simplifies troubleshooting and maintenance
- Helps pinpoint inefficiencies in production
- Enables water reuse and higher quality discharge