



Your Terminal Is Paying Sewer Charges on Water That Sailed Away on Cruise Ships

Water Flow Innovations LLC

Flow Conditioning Device (FCD)
waterflowinnovations.com

Every ship call surges your supply meter — and your meter over-reads it. Ship provisioning surges, simultaneous multi-berth provisioning, and HVAC demand peaks create the conditions for air, gas, and turbulence to form in the line at your meter — and you're billed for water that left port on a cruise ship. The FCD (Flow Conditioning Device) corrects the measurement. Provisioning pressure and delivery are unchanged. Your water bill drops — and so does your sewer bill, because sewer charges are calculated from the same inflated meter reading. One device. Two bills fixed.

WHY CRUISE TERMINAL WATER METERS OVER-READ

The Sharpest Double-Billing Problem in Any WFI Industry: You Pay Sewer on Water That Left at Sea

Your sewer charge is calculated from metered municipal intake — the same meter that over-reads every provisioning surge. Water loaded onto cruise ships sails away with the vessel — it never enters the local sewer system. But your sewer bill charges you for it anyway, because the meter registered it as intake. The FCD corrects the meter. Both charges drop simultaneously.

THE THREE OVER-READING SOURCES UNIQUE TO CRUISE TERMINALS



Ship Provisioning Surges

High-volume provisioning demand during ship calls creates the most intense open-valve events of any terminal water use — generating maximum air, gas, and turbulence at the supply meter.



Multi-Berth Simultaneous Provisioning

Multiple ships provisioning simultaneously from the same supply meter compounds over-reading — each berth adding its own high-velocity demand surges on top of the others.



Terminal HVAC Demand Peaks

Cooling tower makeup water demand cycling with HVAC load creates continuous variable demand events — compounding over-reading from provisioning surges throughout every ship call day.



Your Provisioning Manifests Probably Show Less Water Than Your Meter — That Gap Is the Over-Reading

Many terminals already observe that metered intake exceeds the sum of provisioning manifests plus terminal building use. That discrepancy is meter over-reading from provisioning demand surges. The FCD closes the gap — and produces verifiable documentation for port authority budget reporting and CLIA sustainability disclosure.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ Provisioning surges inflate meter reading
- ✗ Sewer charged on water that sailed away
- ✗ Manifests don't reconcile with metered intake
- ✗ Sewer charge tied to inflated meter



WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ Provisioning surges read accurately
- ✓ Sewer charged on actual local discharge only
- ✓ Manifests reconcile more closely with meter
- ✓ Sewer charge based on real usage

5–30%

Average water & sewer bill reduction

46%

Highest documented single-site reduction

~1 Hour

Install time — water off about 1 hour

6-Mo

Money-back, no questions asked · install non-refundable

How the FCD Works — Four Steps

1

Installs between two pipe joints right after your water meter — water off about one hour

2

Creates a slight back-pressure that extends back through the meter, reducing air, gas, and turbulence

3

Delivers a laminar-like flow profile through the meter — the condition it was calibrated to read

4

Meter reads accurately. Bill drops. Provisioning delivery pressure, pier connections, and terminal HVAC are effectively unchanged.

FREE SAVINGS ESTIMATE

Instant estimate — takes 30 seconds, no contact info required.

waterflowinnovations.com/
[water-bill-savings-calculator](#)

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CERTIFICATIONS

IAPMO

NSF/ANSI/CAN 61

KIWA

GMP

SQF

316L Stainless Steel · Made in USA
Under 0.8 psi pressure loss
Lifetime Transferable Warranty