



# Why Your Pellet Plant Pays More for Water Than It Should — and How to Fix It

Water Flow Innovations LLC

Flow Conditioning Device (FCD)  
waterflowinnovations.com

Your dust suppression, emissions control, and boiler/steam systems all draw from the same municipal supply — but your meter counts more than actually flows. **Spray system cycling, wet ESP wash-down bursts, and boiler feedwater makeup draws create the conditions for air, gas, and turbulence to form in the line at your meter — and you're billed for all of it.** The FCD (Flow Conditioning Device) corrects the measurement. Your plant operations don't change. 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 PELLET PLANT WATER METERS OVER-READ

### The Core Problem: Pellet Plants Run Intermittent, High-Velocity Water Demand Around the Clock

Wood pellet facilities draw metered water for dust suppression, emissions control makeup and wash-down, and boiler/steam systems — all from the same supply meter, on 24/7 production schedules. Each high-velocity demand event generates air, gas, and turbulence in the line at the meter. That registers as water volume. You pay for it on every bill, every month, across every system running simultaneously in your facility.

## THE THREE OVER-READING SOURCES UNIQUE TO PELLET PLANTS



### Dust Suppression Systems

Spray and misting systems at truck dumps, log yards, chip piles, and conveyor transfer points cycle on and off around the clock — creating high-frequency demand events that generate air, gas, and turbulence at the supply meter throughout every shift.



### Emissions Control Wash-Down & Makeup

Wet ESP wash-down cycles and scrubber water makeup tied to dryer exhaust and pellet cooler emissions controls create periodic high-volume demand events — compounding dust suppression over-reading during every operating hour.



### Boiler Feedwater & Steam Conditioning

Boiler makeup and steam conditioning demand at the pellet presses cycles with production load and startups — adding a third compounding over-reading source on top of dust suppression and emissions control demand.



### The Sewer Bill Doubles the Impact — Even for Water That Never Entered a Drain

Municipal sewer charges are calculated as a percentage of metered water consumption. Every phantom gallon your meter over-registers generates a sewer charge alongside the water charge — even though that volume was never actually delivered. At a pellet plant with dust suppression, emissions control, and boiler systems all contributing to over-reading simultaneously, the sewer multiplier compounds the cost of every over-read event across every billing cycle. The FCD corrects the water meter reading, which automatically corrects the sewer charge on the same bill.

## BEFORE & AFTER THE FCD

### WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ Dust suppression cycling inflates meter every shift
- ✗ Wet ESP & scrubber wash-downs compound over-reading
- ✗ Sewer charge tied to inflated meter reading
- ✗ Problem persists even after meter replacement



### WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ Dust suppression demand reads accurately
- ✓ Emissions control makeup measured correctly
- ✓ Sewer charge based on real water consumption
- ✓ Mill operations, pressure & output unchanged

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. Dust suppression, emissions control, and steam conditioning are effectively unchanged.

### FREE SAVINGS ESTIMATE

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

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

### Water Flow Innovations LLC

2651 Route 412  
Coopersburg, PA 18036  
[Info@WaterFlowInnovations.com](mailto:Info@WaterFlowInnovations.com)  
1-(844)-934-8258

### CERTIFICATIONS

IAPMO NSF/ANSI/CAN 61 KIWA GMP SQF

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