



Why Your Mine Site Pays More for Water Than It Should — and How to Fix It

Water Flow Innovations LLC

Flow Conditioning Device (FCD)
waterflowinnovations.com

Your reclaim systems reduce fresh water demand — but your municipal meter over-counts every gallon that does come in. **Processing circuit pump cycling, flotation cell additions, and dust suppression on/off demand create the conditions for air, gas, and turbulence to form in the line at your meter — and you're being billed for it.** The FCD (Flow Conditioning Device) corrects the measurement. Your process doesn'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 MINE SITE WATER METERS OVER-READ

The Core Problem: Your Water Reclaim Efficiency and Your Municipal Meter Accuracy Are Completely Independent Variables

Water reclaim reduces fresh water demand but has no effect on what your municipal meter registers when fresh water is drawn. The over-reading occurs at the meter — caused by air, gas, and turbulence generated by open-valve demand events. The FCD corrects that measurement without touching your reclaim systems or any downstream operation.

THE THREE OVER-READING SOURCES UNIQUE TO MINING & MINERAL PROCESSING



Processing Circuit Pump Cycling

Processing circuit pump startups and load cycling create high-velocity open-valve demand events — generating air, gas, and turbulence at the supply meter throughout every operating shift.



Flotation Cell Additions

Flotation cell water additions are variable in volume and timing — creating the intermittent high-velocity demand events that drive compounding meter over-reading across every production run.



Dust Suppression On/Off

Dust suppression systems cycling on and off across the site create repeated variable demand surges — each one generating air, gas, and turbulence at the supply meter.



Your Water Intensity Per Ton of Ore Is Probably Better Than Your Records Show

If your CDP water disclosure, mining water stewardship reporting, or science-based water targets use metered intake as the baseline, those figures are inflated by over-reading. After FCD installation, your reported water intensity per ton of ore becomes more accurate — documented from utility bills, verifiable for investor ESG scorecards without added infrastructure.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ Circuit pump cycling inflates meter reading
- ✗ Dust suppression surges compound over-reading
- ✗ Water intensity per ton overstated
- ✗ Sewer charge tied to inflated meter



WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ Circuit pump cycling reads accurately
- ✓ Dust suppression measured correctly
- ✓ True water intensity per ton revealed
- ✓ 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. Your processing circuits, flotation cells, and reclaim systems 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