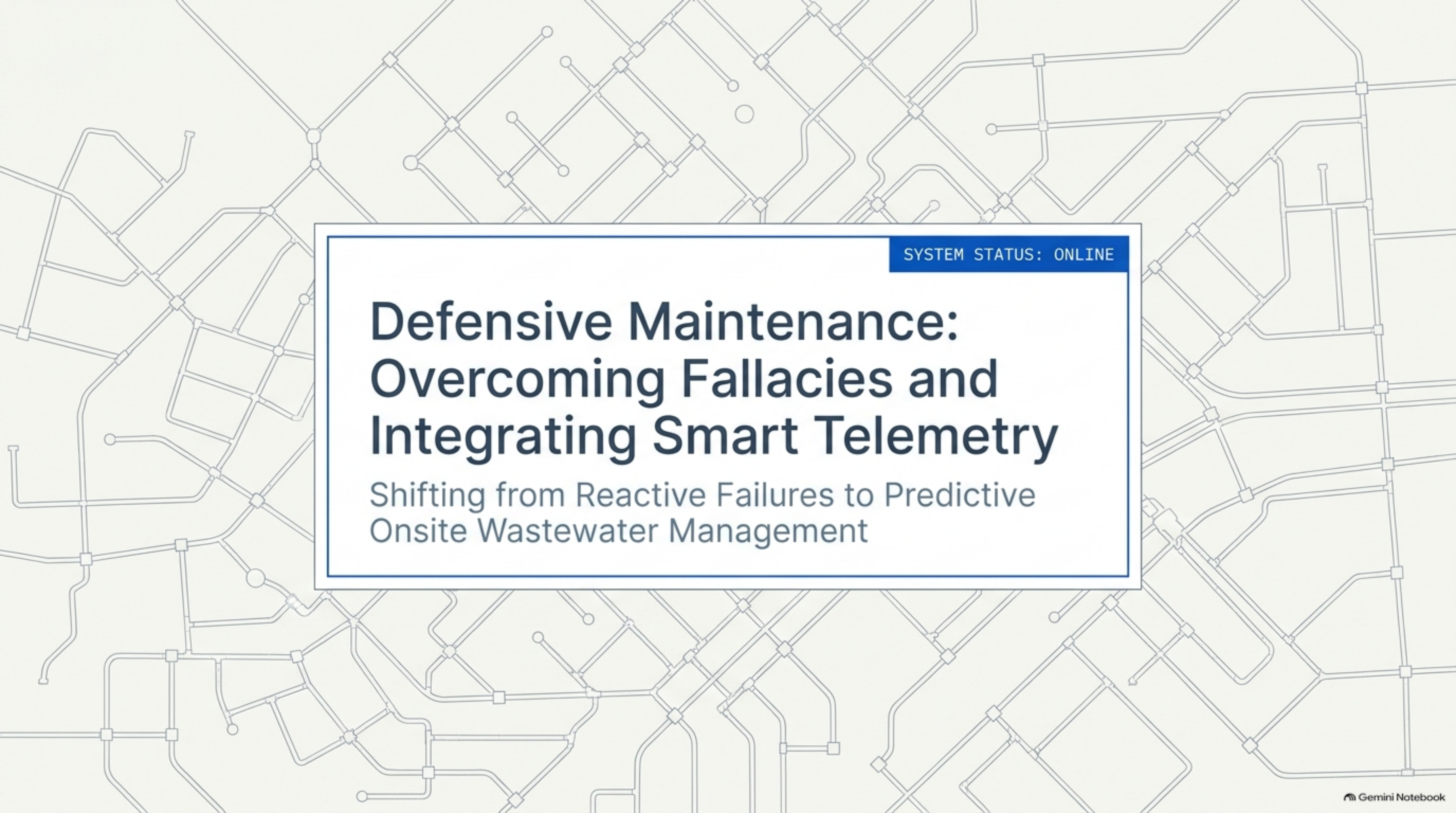


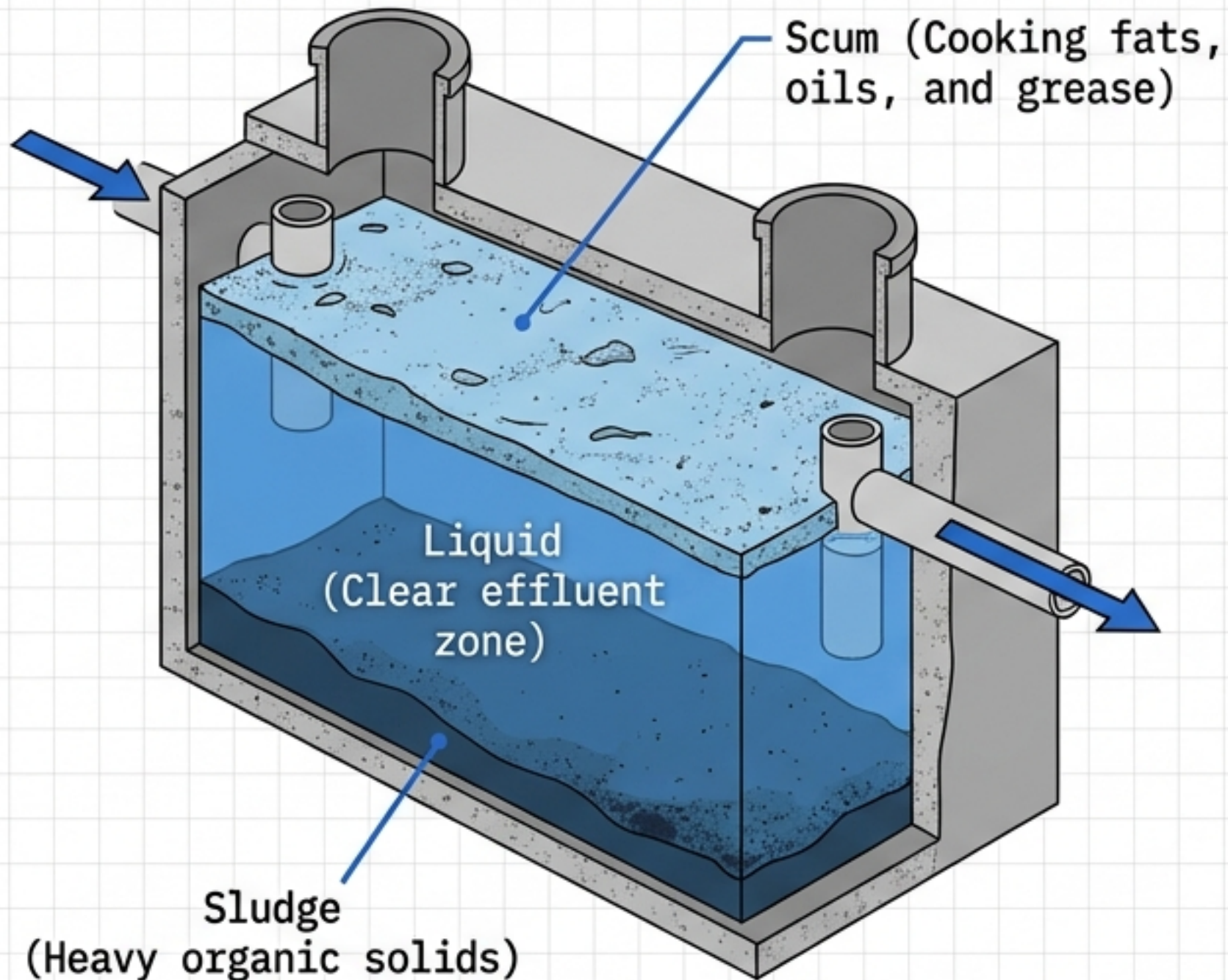


SYSTEM STATUS: ONLINE

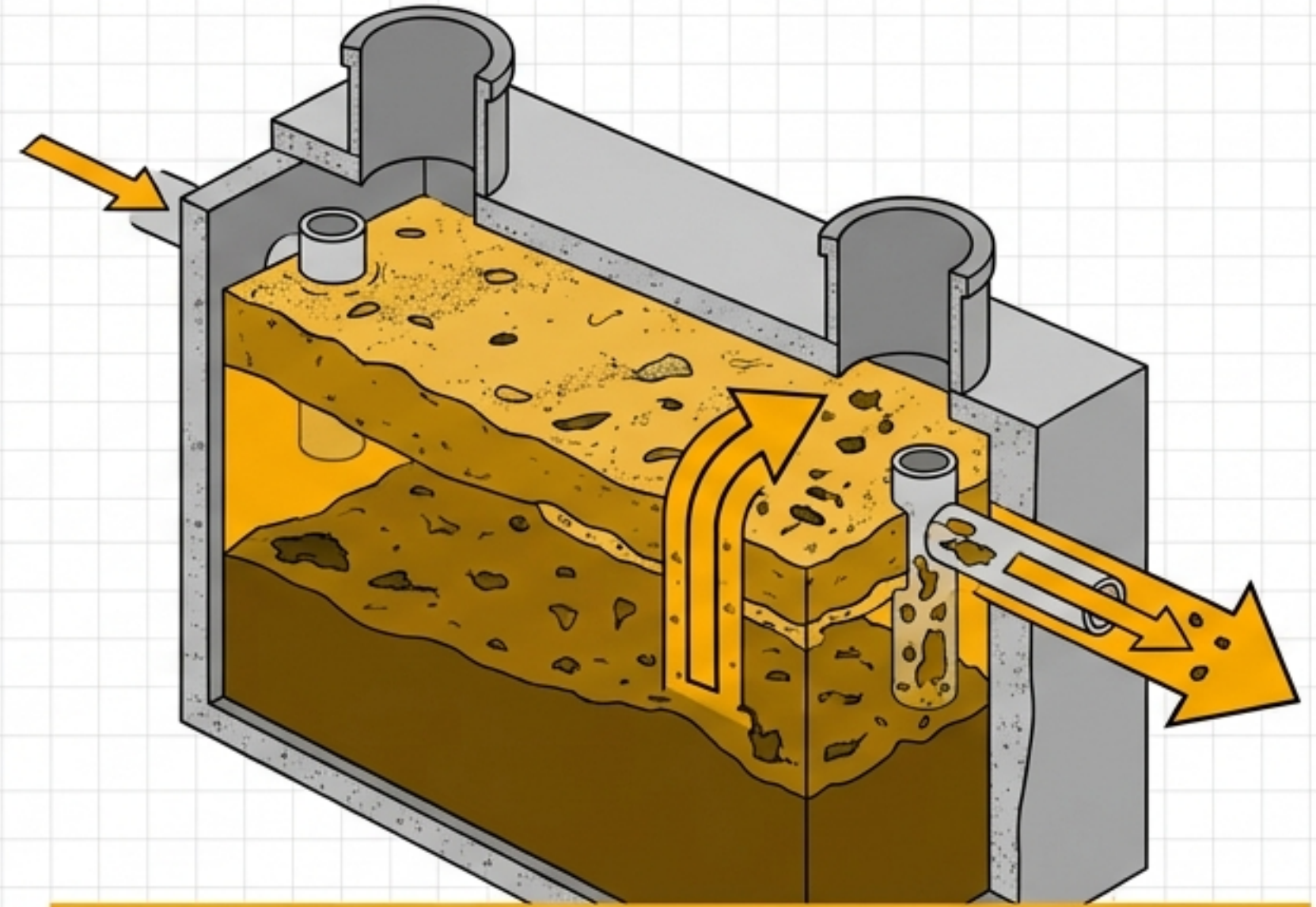
Defensive Maintenance: Overcoming Fallacies and Integrating Smart Telemetry

Shifting from Reactive Failures to Predictive
Onsite Wastewater Management

~~THE MYTH:~~ If a system doesn't back up, it doesn't need maintenance.



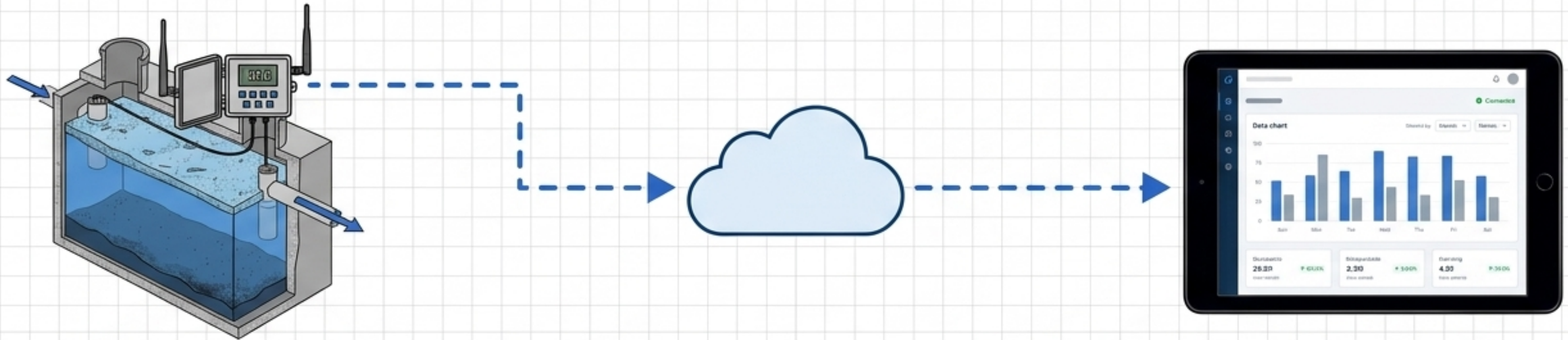
Ideal Pumping Frequency: 3-5 Years



THE CATASTROPHIC PATHWAY

Delayed pumping allows accumulated sludge to escape the outlet baffle. This permanently seals soil pores in the drainfield, triggering expensive, irreversible system failure.

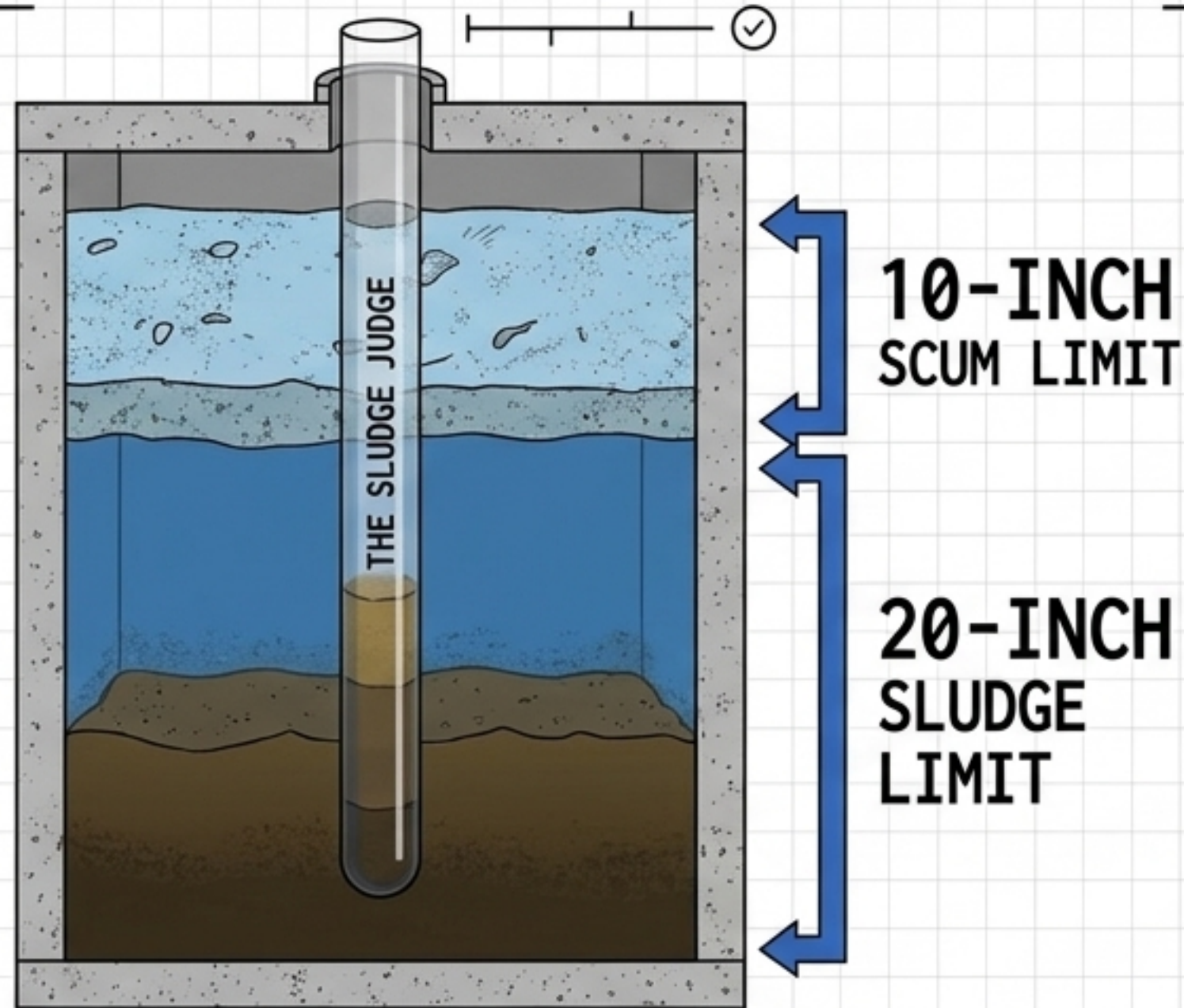
Smart Telemetry & Connectivity



Integration of remote telemetry panels (e.g., SJE Rhombus, Orenco) and Wi-Fi gateways (e.g., Zoeller Z Control) sends real-time alerts for float failures, high water, and amperage volatility directly to service devices.

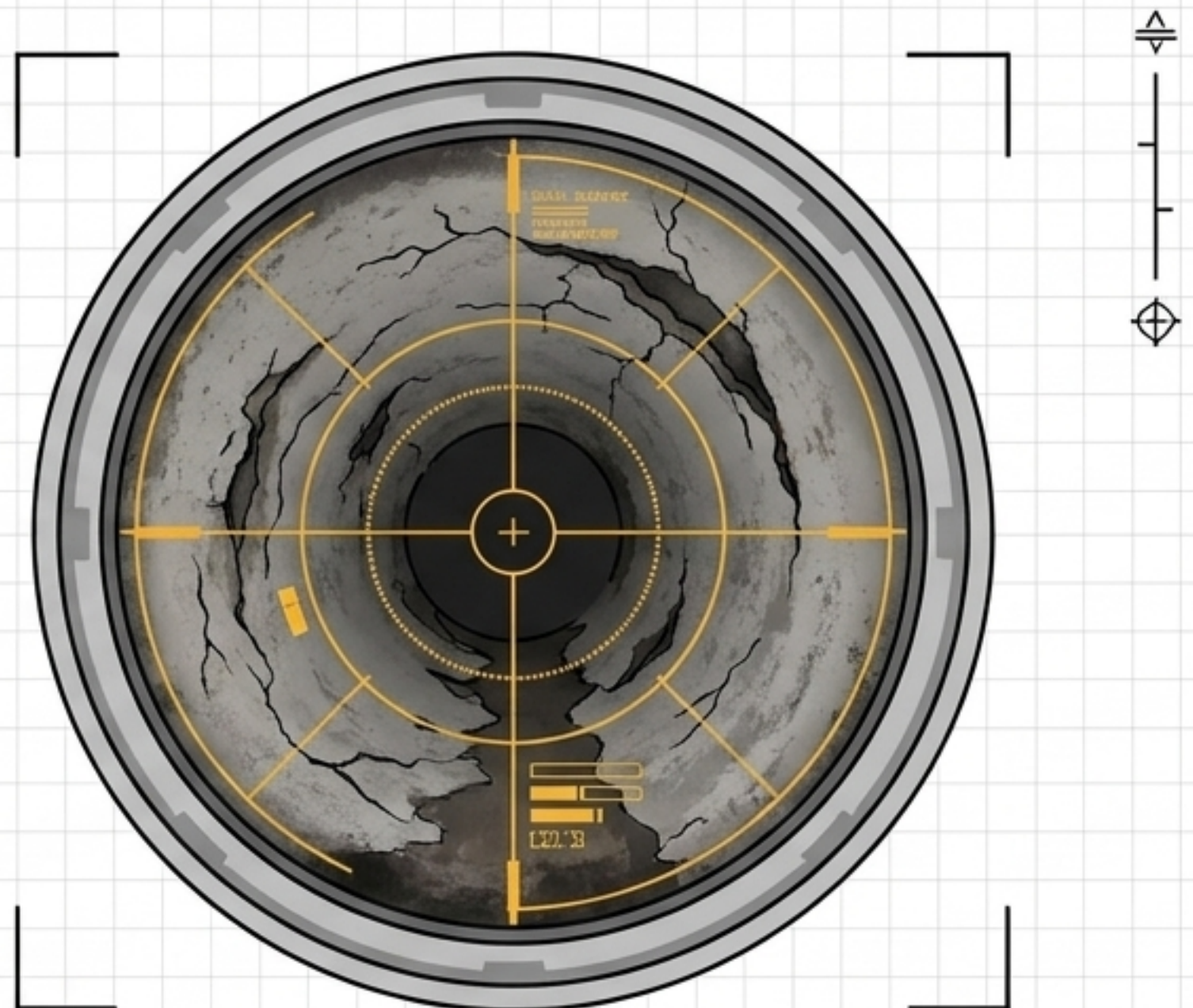
Legacy: Calendar-Based	Modern: Demand-Driven
• Blind operations	• Predictive and data-backed
• Scheduled site visits regardless of actual need	• Service dispatched only upon specific threshold breaches
• Reactive to physical backups	• Optimized OPEX through remote diagnostics

Core Sampling (The Sludge Judge)



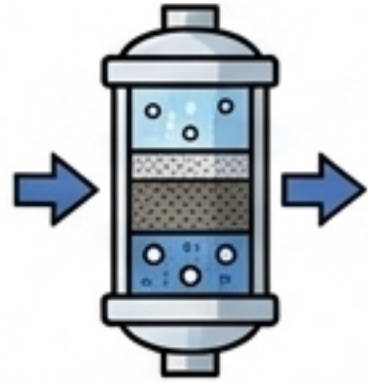
Clear plastic core-samplers are lowered to the tank floor to extract a precise, unmixed profile of tank contents. Mandatory pumping action is required when these thresholds are breached.

Visual Lateral Assessments



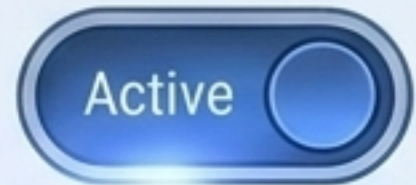
Lateral cameras inspect concrete inlet and outlet tees. These structures are highly susceptible to structural deterioration from trapped sulfuric acid gases. Early detection prevents baffle collapse.

Proactive Field Management Checklist



Filtration Defense

Hose down and clean effluent filters (e.g., Zoeller WW1 or WW4 sanitary tee filters) to prevent solids carry-over to the drainfield.

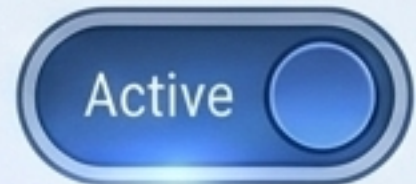


111.82%



Biological Rejuvenation

Rotate diverter valves (e.g., Bull Run valves) on dual drainfields every 6-12 months. This allows resting trenches to dry out, aerate, and biologically recover.

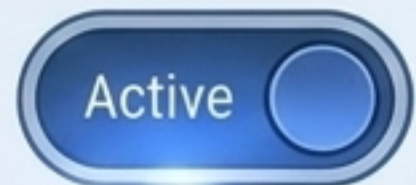


10.53%



Structural Protection

Completely restrict vehicular traffic over tanks and laterals to prevent cracked lids, snapped PVC transitions, and severe soil compaction.



31/28%