For: Director of Sewerage Operations · Network & Treatment Lead

Typical IT / Analyst Prep: ~30 mins for 1 pumping-station catchment

Water Sentinel: 4-Week Catchment Saline & H2S Diagnostic (AED 0 Upfront)

Forwardable technical scope for your operational or IT lead. No live logins, VPNs or production changes are used at any point in this study.

01 · EXACT READ-ONLY HISTORICAL EXTRACTS (CSV / XLSX / PDF)

EXTRACT / REGISTER	TYPICAL SOURCE	FIELDS / COLUMNS USED
1. Station & Manhole Conductivity Logs	Sewer SCADA Historian CSV	`timestamp_15m, node_or_station_id, conductivity_us_cm, pumped_flow_m3_h, coastal_tide_m`
2. Odour Control Scrubber & Dosing Logs	OCU Historian CSV	`timestamp_15m, scrubber_id, inlet_h2s_ppm, outlet_h2s_ppm, recirculation_ph, caustic_dosing_lph`
3. Sewer Branch Map & Dewatering Permits	GIS / Permit Table CSV	`pipe_segment_id, upstream_manhole, downstream_manhole, invert_m, active_dewatering_discharge_flag`

02 · TWO SAFE EXECUTION PATHS (CLIENT CHOOSES)

Option A · Read-Only Slice Under Mutual NDA

Your team shares the agreed read-only historical export above after bilateral NDA signature. Nodal processes it in an isolated UAE-compliant workspace, returns the report, and purges files on study close.

Option B · Self-Run Inside Your Own UAE Network

Your IT team runs Nodal's auditable, dependency-pinned offline script locally on an isolated workstation inside your network and shares only the summary table if you choose.

Strict Security & Scope Boundary (What Is Never Requested):

Zero SCADA write access and zero field loggers deployed during weeks 1–4.

03 · WRITTEN DELIVERABLE, STAGE HONESTY & COMMERCIAL TERMS

WRITTEN OUTPUT

Catchment salt-inflow narrowing plan (comparing 20-logger Bayesian placement nights against expert branch bisection) plus scrubber caustic vs outlet-H2S compliance benchmark against tuned operator rules.

PUBLISHED STAGE & LIMITS

Stage: Simulated, internal review (synthetic single-station catchment; 64 distinct campaigns: 16 author + 16 held-back + 32 stress seeds). In 32 unseen campaigns, hidden salt inflows were pinned in ~7 nights on average vs 11–15 for an expert moving the same 20 loggers and 19–22 for a fixed station meter (59/64 pinned ≥2 of 3 inflows within 5 nights vs 51/64 within 14 nights for the expert). Limits: with 8 or 4 loggers it made ~4.6 or ~2.8 more wasted checks than the expert; lead over the expert is not statistically clear with a deeper water table, 3-night wasted-check cost or 3× ragging. Scrubber caustic fell 12–13% vs a pH schedule (98% vs 94–97% hours in limit; at 2× sulphide load Nodal's saving fell to 4.5% with 10% hours over limit), while a tuned operator rule used 1–2% less caustic with more hours over limit.

MUTUAL NDA & FEE RULE

AED 0 upfront for this 4-Week Catchment Saline & H2S Diagnostic. Zero obligation to continue; any subsequent shadow pilot or rollout runs strictly on terms agreed in writing after your team verifies the findings.

Ready to run this check in writing — zero introductory call required

Request bilateral NDA or local runner: santiago@nodal.systems · Full register: nodal.systems/water-sentinel.html

AED 0 UPFRONT