

Construction sites wrestle with dust, noise, vibration and weather extremes that threaten worker health, breach compliance limits and delay schedules. SitePulse captures real-time environmental data, highlights unsafe thresholds and automates alerts so supervisors can act instantly—protecting crews, avoiding regulatory fines and keeping projects on track.

Why SitePulse

- Protect workforce health
 Continuous noise- and dust-exposure
 tracking helps managers remove staff from
 harmful conditions before limits are
 exceeded.
- Improve reg compliance
 Automated reports align with EPA and
 WorkSafe guidelines, covering noise, dust and
 gas thresholds to simplify audits and avoid
 penalties.
- Reduce project risk
 Early anomaly warnings let teams adjust operations or maintenance, preventing downtime, claims and reputational damage.

How it works

- **Detect**: IoT edge sensors capture noise, dust, gas levels and weather (Temp, RH, BP) metrics every few seconds, streaming them securely.
- Analyse: Cloud AI benchmarks readings against site-specific thresholds, predicting breaches hours ahead and ranking issues by risk level.
- Respond: Instant SMS, email and dashboard alerts guide supervisors to isolate hazards or adjust machinery, while automated reports feed compliance portals.

Getting started with Ericom

- 1 Assess site risks and map monitoring zones.
- 2 Deploy calibrated sensors and connect to the SitePulse cloud.
- 3 Train staff and integrate automated compliance reporting.



Technology options

Adaptive noise sensors Class 1 microphones filter wind and echo to deliver accurate, standardsready SPL readings even in dynamic work zones.

Smart dust monitors Laser-based PM₁₀/PM_{2.5} modules quantify airborne particulates and trigger mist-cannon activation when thresholds near limits.

Multi-gas sensors Pod-form detectors measure CO for the PoC and are expandable to O₂, NH₃, H₂S, NO₂, HCl, H₂, PH₃, SO₂, O₃, Cl₂ and HF, flagging toxic releases before they endanger staff or

Weather-aware alerts Integrated barometric, temperature and humidity (Temp, RH, BP) inputs anticipate dust plume drift and schedule suppressive sprays proactively.

Solar-hybrid power packs Rugged solar-charged battery modules supply off-grid power for sensors for 12 + months, removing cabling and cutting install time.

Unified cloud dashboard Role-based visualisations consolidate multi-site data, generate CSV/PDF reports and stream via open APIs for BIM or FM systems.

WORKERSAFETY

Contractors must protect crews and meet tough HSE KPIs while juggling shifting site hazards. SitePulse's dust, noise, and gas data live streams auto-logs breaches and produces auditready reports, proving compliance, shielding labour-hire teams and preserving preferredsupplier status.

ABOUTUS

Ericom is an Australian technology integrator with 25 years of critical-infrastructure experience. We merge deep construction insight with IoT edge devices, Al analytics and high-reliability Telstra connectivity to provide actionable environmental intelligence that keeps worksites compliant, efficient, profitable, and earns community trust.

TIMFI YDFI IVFRY

Developers face unforgiving milestones, damages clauses, and public scrutiny. SitePulse's predictive alerts and unified dashboard surface risks early. letting supervisors adjust plant or controls before issues stall works, spark complaints or trigger costly schedule penalties.

NEXTSTEPS

Request a no-obligation demo and site assessment. Our specialists will map priority risk zones, estimate ROI from avoided downtime, and design a tailored pilot so you can experience measurable HSE gains and smoother project delivery within weeks.



SitePulse can be integrated across diverse domains,

- Commercial high-rise

- Mining and quarry

- Renewable-energy

