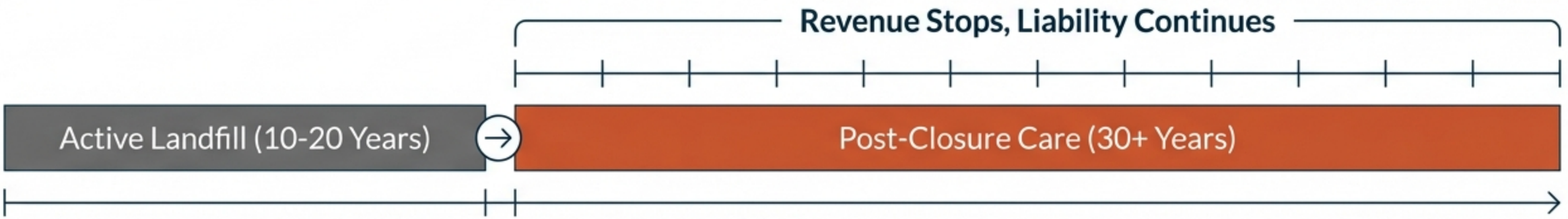
The Cost-Effective Solution to the Global Leachate Crisis

Introducing the Leachate Treatment System (LTS-Series)

Tasmania Limited | Represented by 247 Technologies cc

Landfill Leachate is a Mandatory, Long-Term Liability

Leachate is the "nightmare" wastewater—100 to 1,000 times more polluted than domestic sewage. It creates a regulatory crisis that outlives the landfill itself.



10,000+
Active Landfills Worldwide

30 Years
Mandatory Post-Closure Treatment

$8-12 Billion
Total Available Global Market

Traditional Solutions Are Failing the Industry

Hauling & Disposal

- Unsustainable OpEx: $50–200 per m^3
- **Risk:** WWTPs increasingly refusing toxic leachate

Reverse Osmosis (RO)

- **Issue:** High energy intensity & CapEx

The Hidden Trap:

- Creates the "**Concentrate Problem**"—20–30% of volume remains as toxic sludge requiring secondary disposal.

Evaporation

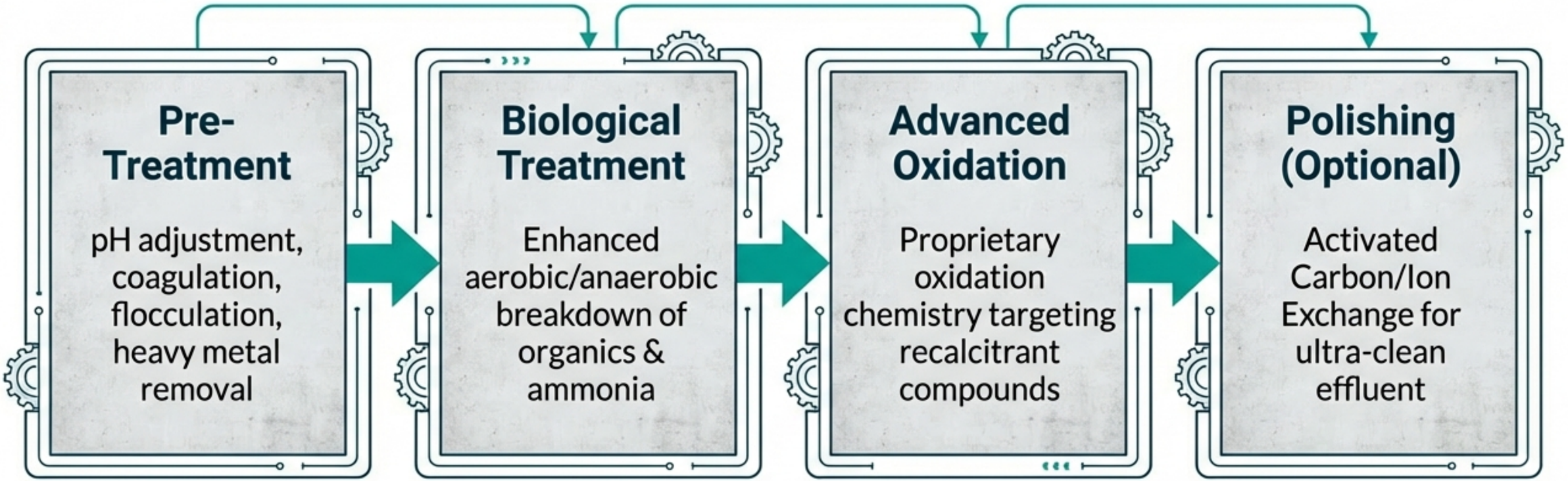
- **Issue:** Extreme energy cost ($15–35 per m^3)
- Still leaves a concentrate residue

The LTS-Series: Superior Treatment Without the Concentrate Trap

A multi-stage hybrid chemical-biological system designed for high-strength wastewater.

- ✓ **60–85% Lower Cost:** Operating costs of $3–8/m³ vs. RO's $12–25/m³.
- ✓ **Zero Concentrate:** Destroys contaminants rather than separating them.
- ✓ **Robust Performance:** Handles COD up to **60,000 mg/L** and **Ammonia** up to **2,500 mg/L.**

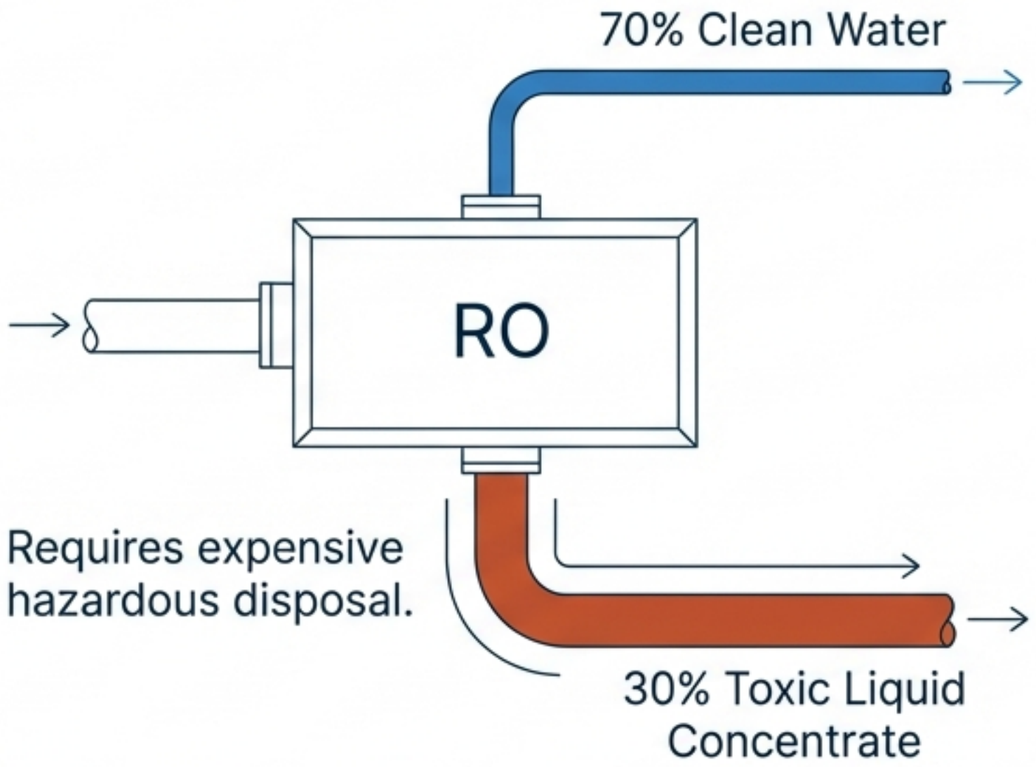
A Hybrid Chemical-Biological Engine Engineered for Complex Contaminants



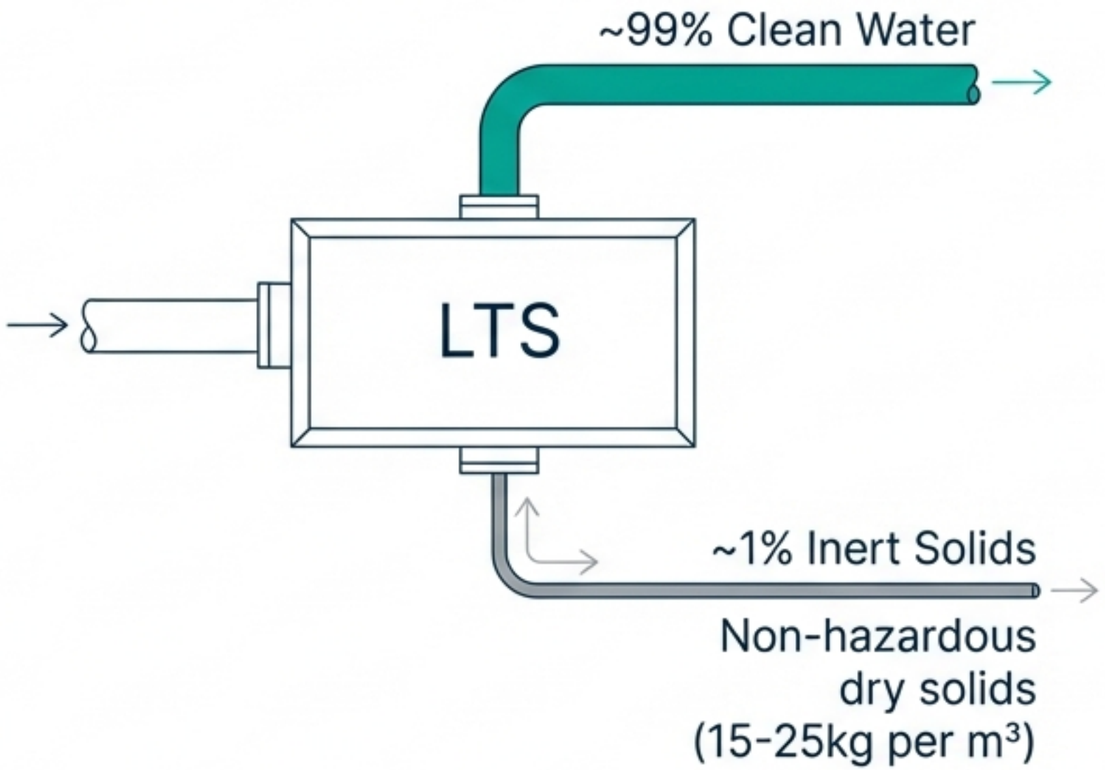
System uptime is typically 99%+.

The Critical Differentiator: Zero Toxic Concentrate Generation

Competitor (RO System)



Solution (LTS-Series)



RO systems just SEPARATE the problem. LTS DESTROYS the contaminants.

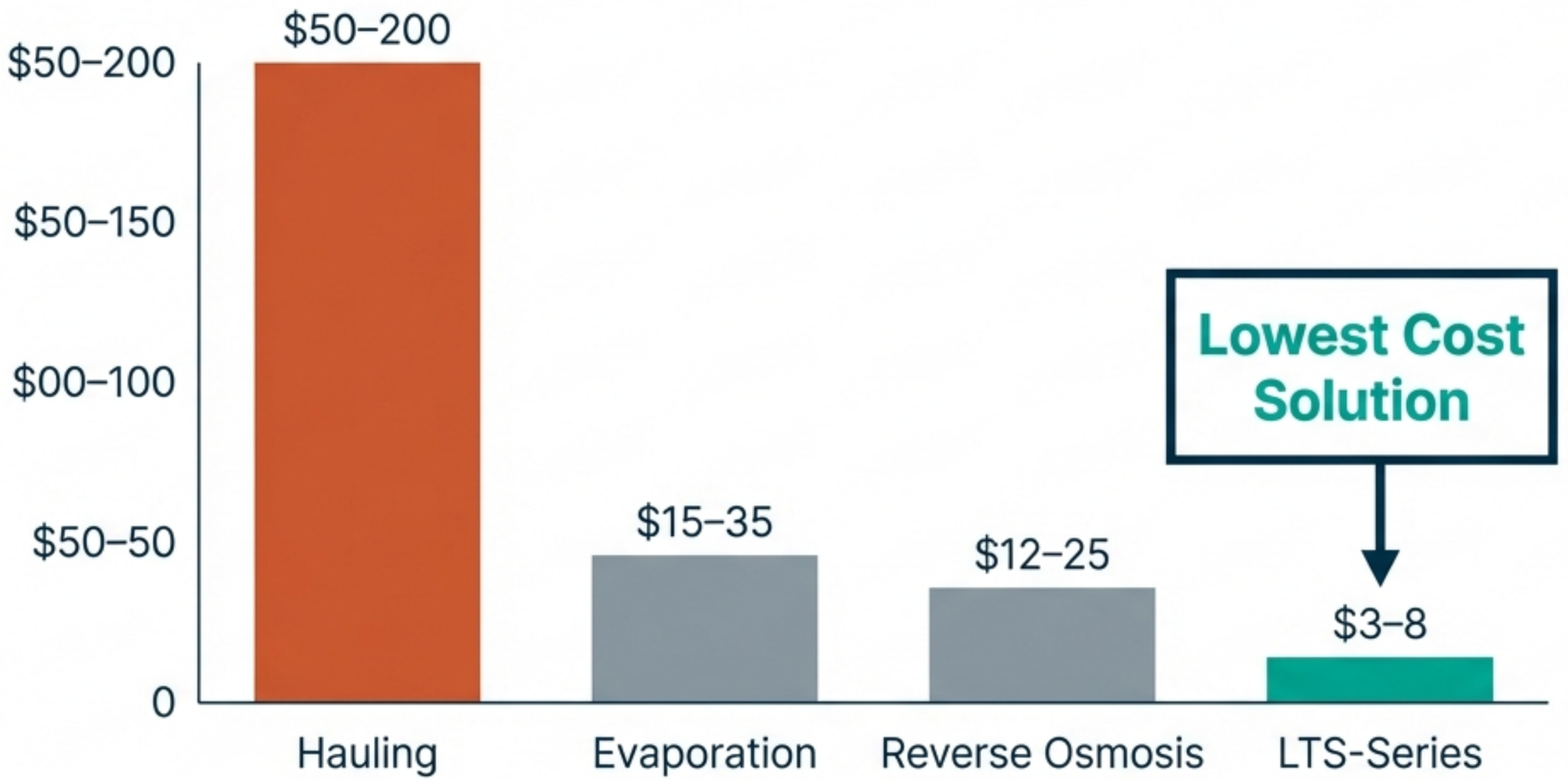
Validated Performance Across All Leachate Maturities

Parameter	Removal Rates	Final Concentration/Limit
Chemical Oxygen Demand (COD)	**92–98% Removal**	Final <150 mg/L
Ammonia	**95–99% Removal**	Final <10 mg/L
Heavy Metals	**>98% Removal**	Pb, Cd, Cr, Ni below limits

- Effective on both **Young Leachate** (High Organics) and **Mature Leachate** (High Ammonia).
- Consistently meets **EPA, EU**, and **local discharge permit standards**.

Disruptive Economics: 60–85% Operational Cost Savings

Cost Per Cubic Metre (m^3)



LTS offers premium performance at mid-market pricing.

Typical ROI under 18 months.

Operational Proof: Municipal Landfill Saves R2.52M Annually

Location: Active Metro Landfill, Gauteng

Challenge:

Spending R4.2M/year on hauling. WWTP threatened to refuse waste.

Solution & Results

Solution: Installed 200 m^3/day LTS system.

99.5%
COD Reduction
(18,500 → 95 mg/L)

R2.52 Million
Annual Net Savings

18 Months
Payback Period

Versatility Proof: Restoring Legacy Sites & Treating Hazardous Waste

Case Study 2: Legacy Site (Western Cape)

Scenario: Closed landfill contaminating stream. Facing R5M fines.

A closed landfill site leaked leachate into a nearby natural stream, violating environmental regulations and leading to potential heavy fines.

Outcome: Stream quality restored in 3 months. Avoided R5M fine. Immediate ROI.

LTS implementation rapidly treated the source, restoring the stream to regulatory standards within three months, preventing the fine, and delivering an immediate return on investment.

Case Study 3: Hazardous Waste (Mpumalanga)

Scenario: Extreme toxicity (48,000 mg/L COD).

The site generated industrial wastewater with exceptionally high levels of Chemical Oxygen Demand, posing a severe treatment challenge.

Outcome: 99.1% COD removal. OpEx R6.50/m³ (vs RO quote of R18/m³).

The LTS system achieved a remarkable 99.1% COD reduction at an operational cost of only R6.50 per cubic meter, significantly lower than the quoted R18 per cubic meter for a Reverse Osmosis alternative.

LTS is capable of treating the ‘worst of the worst’ wastewater.

An $8-12 Billion Market Driven by Inevitable Regulation

Scalability: Systems are modular and containerised (20ft/40ft), scaling from **10 m^3/day** to **500+ m^3/day**.

A Scalable Business Model Anchored by Recurring Revenue

Equipment Sales

Capital revenue from turnkey system sales (35–45% margin)

Chemical Consumables

High-margin proprietary chemicals. Sticky, recurring revenue.

Services & O&M

Operations contracts and Build-Operate-Transfer (BOT) models.

The Forever Customer

Landfills have 30+ year post-closure treatment obligations, ensuring decades of LTV

Tasmania Ltd: 25 Years of Environmental Innovation

John Webster, CEO

- 40+ successful field deployments.
- Environmental technology innovator.

Company Credentials

- ISO 9001 (Quality) & ISO 14001 (Environmental) Accredited.
- Patents pending in South Africa, USA, and EU.
- 12+ Successful LTS Installations.
- Operational Base: Manufacturing in South Africa provides 40–50% cost advantage over US/EU competitors.

Investment Opportunity: Scaling for Global Regulatory Expansion

The Ask: Seeking $3–6 Million Strategic Investment

Use of Funds

Regulatory Approvals
EPA/USA & Environment Agency/UK

Manufacturing Setup
Assembly facilities in US/UK

Market Development
Sales teams & pilots

The Projected Return

5-Year Revenue: $50–100 Million

Break-even: 24–36 Months

Exit Potential: Acquisition by major waste management firms (e.g., Veolia, Xylem).

The Smartest Solution for the Industry's Toughest Challenge

- **Mandatory Market:** Not optional for clients.
- **Superior Technology:** No concentrate, high removal rates.
- **Massive Savings:** 60–85% cheaper than alternatives.
- **Proven:** 12+ installations, 25-year history.

247 Technologies cc

Philip John Talbot &
Peter-John Krauspe

Email:
peter@247technologies.co.za

Phone: +27 31 1013044