

The Importance of **Regular Servicing** in Pollution Control Performance Management

TAPC

The Environmental Group is dedicated to providing advanced solutions for air pollution control, ensuring cleaner and safer environments for industries worldwide. With a commitment to engineering excellence, we manage total pollution control systems from start to finish—covering engineering, manufacturing, installation, and servicing. Our Total Air Pollution Control (TAPC) team, experts in air pollution control systems, plays a critical role in delivering high-quality system solutions and field services that keep essential equipment running both efficiently and effectively.

Subtle yet **Significant Clues**

One of our clients encountered a total failure of their odour control system due to prolonged neglect of scheduled maintenance. Over time, incremental performance degradation went unaddressed, ultimately culminating in a catastrophic system failure. This lack of proactive intervention not only led to unplanned operational downtime but also significantly escalated repair and replacement costs. The incident underscores the critical importance of regular servicing and condition monitoring to ensure efficient long-term system reliability and performance.

Investigation **and Findings**

Our TAPC technical team was engaged to conduct a comprehensive diagnostic assessment of the equipment failure. Our in-depth analysis identified a progressive deviation from optimal operating parameters, which, over time, exacerbated performance degradation and led to critical system failure. Additionally, our investigation revealed that modifications in staff rotations had disrupted the continuity of routine inspections, resulting in lapses in preventive maintenance protocols. These factors collectively contributed to the failure, underscoring the importance of stringent operational oversight and adherence to structured planned and scheduled maintenance regimes.

**Excessive accumulation of
unwanted waste
in an entrainment separator**



The Consequences of Neglected Maintenance

TAPC

Failure to adhere to a structured maintenance schedule can lead to severe operational and financial repercussions:

- **Diminished System Efficiency** – Gradual performance deterioration can escalate into significant functional impairments, impacting overall operational output.
- **Escalating Costs** – Reactive maintenance, including emergency shipping, repairs and component replacements, incurs substantially higher expenses than a proactive servicing strategy.
- **Prolonged Downtime** – Unplanned system failures can disrupt operations, causing production delays, logistical challenges, and financial losses.
- **Workplace Safety Hazards** – Inadequately maintained equipment increases the risk of mechanical failures, exposing personnel to potential health and safety hazards.

Implementing a proactive maintenance program is essential to ensuring long-term reliability, cost efficiency, and safe operational continuity.



Efficient Maintenance for optimal Performance



Blocked Chevron Mist Eliminator



Our Solution

Expert Equipment Management Services

To mitigate the risk of similar failures, The Environmental Group provides world-class servicing and support for air pollution control systems globally. Our TAPC team takes a proactive approach by conducting in-depth assessments of each facility, developing tailored service management plans that maximise system performance, reliability, and longevity.

For this particular client, our TAPC team has implemented a structured maintenance programme designed to enhance operational resilience and efficiency. Key components of this programme include:

- **Regular Inspections & Open Communication** – Early detection of minor deviations is crucial in preventing major failures. Our team has established a robust inspection framework that fosters transparent communication between plant operators and TAPC specialists. This ensures that potential issues are identified and addressed promptly, minimising the risk of costly disruptions.
- **Planned Servicing Schedules** – A well-structured maintenance schedule is essential to ensuring all components operate at peak efficiency. By analysing the client's operational requirements, TAPC has designed a customised service plan that integrates routine servicing with minimal impact on production, preventing unexpected breakdowns and extending equipment lifespan.
- **Staff Training & Knowledge Transfer** – A well-trained workforce is a company's first line of defence against operational inefficiencies and unplanned downtime. Our expert team recognises that properly educated and experienced personnel play a critical role in preserving equipment integrity. To support this, TAPC provides comprehensive training programmes, equipping client staff with the technical expertise needed to optimise system performance and execute routine maintenance effectively.
- **Proactive Maintenance Strategies** – Reactive maintenance can be costly and disruptive. To help our clients transition to a more sustainable maintenance model, TAPC collaborates closely with leadership teams to integrate asset servicing into their broader business growth strategies. By emphasising predictive maintenance and long-term planning, we enable our clients to minimise unplanned downtime, enhance equipment reliability, and significantly reduce total cost of ownership.

Through these strategic initiatives, The Environmental Group and TAPC empower industries to operate with greater efficiency, sustainability, and cost-effectiveness, ensuring air pollution control systems remain robust and compliant with evolving environmental standards.

Blocked Waste Drainage Chamber



Blocked Check Valve



Waste Blockage Cleared From Drainage Chamber



By embracing The Environmental Group's proactive servicing approach, our customer has significantly mitigated the risk of future equipment failures. With a structured maintenance programme in place, they now experience:

- **Enhanced System Performance** – Optimised operational efficiency ensures their pollution control systems function at peak capacity, reducing energy consumption and maximising output.
- **Lower Maintenance Costs** – By identifying and addressing minor issues before they escalate, the client avoids costly emergency repairs and extends the lifespan of critical components, equipment and systems.
- **Improved Workplace Safety** – Regular servicing and staff training have minimised the risks associated with poorly maintained equipment, creating a safer working environment for all personnel.

Our ongoing partnership ensures their air pollution control systems continue to operate reliably, efficiently, and in compliance with industry regulations. By integrating preventative maintenance into their long-term strategy, the customer has strengthened their operational resilience and sustainability.



ID Fan



ID Fan Cover Removed



ID Fan Internal Build Up



Excessive Waste Material Build Up on ID Fan Impeding Airflow

Partner with Industry Experts for Unmatched Service

This case study has been prepared on behalf of The Environmental Group, showcasing the expertise of our TAPC team in delivering high-quality pollution control solutions. With decades of experience, we specialise in proactive servicing strategies that safeguard equipment integrity and enhance operational performance.

Quality Field Service You Can Count On

Don't let minor issues escalate into costly failures. Ensure the longevity and efficiency of your pollution control systems with expert servicing from TAPC. Contact us today to discuss a tailored maintenance programme designed to meet your operational needs.