



Operations & Maintenance

Environmental Monitoring O&M Solutions



TOGETHER WE CREATE SOLUTIONS THAT SHAPE THE FUTURE

GLOBAL REACH, LOCAL KNOWLEDGE

In 2017, ECOTECH became part of ACOEM Environment, a special division of ACOEM Group. ACOEM Group is a global enterprise dedicated to sustainable development and helping companies and public authorities limit their environmental impact.

ACOEM Environment brings together two respected leaders in the fields of environmental monitoring - ECOTECH and o1dB - creating the first globally integrated offering of products and services across noise, vibration, air, dust and water pollution monitoring, operating in 80+ countries worldwide.

With an international reputation for innovation and excellence in precision and reliability, ECOTECH's Operations & Maintenance (O&M) services complement its comprehensive suite of monitoring products, keeping your equipment operating reliably and minimising maintenance costs.

Service & Expertise

ECOTECH Operations & Maintenance services start with our people. Our expert technical team successfully installs, operates and maintains hundreds of environmental monitoring systems in Australia and around the world consisting of thousands of individual pieces of precision equipment.

With this level of experience comes specialised insight.

We understand the importance of accuracy in environmental monitoring and have intrinsic knowledge of a vast array of monitoring instruments and equipment. We know what it takes to operate them efficiently.

ECOTECH O&M services are designed to minimise downtime, reduce system operating costs, mitigate risk and provide greater peace of mind.

We explore alternative approaches and specialise in automated monitoring and preventative maintenance that optimises and prolongs the life of vital instrumentation and entire monitoring systems.

Safeguarding Monitoring Performance

Choosing an O&M supplier that is accredited by relevant national and international organisations is your guarantee of quality and ensures the highest possible safety standards to limit your environmental impact and safeguard your workforce.

ECOTECH is proud to have earned national and international accreditations and certifications including:

- National Association of Testing Authorities (NATA) accredited facilities and services that comply with the requirements of ISO/IEC 17025*
- ISO 9001 Quality Management
- AS/NZS 4801 Occupational Health and Safety Management.



NATIONAL ASSOCIATION OF TESTING AUTHORITIES (NATA)

NATA is the authority responsible for the accreditation of laboratories, inspection bodies, calibration service providers, producers of reference materials and proficiency testing scheme providers throughout Australia.

NATA provides independent assurance of technical competence and integrity of organisations offering testing, inspection and calibration services.

Regular NATA assessments check all aspects of a facility's operations related to consistently producing accurate and dependable data.

ECOTECH's NATA accredited facilities and services comply with the requirements of ISO/IEC 17025 and include:

- Testing services
- Calibration services
- Blast monitoring services.

For more information about NATA, ask your ECOTECH representative for a copy of the ECOTECH NATA Accreditation brochure.

ISO 9001 QUALITY MANAGEMENT

World-class ECOTECH manufacturing facilities in India and Australia are certified to ISO 9001 Quality Management standard.

AS/NZS 4801 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

ECOTECH's occupational health and safety (OHS) procedures, systems, culture and safety record are pivotal to our operations. We ensure our OHS management exceeds common industry practice.

* ECOTECH holds NATA accreditation numbers 14184 & 19650.

Excellence Across Multiple Disciplines

ECOTECH works closely with industry, government authorities, academia and research organisations to offer a broad range of operations and maintenance services to support environmental monitoring including:

1. INSTALLATION & COMMISSIONING

2. MAINTENANCE

3. SERVICE & REPAIRS

4. CALIBRATION SERVICES

5. ENVIRONMENTAL REPORTING SERVICES -
DATA COLLECTION, ANALYSIS, VALIDATION
& REPORTING

6. WATER MONITORING

7. BLAST MONITORING

8. EQUIPMENT RENTALS

9. USER TRAINING

1. INSTALLATION & COMMISSIONING

Professional installation of monitoring systems is the crucial first step in establishing your environmental monitoring program.

ECOTECH's highly-skilled installation team takes into account the equipment, the location, climatic conditions, the application, the serviceability and most importantly the ability to accurately report for compliance and continuity of the operation.

It is a process that ensures you meet your organisation's responsibility for your people, the community and the environment.

We offer our customers a total solution that covers the entire life cycle of your equipment – from initial design and installation through to maintenance, service and repair of all products and systems we supply.

ECOTECH trained field technicians and engineers use their unique problem-solving perspective to install fully-integrated systems, ensuring they operate with maximum effectiveness and meet regulatory standards. This includes initial calibration and final checks.

As your monitoring needs change over time, ECOTECH technicians will also manage decommissioning of equipment and retrofitting new instrumentation to existing enclosures, ensuring minimal down time and continuous data capture.

2. MAINTENANCE

Once an integrated system is installed, continued preventative and corrective maintenance, and calibration of monitoring instruments is critical for enhanced performance and regulatory compliance.

ECOTECH also offers comprehensive maintenance contracts to ensure reliable performance of your monitoring systems.

Scheduled ongoing maintenance of your environmental monitoring instruments and systems helps:

- **Protect your initial financial investment**
- **Minimise down times**
- **Increase the lifespan of your equipment**
- **Ensure less equipment failure**
- **Guarantee greater accuracy and higher data capture rates.**



2. MAINTENANCE

ECOTECH Asset Management Software

ECOTECH Asset Management Software (AMS) is an essential tool for the management of maintenance scheduling right down to the individual task level.

AMS is engineered from the ground up to meet the special O&M requirements demanded by environmental monitoring equipment and systems.

AMS is also a central solution that stores all relevant calibration and maintenance records. In doing so, AMS helps facilitate internal or external audit processes and improves access to records for data validation.

AMS can be set up to comply with different manufacturers' recommendations, AS/NZ standards and NATA requirements.

More than just a powerful computerised maintenance management systems (CMMS), ECOTECH Asset Management Software also assists with:

- Project management
- Contract/delivery accountability
- Expenditure control
- Quality assurance
- Health & Safety compliance
- Inventory management.

For more information about AMS, ask your ECOTECH representative for a copy of the ECOTECH Asset Management Software brochure.

ECOTECH Trained Technicians

ECOTECH field staff have high-levels of experience servicing a wide range of dust monitors, ambient gas analysers, water sensors, meteorological sensors and other equipment, including noise and blast vibration/over-pressure.

We conduct regular training sessions including modules taught by external equipment manufacturers to ensure ECOTECH technicians remain fully qualified and competency tested.

This means ECOTECH technicians can operate and maintain ECOTECH instruments alongside third party equipment and mix and match to suit individual sites' systems.



3. SERVICE & REPAIRS

In the event that a repair is required, ECOTECH provides comprehensive repair services for all ECOTECH equipment, as well as all other brands we distribute. We will manage that process for you, with an easy to complete downloadable Service and Warranty Request form.

Most repairs can be performed remotely or on site, but should equipment need to be removed for servicing, ECOTECH can arrange the supply of a swap out unit to minimise or eliminate any lapse in data capture.

4. CALIBRATION SERVICES

Timely calibration is critical to ensure the integrity and traceability of your measurements.

Regular calibration of equipment is the best way to ensure that all your monitoring instruments remain accurate and that your business complies with all mandated standards and environmental requirements.

Having your equipment calibrated by ECOTECH gives you the added reassurance that all work is performed at the highest standard.

ECOTECH's NATA accredited testing and calibration services comply with the requirements of ISO/IEC 17025.

Did you know, ECOTECH is the only NATA-accredited laboratory for pyranometer calibrations in Australia and the only Australian company accredited to calibrate all types of anemometers?

Personal reminder emails will let you know when your next calibrations are due and you will receive status updates throughout the calibration process. Advanced scheduling means minimum downtime and the fastest possible turnaround.

ECOTECH calibration services include:

- NATA/ISO 17025 Accredited Calibrations
- NIST Traceable Calibrations
- Traceable Calibrations.

For more information about calibration services, ask your ECOTECH representative for a copy of the ECOTECH Calibration Services brochure.

NATA/ISO 17025 Accredited Calibrations

- Wind speed & direction sensors
- Pyranometers
- Ozone analysers
- Temperature sensors
- Relative humidity sensors
- Anemometers
 - Conventional vane
 - Hot wire
 - Cup
 - Propeller
 - Ultrasonic
 - Pitot tube

NIST Traceable Calibrations

- Mercury analysers

Traceable Calibrations

- Flow meters
- Barometers
- Manometers
- HiVol Oriface Plates
- Teledyne Oxygen Sensors

5. ENVIRONMENTAL REPORTING SERVICES

ECOTECH operates one of the largest networks of environmental monitoring systems in the world, with over 500 sites across 80+ countries.

Our data reporting services are relied upon by major industry players including BHP, Glencore, Origin Energy and Transurban; other multi-nationals; and hundreds of small/medium enterprises.

Using Airodis®, ECOTECH's industry-leading online reporting software, our team of specialist environmental data analysts provide data collection, analysis, validation and reporting services to customers worldwide.

ECOTECH's dedicated Environmental Reporting Services (ERS) department operates 365 days a year and will work with you to develop the best solution for remote data retrieval.

Data is collected from an extensive range of instruments and monitoring systems, stored in individual station Airodis® databases and backed up off-site for maximum data security.

For more information about environmental reporting, ask your ECOTECH representative for a copy of the ECOTECH Environmental Reporting Services brochure.



Continuous data checks, analysis and validation

One of the major functions of ECOTECH's ERS department is to perform strict checks to ensure that data quality and valid capture rates are maintained.

Details of the data validation process are recorded in Airodis®, making all data traceable and auditable back to original measurements.

Tailored reporting to suit your requirements

Monthly reports are customised and can be presented on a project website and/or PDF digital files sent electronically or as hard copies. They include:

- Graphical presentation of data and comparison to regulatory limits and/or relevant guidelines
- Detailed assessment of any exceedance events, as applicable
- Monthly percentage of data captured by each monitoring station
- Summary of data verification and validation results
- Field record sheets.

Benefits of ECOTECH's environmental data management

- Your business can focus on core competencies
- Your data is examined daily, relieving you of reporting and data management tasks
- Data reports can be NATA endorsed
- Our ERS department works 365 days a year with data downloads occurring as often as required
- Reports can be provided in a wide variety of formats and can be distributed by email, DVD, FTP, SFTP, website, hardcopy or by direct file output onto a PC or network
- Optimum valid data capture rates, greater than 95%
- Data can be viewed on public or private-access customised websites hosted by ECOTECH.

6. WATER SAMPLING & MONITORING

Whether you are monitoring for industrial compliance, environment sustainability, restoration, livelihood, or food and water preservation, ECOTECH's water monitoring systems are key to sustaining appropriate water quality.

ECOTECH offers a comprehensive range of water sampling, flow monitoring and water analysis instruments. It provides accurate real-time results, which are imperative in identifying possible contamination and reducing risk.

Who benefits from ECOTECH water monitoring systems?

- Mining companies seeking services for compliance, discharge, water balance investigative monitoring
- Environmental specialists who require real-time data to allow for highly accurate modelling
- Heavy industry – refineries and smelters – where process water quality and discharge can be issues
- Local, state and federal government authorities interested in industry discharge and flow and stream height monitoring.

For more information about water sampling & monitoring ask your ECOTECH representative for a copy of the ECOTECH Water Services brochure.



Why choose ECOTECH for water monitoring services?

- NATA-accredited for field sampling techniques & reporting for in-situ water quality measurements and water quality laboratory & accredited reports for all water quality analyses
- Exclusive Australian distributor of Tethys multiparameter monitors, Maxx specialty water samplers, Mercury Instruments for mercury in water analysers, Aquaread multi-parameter sondes and Los Gatos Research water isotopes analysers
- Water Quality Monitoring Station (WQMS) measures and samples water discharge or run-off with real-time water quality data viewable online from remote-linked water quality stations including, pH, EC, level, temperature, ORP, DO and turbidity parameters.
- Customisable Environmental Water Monitoring System (EWMS) database stores detailed site information including GPS mapping and specifications and full sample histories.

7. BLAST MONITORING

Whether your project is above or below ground, on a construction site, part of a demolition or within a mine or quarry, high-risk conditions require adherence to industry regulations and companies need to ensure that they continually maintain a traceable and defensible blasting position.

ECOTECH is Australia's only NATA-accredited blast monitoring and data collection company.

ECOTECH's fully-integrated blast monitoring system is available for purchase or long-term rental with trained technical staff managing the provision of blast data remotely.

The Dynamate® system by ECOTECH consists of remote blast monitoring stations, which are continuously supervised by remote Dynamaster® software and housed on our Melbourne head office server.

Blast results are automatically collected from the stations, collated and made available within minutes of the blast.

Customers can view blast results, produce reports and interact with the server software via the Dynamaster® web portal.

This proprietary ECOTECH website allows full access to results within minutes of blasting or vibration activities, including email and SMS notifications.

ECOTECH's dedicated blast and vibration monitoring team consists of data analysts, blast monitoring coordinators, technical coordinators, quality coordinators and highly experienced field service staff.

They remotely supervise all data management, perform on-site maintenance, validation and reporting, and provide diagnostics run at five-minute intervals, 365 days a year.

For more information about blast monitoring, ask your ECOTECH representative for a copy of the ECOTECH Blast Monitoring brochure.



8. ECOTECH RENTALS

Renting ECOTECH instruments and equipment provides flexible access to world-class equipment.

ECOTECH rentals empowers companies and consultants to minimise costs for one-off, smaller or even long-term projects, while still ensuring that environmental monitoring is conducted using the most precise and effective systems on the market.

Rentals and lease-to-buy options allow for greater flexibility without the need for capital outlay.

Our operations contracts include the supply of equipment, regular calibration, maintenance, spare parts, data collection and the provision of data reports.

ECOTECH provides the same level of support and technical advice whether you are renting or purchasing.

9. USER TRAINING

ECOTECH is committed to providing the highest quality training for your frontline staff by our expert technicians and product specialists.

Training can be tailored to suit your specific needs and can be conducted at ECOTECH offices or at your work site / location.


Certificates of training completion for staff and recognition of participation are also provided.

Training areas covered include:

- Trouble-shooting
- First responder servicing
- Preventative maintenance
- General maintenance
- In-depth workshop
- Lab service
- Calibration of certain instruments.

ECOTECH has been at the forefront of environmental monitoring for over 40 years, pioneering solutions in the design, manufacture, operation and maintenance of air, water, gas, meteorology, noise, vibration, blast, fine particulate and dust monitoring systems to internationally recognised standards.

“ ECOTECH’s O&M services offer you greater reassurance – knowing that all your essential environmental monitoring needs can be met by one trusted supplier.



ABOUT ECOTECH: Together we create solutions that shape the future

For over 40 years ECOTECH has pioneered innovative solutions in environmental monitoring for air, water, gas, noise, vibration, blast, fine particulate and dust. Headquartered in Australia, and certified to internationally recognised quality standards, ECOTECH operates in more than 80 countries, managing and maintaining over 500 real-time environmental monitoring sites consisting of thousands of individual pieces of precision equipment. ECOTECH is part of the ACOEM Group.

ABOUT ACOEM: Reduce your environmental impact

The ACOEM Group is a global leader in providing sustainable solutions for the development of smart cities of the future. It is committed to helping companies and public authorities meet challenges by offering products and services that:

- Prevent and control air, noise and vibration pollution
- Increase the productivity and reliability of industrial machinery
- Contribute to the development of effective, robust & noiseless solutions
- Protect soldiers, sites and vehicles in military theatres of operation.

Across the world, ACOEM's 700+ employees innovate in the measurement, analysis and control of environmental parameters through its 01dB, ECOTECH, ONEPROD, FIXTURLASER, MEAX, VIBRALIGN and METRAVIB brands.

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