I&E INDUSTRIES & ENVIRONMENT

Reliable pesticide analysis for water, soil and air

Comprehensive, accredited analysis for water, soil and air

IMPACT NOW for sustainability

SGS

Delivering confident, accredited pesticide monitoring across water, soil and air

Monitoring pesticide, herbicide and fungicide residues is critical to protecting human health, safeguarding the environment and meeting increasingly stringent regulatory requirements. SGS delivers reliable, NATA-accredited testing to support environmental compliance, waste management and risk assessment across water, soil and air.

WHY PESTICIDE TESTING MATTERS

Monitoring pesticide, herbicide and fungicide residues is critical to protecting human health, safeguarding the environment and meeting increasingly stringent regulatory requirements. These compounds are widely used across agricultural, industrial and urban environments and can persist in water, soil and air if not effectively managed.

Regulatory frameworks increasingly require monitoring at very low limits of reporting. Health-based guidelines, including the Australian Drinking Water Guidelines, mandate reliable detection at sub-parts-per-billion concentrations, placing high demands on analytical sensitivity, data quality and turnaround time.

WHY SGS

Our global network of offices and laboratories, alongside our dedicated team, allows us to respond to your needs, when and where they occur. Our reputation for independence, excellence and innovation has established us as the market leader in providing services that improve efficiency, reduce risk, and deliver competitive advantage for you.

Our global approach and local expertise allow us to support you and adapt our services to your needs. Whatever your requirements. More than a laboratory, SGS is your partner, for when you need to be sure.

OUR SERVICES

SGS provides comprehensive pesticide, herbicide and fungicide testing across key environmental matrices, supporting regulatory compliance, risk management and environmental decision-making.

- Groundwater and surface water
- Drinking and potable water
- Trade waste
- Soil and contaminated land
- Airborne monitoring supporting occupational hygiene assessments

Our services support environmental consultants, infrastructure and engineering firms, utilities and organisations that require reliable, defensible data for compliance and informed decision-making.

- Largest network of environmental specialists globally
- Physical presence in 70+ countries
- Over 50 years offering environmental testing services
- +6,000 environmental specialists, biologists, and chemists in our laboratories
- Quality assured

Technical Capabilities

Regulators increasingly require monitoring of pesticide levels at very low limits of reporting. SGS helps you remain compliant and protect communities by delivering accurate, validated testing methods supported by efficient laboratory workflows.

HANDLING & ANALYSIS

SGS delivers comprehensive pesticide, herbicide and fungicide analysis using advanced gas chromatography–mass spectrometry (GC-MS) and liquid chromatography–mass spectrometry (LC-MS) techniques. Our methods are designed to provide broad compound coverage while reducing analytical complexity, cost and turnaround time.

OUR ANALYTICAL APPROACH

- Multi-residue pesticide analysis in one or two analytical runs per sample
- Minimal sample preparation with parts-per-billion reporting limits
- Fully validated, NATA-accredited LC-MS pesticide methods for water
- Determination of up to 69 pesticide, herbicide and fungicide compounds in a single analysis

BESPOKE SOLUTIONS

We support project-specific needs through:

- Extended analyte suites
- Multiple orthogonal analyses from a single sample bottle
- Reduce resampling and field costs through efficient workflows

WHY WORK WITH SGS

Drawing on our extensive environmental testing expertise, SGS provides a single, integrated solution for pesticide testing across water, soil, air and land. We offer:

- NATA-accredited methods suitable for regulatory reporting
- Broad compound coverage through multi-residue analysis
- Efficient turnaround times to support operational decision-making
- Flexible, robust methods for routine monitoring and complex investigations
- Data suitable for regulatory compliance and environmental assessment

AIR MONITORING AND OCCUPATIONAL HYGIENE

In addition to water and soil testing, we provide airborne pesticide monitoring to support occupational hygiene and exposure assessments. These services assist clients in understanding potential worker exposure risks and environmental pathways, particularly where pesticides may become airborne during handling, application or remediation activities.

Present in every region around the globe we provide solutions for every stage in your project life cycle.

Our dedicated network of global and local offices are highly flexible and focused on meeting our customer's needs irrespective of the scale of the project.

Our Testing Capabilities

Our facilities are equipped with state-of-the-art instrumentation to ensure that we meet our clients' requirements and remain at the forefront of environmental testing. Our laboratories offer sophisticated techniques such as GC/MS-MS, LC-MS/MS, GC/ECD, GC/FID, ICP-MS and many more. Whatever your sample matrix, we have a comprehensive, high quality testing solution to match, affording you accurate data to enhance your decision making.

MATRICES

AIR

- Ambient air
- Workplace atmosphere
- Soil vapour and sub-slab emissions
- Volatile emissions
- Industrial emissions and waste gases
- Aerosols
- Landfill gas

SOLIDS

- Sediment and silt
- Loamy soil
- Organic soil
- Sandy soil
- Sludge
- Compost
- Biosolids

WATER

- Groundwater and bore water
- Surface water
- Seawater and saline waters
- Potable (drinking) water
- Wastewater and sewage
- Irrigation water
- Steam-raising waters
- Liquid trade wastes

APPLICATION

- Site remediation
- Landfill leachate monitoring
- Agricultural runoff monitoring
- Industrial process monitoring
- Environmental impact assessment
- Legacy site contamination
- Contaminated land investigation
- Stockpile assessment
- Waste classification
- Groundwater monitoring
- Water supply monitoring
- Drinking water health guidelines
- Recycled water monitoring
- Agricultural soil condition testing
- Occupational health and safety assessment
- Worksite exposure testing

QUALITY ASSURANCE

The SGS philosophy enables each facility to implement a quality policy using their unique operating style. This approach provides the autonomy needed to meet the requirements of the local regulatory jurisdictions using procedures that efficiently meet their operational objectives. All our environmental laboratories are accredited under either ISO 17025, NELAP, or any other local accreditation scheme required to operate under the highest level of quality. The Quality Assurance Officer monitors the program, provides feedback to local and corporate management, and assists with corrective action and training if needed.

Why choose SGS conventional laboratories?

- Experienced Chemists and Subject Matter Experts to support your projects
- As your financially sound partner, SGS can mitigate risk with our vast depth and resources
- Extensive regulatory program experience for precise methodology
- Largest and most complete roster of analytical capabilities in the world
- Global team of dedicated project managers with cross-border coordination

If you would like to discuss your pesticide, herbicide or fungicide testing requirements, please contact our environmental specialists

Connect with SGS

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