



Soil Gas

Vapor Intrusion

Property Redevelopment

Ambient Air Monitoring

Indoor Air Quality

Waste-to-Energy



Air Toxics

Eurofins Air Toxics, Inc., is the global expert in environmental air testing. With more than 25 years of air expertise, we have analyzed a wide range of matrices for both routine and specialty air testing programs. Our capabilities extend from trace level measurements required for indoor air testing to identifying and quantifying organics in high-level sources. Eurofins Air Toxics provides you with the benefits of technical expertise to meet your project and quality objectives, production capacity to meet delivery timelines and highly skilled project managers to provide superior customer service.



Eurofins Air Toxics' 45,000-square-foot facility is custom-designed to suit the specifications of an air laboratory. Our facility design includes segregation of conflicting tests to prevent cross contamination and work flow to encourage cross-functional work teams. We also have an isolated negative pressure room for solvent handling and extraction activities. Our 2,000-square-foot method development area is allocated specifically for research and development activities. We also have sorbent tube preparation and canister cleaning operations located in segregated areas to prevent cross-contamination, and all sample media are stored in a secured area.

Completing more than 60,000 air analyses per year, Eurofins Air Toxics is the leading air lab in the United States because we continually abide by the following principles:

Customer Service

Our Project Management Team has significant depth of experience both in technical and industry requirements. Each Project Manager (PM) is a degreed scientist with years of project management experience at Eurofins Air Toxics. The team is focused on meeting client objectives and communicating relevant information in a clear and timely manner. Each project manager can walk new customers through the intricacies associated with air testing as well as facilitate analytical solutions for complex and non-routine projects. While a single PM is assigned as the primary point of contact for each project, any of our PMs can step in to maintain continuity of the project.

Data Integrity and Quality

"We get the right answers" is a statement that is supported by our audit records and exemplary sample testing success. Accuracy and precision are highly dependent on lab instrumentation and the analysts' skills and commitment to adhering to a comprehensive QA/QC program. Unique in design, our equipment is dedicated to specific air methods. We've optimized our equipment to efficiently handle the wide range of concentrations often encountered at a vapor intrusion site. All vapor samples are screened by GC/MS prior to analysis to ensure the



appropriate instrumentation is used to generate reliable results. We have instruments dedicated to analysis in the part per trillion (ppt), part per billion (ppb), and part per million (ppm) ranges. This approach to sample analysis minimizes sample dilutions and contamination from sample carryover, thereby providing the highest level of data quality available. Unique to Air Toxics is our data review process. Our data is reviewed by a sophisticated software package known as LUMEN to ensure data quality. This innovative tool helps to ensure data is accurate before data delivery.

Technical Services

Our laboratory is staffed by experienced chemists who have worked with all types of air samples, and it is equipped with a variety of equipment specifically designed or modified for the analysis of air. This unique combination of experience and equipment ensures that "special projects" become routine, and data quality objectives are met. In addition, Eurofins Air Toxics is one of the few commercial environmental laboratories with a Research Group devoted to method development. This group works to refine and extend existing methodologies and develop innovative sampling and analysis procedures in order to simplify sampling or enhance data quality.

Experience

Eurofins Air Toxics has established national relationships with numerous environmental engineering and consulting firms, as well as many industrial clients. We also support a wide variety of clients in both the private and government sectors. Public sector clients include the U.S. EPA, Department of Defense (DoD), Department of Energy (DOE), Army Corps of Engineers, Air Force Center for Environmental Excellence (AFCEE) and the U.S. Navy. Our laboratory has provided analytical support for many high-profile projects nationwide, including extensive vapor intrusion investigations, indoor air quality evaluations, ambient air monitoring, and soil vapor monitoring.

In order to ensure that we are providing our clients with the best available service, we continually work to stay abreast of new technology. This means constantly evaluating and adopting new sampling and analytical techniques or developing our own in-house equipment. Our Method Development Group is chartered with extending the range of existing methodologies through either chemical validation or hardware modifications.

Project Management

The Eurofins Air Toxics' Project Management System describes the critical pathways necessary to adequately ensure that the customer expectation is reviewed, committed to by top management, and communicated to the laboratory prior to sample delivery. System elements include:

- Review of project-specific documents
- Negotiations and variance requests
- Documentation of project requirements
- Documenting client discussions
- Project briefings
- Scheduling sampling media
- Tracking sample analysis and reporting
- Project follow-up

Review of Project-Specific Documents

Clients document project requirements in requests for proposals, statement-of-work plans, and quality assurance project plans. No matter how the specifications are communicated, the project details must be reviewed to ensure that the laboratory has sufficient staff, equipment, and capacity to meet project needs. The project management team is provided technical support by the designated project chemist who reviews all relevant sections of proposals and other

documents. The department managers are consulted for further information when needed.

Deliverables

Eurofins Air Toxics continues to provide cutting-edge deliverables through our custom-designed Laboratory Information Management System (LIMS). This system provides consistent accuracy and flexibility. All reports are generated directly from the LIMS database preventing common data entry errors. Our proprietary tools allow us to provide Electronic Data Deliverables (EDDs) in hundreds of industry and client-specific formats directly from the database. Examples include, but are not limited to, a variety of spreadsheet, XML, and database formats. Our ability to create original print quality, Level IV Electronic Comprehensive Validation Packages (eCVP), reduces the effort required for data review and validation.



The following deliverables may be downloaded from our client web portal, emailed to you or delivered on a CD ROM:

Standard Reports

Standard analytical reports are compiled utilizing Adobe Acrobat Portable Document Format (PDF) and emailed directly to the client.

Electronic Data Deliverables

Electronic Data Deliverables are generated with software that allows the user to create EDDs in many standard and complex custom formats. These deliverables are many and varied requiring specific data types, formatting, and values compliance. The software allows the laboratory to conform to requests for client-specific formats. The laboratory has an EDD library of over 300 different formats, including ERPIMS, SEDD, JEMS, IRDMIS, and COELT deliverables.

Electronic Comprehensive Validation Packages

The electronic Comprehensive Validation Package (eCVP) simultaneously meets the requirements of a Level IV and CLP data validation package. Eurofins Air Toxics uses the Adobe Acrobat PDF file standard as a foundation for the eCVP product. Utilizing many different technologies, we are able to extract the data directly from the systems that create and store the data. This allows for accuracy, high quality, and flexibility.

Online Data Access

We are committed to extending our services to your desk-top, saving you time and money. As part of our standard product offerings, your data is accessible 24/7 via a secure internet browser. Complete access to your results, includes:

- Sample Receipt Notifications
- Chain-of-Custody (COC) form
- Final Data Report
- eCVP
- EDDs
- Invoices
- Shipment Information and Tracking
- Project follow-up

Instrumentation and Capacity

Laboratory success is evaluated against specific performance measures, one of which is on-time reporting. Our efforts are focused on providing data that meets the highest quality standards and is delivered to our clients within the promised

time frame. To achieve this goal, Eurofins Air Toxics has invested resources toward expanding our capacity with state-of-the-art instrumentation, in-house developed technology, and a workforce that is cross-trained among teams.

Eurofins Air Toxics has outfitted the laboratory with state-of-the-art instrumentation and equipment, which has been optimized in order to enhance performance and reliability. In addition, our expert in-house staff has designed and built numerous innovative pieces of instrumentation in order to address laboratory-processing challenges and meet unique project needs.

Major Air Instrumentation

Description	Quantity
GC/MS VOC	19
GC/MS SVOC	2
GC	9
HPLC	2

Sample Media

With more than 4,400 canisters and 1,800 flow controllers, Eurofins Air Toxics now maintains one of the largest, single-location canister inventories of any laboratory in the United States. Every year, we purchase hundreds of new canisters and flow controllers and budget significant dollars to the maintenance of this inventory.

We maintain a staff dedicated to cleaning and certifying our canisters, and we also draw on the resources of our GC/MS Volatiles Team for large-scale projects requiring individually certified canisters. Our canister-cleaning program is one of the most comprehensive in the industry. Canisters are certified using GC/MS and analyzed for Eurofins Air Toxics' standard TO-15 compound list. Certification by GC/MS adds another layer of data defensibility when compared to certification by GC/FID, which may miss the detection of chlorinated compounds. Eurofins Air Toxics is also able to certify canister sampling trains for low level and SIM level projects.

Sample Media Summary

Description	Quantity
Air sampling canisters	
6-Liter Summa canister	2,400
1-Liter Summa canister	1,600
PAC250 (250mL) Summa Canister	450
Flow controllers for air sampling canisters	1,800

We also provide sampling guides for both whole air (canisters and bags) and sorbent methods, which include useful information on media operation, common field sampling occurrences, and method guidance to complement our Project Managers' extensive knowledge.



1L Canister



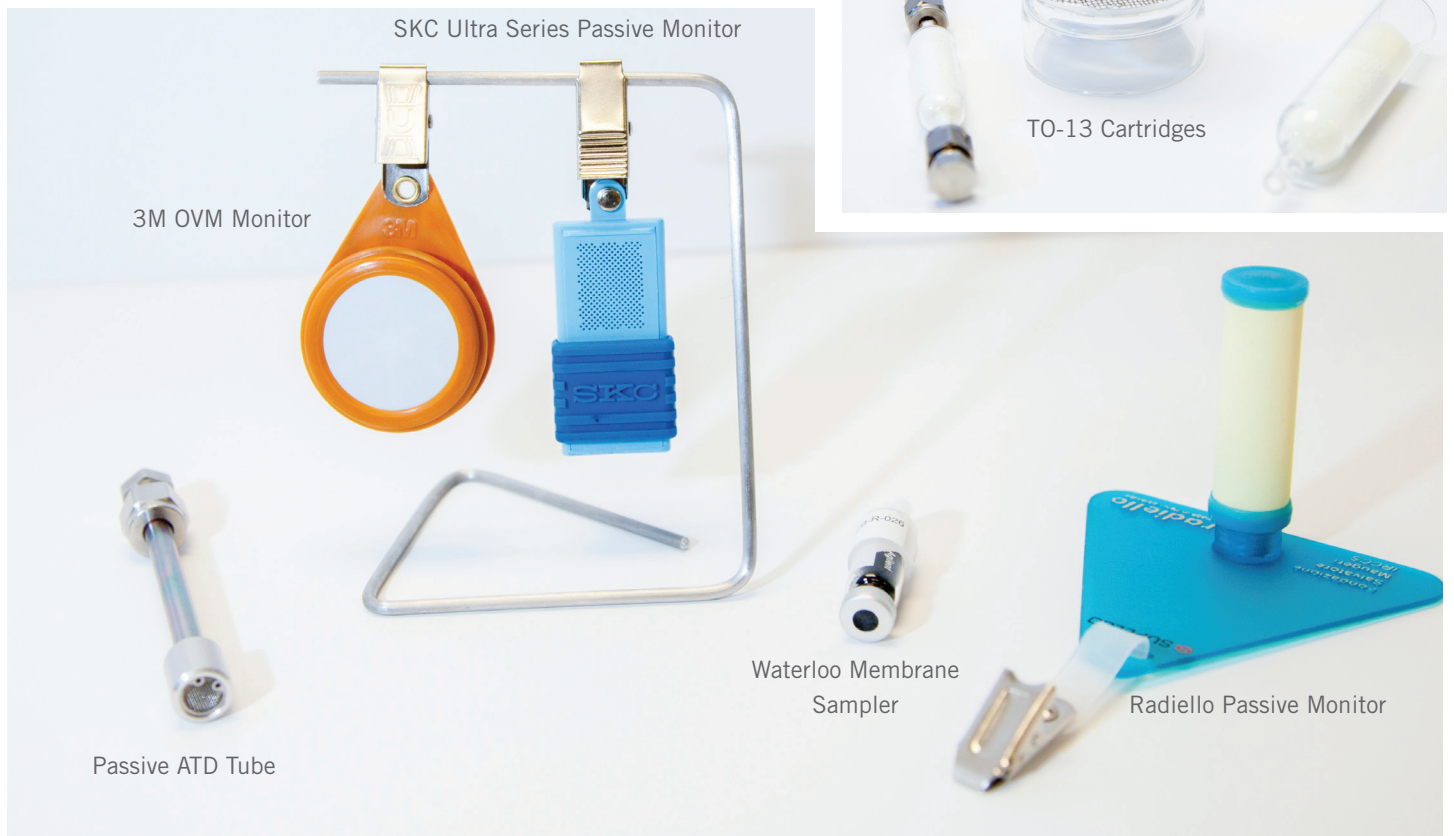
6L Canister



TO-17 Tube



TO-13 Cartridges



SKC Ultra Series Passive Monitor

3M OVM Monitor

Passive ATD Tube

Waterloo Membrane Sampler

Radiello Passive Monitor

Analytical Capabilities

Eurofins Air Toxics supports numerous EPA methods described in the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, commonly referred to as the “TO” methods. Additionally, we have implemented various ASTM methods in the laboratory. The

following analyses are currently performed routinely at Eurofins Air Toxics. Special project requirements, including method development, are accommodated, and new methods are evaluated and validated as needs arise.

US EPA Compendium Ambient Air Methods

Method	Analysis	Media
EPA TO-3	BTEX/TPH by GC/PID/FID	Canister or Tedlar bag
EPA TO-4A	Pesticides/PCBs by GC/ECD	High volume PUF cartridge
EPA TO-10A	Pesticides/PCBs by GC/ECD	Low volume PUF cartridge
EPA TO-11A	Aldehydes and Ketones by HPLC/UV	DNPH cartridge
EPA TO-12	Non-methane Organic Compounds	Canister or Tedlar bag
EPA TO-13A	Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS	PUF/XAD cartridge
EPA TO-14A	Volatile Organic Compounds (VOCs) by GC/MS or GC/FID	Canister or Tedlar bag
EPA TO-15	Volatile Organic Compounds (VOCs) by GC/MS SIM/Scan	Canister or Tedlar bag
EPA TO-17	Volatile Organic Compounds (VOCs) and SVOCs by GC/MS	Sorbent tube

ASTM Methods

Method	Analysis	Media
ASTM D1945	C1-C5 Hydrocarbon Speciation and atmospheric gases by GC/FID/TCD	Canister or Tedlar bag
ASTM D1946	Atmospheric Gases, Ethane, Ethene by GC/FID/TCD	Canister or Tedlar bag
ASTM D5504	Speciated and Reduced Sulfur Compounds by GC/SCD	Canister or bag

NIOSH Methods

Method	Analysis	Media
NIOSH 5515	Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS	XAD tube

LEED Testing Methods

Method	Analysis	Media
TO-17	Total VOCs and target VOCs by GC/MS	Sorbent tube
TO-11A	Formaldehyde by HPLC/UV	DNPH cartridge

Passive Sorbent Methods

Method	Analysis	Media
TO-17	VOCs by GC/MS	SKC Ultra III Radiello 145 Sorbent tube WMS™ vial
Solvent Extraction GC/MS	VOCs by GC/MS	SKC Ultra III-charcoal SKC 575 3M OVM Radiello 130 WMS™ vial - charcoal

Miscellaneous Methods

Method	Analysis	Media
40 CFR Part 50 APP. J (PM10)	Particulates	Filter
SOP# 71	Siloxanes by GC/MS	Methanol impingers

Custom Method Development, per client request.

Quality Assurance

Eurofins Air Toxics maintains a comprehensive Quality Assurance and Quality Control program to assess data quality, ensure analytical data is within method-specified control limits, and comply with project-specific QAPP requirements. Wherever possible, the quality control measures used are those specified in the most current NELAC Quality Systems. We participate in ERA's Air and Emissions (AE) performance evaluation program. We routinely undergo on-site audits and analyze proficiency samples submitted by certifying agencies as well as independent clients. Few states currently have certification programs for air analysis. Eurofins Air Toxics is certified by the states and agencies outlined below:

Agency	Certificate #
Arizona Department of Health Services	AZ0775
State of New Jersey	CA016
New York State Department of Health	11291
Utah State Department of Health	CA009332013-4
Texas Commission on Environmental Quality	T104704434-13-6
Oregon State Department of Environmental Quality	CA300005
Washington Department of Ecology	C935
DoD-ELAP and ISO/IEC 17025:2005	ADE-1451
Commonwealth of Virginia	460197

Eurofins Air Toxics is classified under NAICS Code 541380. We have received our Certification of Accreditation from the Department of Defense (DoD) ELAP for multiple air methods, including TO-3, ASTM D1945, TO-14A/TO-15, and TO-17.

Data Validation - Lumen Data Services®

Lumen Data Services® Data Assessor was developed and implemented to provide automated data validation prior to report delivery. Reports are validated with this software to ensure that clients receive the highest level of definitive data in the laboratory industry using EPA Functional Guidelines. This validation program is a rules-based, logic driven, independent validation engine to assess completeness, evaluate pass/fail of relevant project quality control requirements, and verify all quantified results. The Data Assessor reviews 100% of the raw analytical data against established validation criteria for compliance, ensuring accurate, complete, and timely results.



Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B | Folsom, CA 95630

Tel | 1-800-985-5955 | Fax | 916-985-1020

www.AirToxics.com

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