Persistent Organic Pollutants (POPs)

ALS Environmental are able to offer a unique High Resolution Mass Spectroscopy (HRMS) services for ultra trace analysis of Persistent Organic Pollutants (POPS) from our European laboratories. The POPs suite, which is now a requirement under Waste Management 3 (WM3), is available from our HRMS laboratory in Pardubice (Czech Republic).

What are POPs?

Persistent Organic Pollutants (POPs) are synthetic chemicals that have been produced and released into the environment. They are known as persistent due to the time they take to degrade, with some compounds taking centuries.

POPs	Description
Aldrin	A pesticide applied to soils to control termites, grasshoppers, corn rootworm, and other insect pests.
Chlordane	Used extensively to control termites and as a broad-spectrum insecticide on a range of agricultural crops.
Chlordecone	First produced in 1951, Chlordecone is a synthetic chlorinated compints which was mainly used as am agricultural pesticide.
DDT	DDT was widely used during World War II to protect soldiers and civilians from malaria, typhus, and other diseases spread by insects. It continues to be applied against mosquitoes in several countries to control malaria.
Dieldrin	Used principally to control termites and textile pests, dieldrin has also been used to control insect-borne diseases and insects living in agricultural soils.
Dioxins	Dioxins are families of structurally related compounds and belong to a class of environmental pollutants known as organochlorines. Dioxins is an umbrella description for polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF)
Endosulfan	Is an insecticide that has been used since the 1950s to control crop pests, tsetse flies and ectoparasites of cattle and as a wood preservative. As a broad-spectrum insecticide, endosulfan is currently used to control a wide range of pests on a variety of crops including coffee, cotton, rice, sorghum and soy.
Endrin	This insecticide is sprayed on the leaves of crops such as cotton and grains. It is also used to control mice, voles and other rodents.
Furans	Unintentionally produced compounds from many of the processes that produce dioxins, and also during the production of PCBs.
Hexabromobiphenyl	Is an industrial chemical that has been used as a flame retardant, mainly in the 1970s. It is no longer produced or used in most countries.
Hexabromodiphenyl ether and Heptabromodiphenyl ether	Are the main components of commercial octabromodiphenyl ether which has been used as a flame retardant The only degradation pathway is through debromination and producing other bromodiphenyl ethers.
Tetrabromodiphenyl ether and pentabromodiphenyl ether	Are the main components of commercial pentabromodiphenyl ether which has been used as a flame retardant.
Heptachlor	Primarily employed to control soil insects and termites, heptachlor has also been used more widely to control cotton insects, grasshoppers, other crop pests, and malaria-carrying mosquitoes.
Hexachlorobenzene (HCB)	First introduced in 1945 to treat seeds, HCB was primarily used as a fungicide. It was widely used to control wheat bunt. It is also a by-product of certain industrial chemicals and exists as an impurity in several pesticide formulations. HCB emissions may also arise from combustion sources.
Hexachlorocyclohexane (alpha and beta)	Are still produced as a by-product of lindane, although the intentional use of alpha- and beta- HCH as an insecticide was phased out years ago.
Lindane (gamma hexachlorocyclohexane)	Is the common name for the gamma isomer of hexachlorocyclohexane (gamma-HCH). Lindane has been used as a broad-spectrum insecticide for seed and soil treatment, foliar applications, tree and wood treatment and against ectoparasites in both veterinary and human applications.
Mirex	Has been used as an insecticide for ants & termites as well as an industrial fire retardant in plastics, rubber & electrical goods.
Pentachlorobenzene	PeCB might still be used as an intermiediate, it is also produced uninetentionally during combustion, thermal and industrial processes and can be present in products such as solvents or pesticides.
Perfluoroctane sulfonic acid	PFOS is intentionally for an array of applications including fire fighting foam, photo imaging and textiles.
Polychlorinated Biphenyls	(PCBs) These compounds were used in industry as heat exchange fluids, in electric transformers and capacitors, and as additives in paint, carbonless copy paper, sealants and plastics. They can also be formed unintentionally as by-products in some chemical and combustion processes. It is now known that some PCBs exhibit similar biological activity to dioxins and these compounds are therefore referred to as dioxin-like PCBs.
Toxaphene	This insecticide, also called camphechlor, is applied to cotton, cereal grains, fruits, nuts, and vegetables. It has also been used to control ticks and mites in livestock

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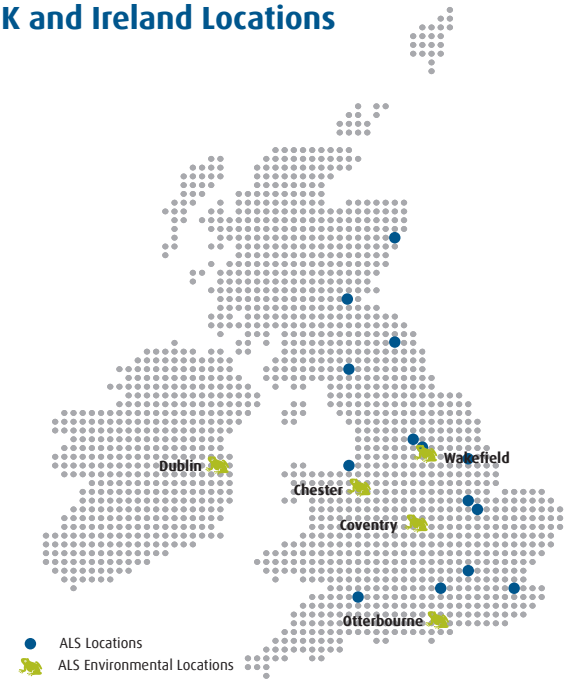
Service overview

UK and Ireland Locations



Quality

Providing customers with UKAS ISO 17025:2005, MCERTS and DWTS accredited data from our laboratories across the UK. We participate in a broad range of Proficiency Testing schemes and hold a DEFRA import licence for soils.

Did you know that?

We are able to provide a broad range of additional services to help with your sampling including:

- Internal refrigerated and tracked courier network
- National portfolio of drop-off locations
- Pre-Registration of samples via our "Pre-Reg" system
- Dedicated customer service advisor
- Online reporting via our WebTrieve system

Contaminated Land

We understand the time pressures of large scale Remediation and Brownfield projects and are a member of the AGS. Our Coventry laboratory utilises state of the art analytical equipment with the back-up of our sister laboratories across Europe to ensure that we deliver your projects on time every time.

Legionella and Microbiology

Being members of the Legionella Control Association (LCA) we understand the emphasis placed on laboratory analysis for the Control of Legionella. With 3 methods for testing Legionella (including rapid PCR) and an understanding and appreciation the implications of ACoP L8, HSG 274 and HTM04-01 we are your ideal analytical partner for all of your water hygiene monitoring requirements.

Waste Management

By working closely with some of the largest companies in this sector we are able to offer unrivalled analytical and administration services to ensure that your samples are processed swiftly and in line with the UKAS Deviating Sample Guidance.

Drinking Water

We are one of only a handful of commercial laboratories to have a dedicated Drinking Water Testing Specification (DWTS) accredited laboratory, based in Wakefield, Yorkshire. We are able to supply analysis to the Public and Private Drinking Water Regulations.

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