Schedule of Accreditation

Organisation Name	Axis Environmental Services Ltd
Trading As	
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Accreditation Standard	EN ISO/IEC 17025 T
Date of award of accreditation	06/09/2023
Scope Classification	Chemical Testing
Services available to the public[1]	Yes

[1] Refer to document on interpreting INAB Scopes of Accreditation

Sites from which accredited services are delivered		
(the detail of the accredited services delivered at each site are on the Scope of Accreditation)		
	Name	**Address**
1	Head Office	Westlink Business Park, Unit 3, Clondrinagh, Limerick

Scope of Accreditation

Head Office

Chemical Testing

Category: A

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
770 Gases and aerosols - .04 Industrial fumes and emissions	Stationary source Emissions- determination of Odour Concentration by Dynamic Olfactometry and Odour Emission Rate	Odour	3.5- 59.081 ouE/m3 (extended by dilution)	Industrial fumes and emissions	Olfasense T08 Evolution	SOP 2023 & EN 13725:2022 to meet the requirement of the Irish Environmental Protection Agency Publication AG1 & AG2

Head Office

Chemical Testing

Category: B

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
770 Gases and aerosols - .04 Industrial fumes and emissions	Determination of particulate matter on air emission filter papers and rinse solutions	Particulate Matter	0-80g	Industrial Fumes & Mixtures	Gravimetric, drying oven &5 place calibrated balance	SOP 2750 and EN 13284:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
			0-80g	Industrial Fumes & Mixtures	Gravimetric, drying oven &5 place calibrated balance	SOP 2500 and MDHS 14/4
	General methods for sampling and gravimetric analysis of respirable, thoracic and inhalable aerosols	Inhalable/ Respirable Dust	0-30 mg/ m-3	Industrial Fumes & Mixtures	Sampling & Gravimetric	SOP 2500, MDHS14/4
	General methods for sampling of Metals with subsequent analysis in 17025 accredited laboratory	Occupational Metal Dust	0-30 mg/ m-3	Industrial Fumes & Mixtures	Sampling	SOP 2501 and MDHS 14/4
	General methods for sampling of Volatile Organic Compounds in	Occupational VOC monitoring	0.05-5000 mg/ m -3	Industrial Fumes & Mixtures	Sampling	SOP 2502 and MDHS 96

	Air with subsequent analysis in 17025 accredited laboratory					
	QAL2 & Annual Surveillance Test (AST) for CEMS	QAL2 & Annual Surveillance Test (AST) for CEMS	1	Industrial Fumes & Mixtures	Stack Emissions-Continuous Emissions Monitoring Systems (CEMS)	SOP 2021 and EN 14181 to meet the requirements of the Irish Environmental Protection Agency Publications Ag3 and EN 15259:2007 and also the requirement of BS EN 15259:2007
	Sampling & On-site Analysis, Stationary Source Emissions-Determination of mass concentration of multiple gaseous species using electrochemical cells.	Carbon Dioxide (CO2)	0.1-25%	Industrial Fumes & Mixtures	Testo/Electrochemical Cells	SOP 2019 and CEN/ TS 17405:2020 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2009
		Carbon Monoxide (CO)	0-1500 mg.m-3	Industrial Fumes & Mixtures	Testo/Electrochemical Cells	SOP 2019 and EN 14793:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
		Nitrogen Oxides (NO)	0-2050 mg.m-3	Industrial Fumes & Mixtures	Testo/Electrochemical Cells	SOP 2019 and EN 14793:2017 to meet the requirements of

						the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2008
		Oxygen (O2)	0-26%	Industrial Fumes & Mixtures	Testo/Electrochemical Cells	SOP 2019 and EN 14793:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2010
	Sampling & On-site Analysis, Stationary Source Emissions- Determination of mass concentration of multiple gaseous species using Atmos FTIR	Ammonia (NH3)	0- 10 mg/m3	Industrial fumes & mixtures	Atmos FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2007
		Carbon Dioxide (CO2)	0-20%	Industrial Fumes & Mixtures	ATMOS FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN

				15259:2007and also the requirements of BS EN 15259:2010
Carbon Monoxide (CO)	CO 0-240 mg.m3	Industrial Fumes & Mixtures	ATMOS FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2007
HCL	0-15 mg/m3	Industrial fumes & mixtures	Atmos FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2007
Methane (CH4)	0-15mg/l	Industrial fumes & mixtures	Atmos FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2007

		Moisture (H20)	0-30%	Industrial fumes & mixtures	Atmos FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2007
		Nitrogen Dioxide (NO2)	0-200 mg.m3	Industrial Fumes & Mixtures	ATMOS FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2009
		Nitrogen Oxides (NO)	0-200 mg.m3	Industrial Fumes & Mixtures	ATMOS FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2008
		Nitrous Oxide (N20)	0-50 mg/m3	Industrial fumes & mixtures	Atmos FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental

						Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2007
		Oxygen (O2)	0-21%	Industrial Fumes & Mixtures	ATMOS FTIR	SOP 2020 and EN 14789 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2011
		Sulphur Dioxide (SO2)	0-300 mg.m-3	Industrial Fumes & Mixtures	ATMOS FTIR	SOP 2020 and PD CEN/TS 17337:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2012
	Sampling and On-Site Analysis- Determination of mass concentration of Carbon monoxide by NDIR	Carbon Monoxide (CO)	0-6250 mg.m3	Industrial Fumes & Mixtures	NDIR	SOP 2004 and EN 15058:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007

Sampling and On-Site Analysis- Determination of mass concentration of Oxides of Nitrogen by Chemiluminescence	Oxides of Nitrogen (NOx)	0-2500 ppm	Industrial Fumes & Mixtures	Chemiluminescence	SOP 2002 and EN 14792:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling and on-site analysis- Stationary source emissions — Determination of carbon dioxide	Carbon Dioxide (CO2)	0.1-25%	Industrial Fumes & Mixtures	NDIR	SOP 2005 and CEN/ TS 17405:2020 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling and On-Site Analysis: Determination of the mass concentration of total gaseous organic carbon at low concentrations in flue gases. Continuous flame ionization detector method	Total Organic Carbon	0.8 to 1600 mgC.m-3	Industrial Fumes & Mixtures	Flame Ionisation Detector (FID)	SOP 2009 and EN 12619:2013 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling and On-Site Analysis: Determination of Water Vapour in Ducts	Water Vapour	0.1-40%	Industrial Fumes & Mixtures	Gravimetric	SOP 2008 and EN 14790:2017 to meet the requirements of the Irish Environmental

					Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling and On-Site Analysis: Determination of volume concentration of oxygen (O2)	Oxygen (O2)	0.1-26%vol	Industrial Fumes & Mixtures	Paramagnetic and Zirconium oxide cell	SOP 2006 and EN 14789:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling and On-Site Analysis-Determination of mass concentration of Nitrogen Monoxides by Chemiluminescence	Nitrogen Monoxide (NO)	0-2500 ppm	Industrial Fumes & Mixtures	Chemiluminescence	SOP 2002 and EN 14792:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling and On-Site Analysis-Determination of mass concentration of Sulphur Dioxide by Instrumental Technique	Sulphur Dioxide (SO2)	1.8-2860 mg.m-3	Industrial Fumes & Mixtures	NDIR	SOP 2003 and CEN/TS 17021:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also

					the requirements of BS EN 15259:2007
Sampling and On-Site Analysis-Determination of Pressure	Pressure	0 – 8000 pa	Industrial Fumes & Mixtures	L & S Type Pitots	SOP 2007 and EN 16911-1:2013 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2009
Sampling and On-Site Analysis-Determination of Temperature	Temperature	0- 1200°c	Industrial Fumes & Mixtures	Thermocouple	SOP 2007 and EN 16911-1:2013 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2010
Sampling and On-Site Analysis-Determination of Velocity	Velocity	0.01- 30 m.s-1	Industrial Fumes & Mixtures	Anenometer	SOP 2007 and EN 16911-1:2013 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2008
		2.98-50 m.s-1	Industrial Fumes & Mixtures	L & S Type Pitots	SOP 2007 and EN 16911-1:2013 to meet

						the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
	Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory-Determination of mass concentration of gaseous chlorides expressed as HCl	HCL	0.05-5000 mg.m-3	Industrial Fumes & Mixtures	Extraction & Sampling	SOP 2011 and EN 1911:2010 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
	Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory-Determination of Formaldehyde by CEN TS 17638	Formaldehyde	0.05-5000 mg. m -3	Industrial Fumes & Mixtures	Extraction & Sampling	SOP 2014 and CEN TS 17638 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
	Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory:Determination of mass concentration of PCDD’s & PCDF's	Dioxins	0.0001 -10 ng. TEQ m-3	Industrial Fumes & Mixtures	Sampling	SOP 2018 and EN 1948-1:2006 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also

					the requirements of BS EN 15259:2007
Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory- Ammonia Stationary source emissions. Determination of mass concentration of Ammonia. Standard reference method	Ammonia	0.1-2200 mg. m -3	Industrial Fumes & Mixtures	Extraction & Sampling	SOP 2012 and ISO 21877:2019 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory- Determination of Low range concentration of dust	Particulate Matter	0.05-50 mg.m-3	Industrial Fumes & Mixtures	Gravimetric	SOP 2000 and EN 13284:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory- Determination of mass concentration of Sulphur Dioxide by reference method	Sulphur Dioxide (SO2)	0.1 – 5000 mg.m-3	Industrial Fumes & Mixtures	Extraction & Sampling	SOP 2013 and EN 14791: 2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling with subsequent analysis by	Speciated VOC’s	0.05-5000 mg. m -3	Industrial Fumes & Mixtures	Extraction and Sampling onto	SOP 2010 and EN 13649:2014 to meet

an ISO/IEC 17025 Accredited Laboratory- Determination of Speciated Volatile Organic Compounds (VOC's) using Carbon and other suitable tubes- Amines and Amides, Phenols, Cresols, Carboxylic Acids, Aldehydes, etc.				charcoal tubes and analysis by GC	the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory- Determination of the mass concentration of Individual Gaseous Organic Compounds		0.05-5000 mg. m -3	Industrial Fumes & Mixtures	Extraction and Sampling onto charcoal tubes and analysis by GC	SOP 2010 and EN 13649:2014 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory- Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, TI and V	Metals- As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, TI and V	0.003-0.5 mg.m -3 per metal	Industrial Fumes & Mixtures	Sampling	SOP 2016 and CEN/TS 14385:2004 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory- HF EN 15713:2006	Gaseous Fluoride	0.03-500mg. m3	Industrial Fumes & Mixtures	Extraction & Sampling	SOP 2015 and CEN/TS 17340:2020 to meet the requirements of the Irish Environmental

Stationary source emissions. Sampling and determination of gaseous fluoride content					Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory-Manual determination of mass concentration of particulate matter	Particulate Matter	20-1000 mg.m-3	Industrial Fumes & Mixtures	Gravimetric	SOP 2001 and ISO 9096:2017 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Sampling with subsequent analysis by an ISO/IEC 17025 Accredited Laboratory-Manual method of Determination of the Concentration of Total Mercury	Mercury	0.001-0.5 mg.m -3 per metal	Industrial Fumes & Mixtures	Sampling	SOP 2017 and EN 13211:2001 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007 and also the requirements of BS EN 15259:2007
Stationary Source Emissions-Determination of Sulfuric acid including sulfuric acid mist and sulfur trioxide	Sulfuric acid including sulfuric acid mist, and sulfur trioxide	0.2-200mg/m3	Industrial Emissions & Fumes	Isokinetic or Non-Isokinetic Extractive Sampling	SOP 2024 and US EPA Method 8 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2007

798 Sampling - .04 Industrial fumes and emissions	Stationary Source Emissions Determination of Odour concentration by dynamic olfactometry - Collection of odour samples for delayed olfactometry & Bag manufacture for odour sampling & analysis	Odour	3.5-59,081 ouE/m3 (extended by dilution)	Industrial fumes and emissions	Odour sampling from point sources for delayed olfactometry using Lung Method by Dynamic Dilution Olfasense.	SOP 2023 and EN 13725:2022 to meet the requirements of the Irish Environmental Protection Agency Publications AG1 and AG2 and EN 15259:2007and also the requirements of BS EN 15259:2007