

PH1D: Develop and maintain registers of authorized laboratories to perform water quality analyses

REGULATORY FUNCTION: PUBLIC HEALTH		PH1D		
OBJECTIVE PH1 There are rules ensuring public health standards for safe drinking water and sanitation	ACTION CARD PH1D <h2 style="margin: 0;">DEVELOP AND MAINTAIN REGISTERS OF AUTHORIZED LABORATORIES TO PERFORM WATER QUALITY ANALYSES</h2>			
COST: High FREQUENCY: Regular TARGET GROUPS: Regulators, ministries of health, service operators				
DESCRIPTION Regulators support ministries of health in establishing laboratory accreditation schemes and maintaining registers of accredited laboratories for undertaking drinking water sampling and analyses. Whereas accreditation schemes and their management remain almost exclusively under the responsibility of ministries of health, actual operation of registers can be outsourced to regulators, with an objective of making drinking water quality testing more convenient for operators.				
EXPECTED OUTCOMES <ul style="list-style-type: none"> • Transparent registers of authorized laboratories are in place. • Service operators organize sample testing processes internally. • Analysed results are easily accessible and subject to regulatory correction. 				
EXAMPLE 1: INDIA In India , a register of accredited laboratories is managed by the National Accreditation Board for Testing and Calibration Laboratories (NABL). NABL was established with the objective of providing the government, industry associations and industry in general with a Conformity Assessment Body accreditation scheme, that involves third-party assessments of technical competence of testing including medical and calibration laboratories, proficiency testing providers, and reference material producers. NABL offers accreditation services in a non-discriminatory manner, with an accreditation system in accordance with ISO/IEC 17011: 2017 (Conformity assessment – requirements for accreditation bodies accrediting conformity assessment bodies). The NABL accreditation system also acknowledges the requirements of Mutual Recognition Arrangements (MRAs) of which NABL is a member.				
EXAMPLE 2: UNITED KINGDOM In the UK , the Drinking Water Inspectorate (DWI) administers regulations that require that every drinking water supplier must ensure that its analytical methods, laboratory procedures, analytical equipment, sampling procedures, transport of samples, and storage of samples are checked periodically by an accredited third party. The Department for Business, Energy and Industrial Strategy appointed the United Kingdom Accreditation Service (UKAS) as the sole accreditation body for assessing drinking water testing facilities and sampling arrangements in accordance with ISO/IEC 17025 and the Drinking Water Testing Specification (DWTS).				
A list of organisations carrying out drinking water testing: showing their accreditation status for drinking water testing *				
Organisation	Accreditation Status			Electronic Reporting **
	UKAS No.	Sampling	Analysis	
Aberdeen City Council	1325		ISO17025 DWTS	NO

Accreditation of sampling procedures, transport and storage of samples, laboratory analysis and on-line monitoring to EN ISO/IEC 17025, or its equivalent, is a regulatory requirement. Accreditation to DWTS provides assurances to the DWI that companies comply with all the requirements of regulation. The Drinking Water Inspectorate maintains a list of companies including UKAS-accredited laboratories on its website.

EXAMPLE 3: BOLIVIA

In Bolivia, in order to ensure the reliability of analytical results, Regulations NB 495, NB 496 and NB 512 (texts approved by Ministerial Resolution No. 126/18 of the Ministry of the Environment and Water) stipulate that when carrying out the Monitoring of the Quality of Water for Human Consumption and adopting any pertinent corrective measures, drinking water and sanitary sewerage service providers should own or hire a laboratory to perform the authorized testing. Additionally, the regulator of test sample analyses should use an accredited laboratory or one that is recognized for its best practices and hired for these purposes. The standard considers an accredited laboratory to be that which has been formally recognized as capable of performing water quality monitoring tasks, given that it fulfils all the requirements demanded of administrative and technical quality systems according to International Standard NB-ISO IEC 17025, as recognized by a competent accreditation body.

EXAMPLE 4: PERU

In Peru, Supreme Decree No. 010-2019-VIVIENDA regulates non-domestic wastewater discharges into the sanitary sewerage system, stipulating that the inspection to be performed by the sanitation service provider must, among other requirements, collect the samples and have the analyses performed by a laboratory accredited by the National Quality Institute (Inacal). Accredited laboratories are those which have obtained the Accreditation Certificate granted by the Inacal for performing wastewater analyses pursuant to regulatory parameters. The list of accredited laboratories, as well as those suspended or cancelled due to sanctions or other reasons, is registered and published on the official Inacal website.

LINKS

India: <https://nabl-india.org>

UK: <https://www.dwi.gov.uk/drinking-water-products/laboratory-information/>

<https://www.dwi.gov.uk/drinking-water-products/laboratory-information/designated-test-laboratories-and-consultants/>

<https://www.ukas.com/wp-content/uploads/2021/12/LAB-33-Food-and-Feed-Control-Laboratories-NRLs.pdf>

Bolivia: Regulatory compendium on the quality of water for human consumption

<https://www.bivica.org/files/normativa-calidad-agua.pdf>

Peru: Supreme Decree No. 010-2019-Vivienda

<https://www.fao.org/faolex/results/details/es/c/LEX-FAOC187059/>

INTERNAL CAPACITIES NEEDED AND THE ROLE OF PARTNERS

Capacity is required to accredit and establish registers of authorized laboratories, including the need to first establish a central accreditation body, commonly under ministries of health. Ministries also have the ability to undertake shadow sampling and testing, for comparison with results from laboratories undergoing accreditation, in order to determine their eligibility for inclusion in the register. This could also be potentially outsourced to independent accredited laboratories. Ministries of health will require a range of administrative capacities to establish protocols for accreditation, and development partners could provide support in this process.