

Heterotrophic Plate Count □ Standard Method for the Examination of Water and Wastewater (9215 A & B)

Baku (Azerbaijan)

9 - 20 March 2026

UK Training

PARTNER



Heterotrophic Plate Count – Standard Method for the Examination of Water and Wastewater (9215 A & B)

Code: QM28 From: 9 - 20 March 2026 City: Baku (Azerbaijan) Fees: 7400 Pound

Introduction

In today's evolving water and wastewater management sector, the ability to perform accurate microbiological assessments is critical for ensuring public health and environmental safety. The Heterotrophic Plate Count HPC is a key microbiological test used worldwide to evaluate the general microbial population in potable water, treated effluents, and other water samples. Standard Method 9215 A & B outlines the essential procedures and quality control measures to achieve reliable results in these contexts.

This comprehensive training course provides in-depth knowledge and hands-on experience in applying the HPC using Standard Method 9215 A & B. Participants will learn the principles, techniques, and best practices that are vital for water quality assessments and compliance with international standards such as WHO, EPA, and local regulatory bodies.

Course Objectives

By the end of this course, participants will be able to:

- Understand the importance and applications of heterotrophic bacteria testing in water systems.
- Apply Standard Methods 9215 A Overview and 9215 B Pour/Spread Plate Methods.
- Correctly collect, preserve, and handle water samples for HPC.
- Use proper media, incubation, and enumeration techniques for accurate HPC procedures.
- Interpret HPC results and integrate them into comprehensive water quality assessments.

Course Outlines

Day 1: Microbial Water Quality and HPC Overview

- Introduction to microbial indicators in water quality.
- Role of heterotrophic bacteria in water systems.
- Overview of HPC and its limitations.
- Regulatory relevance of HPC WHO, EPA, local.
- Comparison of different HPC methods.

Day 2: Understanding Standard Method 9215 A & B

- Scope and background of Standard Method 9215.
- Definitions and microbiological terms.
- Overview of parts A-E of the method.
- Focus on Part A Introduction and Part B Plate Count Methods.
- Overview of pour plate vs spread plate techniques.

Day 3: Laboratory Setup and Media Preparation

A graphic of a chessboard with several chess pieces, including a king and pawns, arranged on it. The text 'UK Training PARTNER' is overlaid on the image.

UK Training
PARTNER

- Required materials, glassware, and equipment.
- Types of media used R2A, PCA, etc..
- Media preparation and sterilization techniques.
- Pour plate media vs spread plate media handling.
- Storage and shelf-life of prepared media.

Day 4: Sample Collection and Preservation

- Selection of sampling points and volumes.
- Aseptic techniques and sample container types.
- Use of sodium thiosulfate in chlorinated samples.
- Sample preservation and holding times.
- Sample transport and chain of custody.

Day 5: Pour Plate and Spread Plate Techniques

- Pour plate procedure - step-by-step.
- Spread plate procedure - step-by-step.
- Serial dilution techniques.
- Avoiding contamination and false counts.
- Differences in colony recovery between methods.

Day 6: Incubation and Enumeration

- Incubation conditions temperature, time, aerobic.
- Reading and recording colony counts.
- Differentiating colony morphologies.
- Identifying overgrowth and TNTC plates.
- Counting accuracy and acceptable plate ranges.

Day 7: Data Interpretation and Result Reporting

- Calculating CFU/mL from dilution factors.
- Recording results in lab logs or databases.
- Interpreting normal vs elevated counts.
- Linking results to water quality status.
- Reporting formats and compliance with standards.

Day 8: Quality Control and Validation

- Positive and negative controls.
- Media sterility and performance checks.
- Duplicate and blank sample handling.
- Method reproducibility and recovery validation.
- Troubleshooting QC failures.

Day 9: Safety, Waste Disposal, and Audit Preparedness

- Biosafety practices in microbiology labs.

A graphic of a chessboard with several chess pieces. A large gold king piece is in the foreground, with a silver pawn and a silver knight behind it. In the background, there are concentric circles and the text 'UK Training PARTNER' in a bold, black, sans-serif font.

UK Training
PARTNER

- Handling biohazard waste and plate disposal.
- Cleaning and decontaminating lab surfaces.
- Documentation for audits and inspections.
- Good Laboratory Practice GLP compliance.

Day 10: Practical Demonstration and Course Wrap-Up

- Full hands-on session using 9215 B pour and spread plate.
- Result comparison and discussion.
- Review of key learning points from Days 1-9.
- Participant assessments and feedback.
- Certification and closing session.

Why Attend This Course: Wins & Losses!

- Gain practical, actionable skills in applying Standard Method 9215 A & B for reliable water quality assessments.
- Strengthen your ability to detect and monitor heterotrophic bacteria in potable water and treated effluents.
- Build confidence in collecting, preserving, and analyzing water samples using pour and spread plate techniques.
- Improve accuracy and compliance in your microbiological testing, reducing regulatory risks.
- Learn from experienced professionals and real-world examples to reinforce your understanding.
- Enhance your laboratory safety practices and ensure audit readiness.
- Foster continuous improvement through quality control and validation practices.
- Network with peers and expand your knowledge in water microbiology.

Conclusion

Accurate microbial testing is foundational for ensuring the safety and quality of water in today's dynamic water and wastewater management landscape. This course provides a structured and comprehensive approach to performing the Heterotrophic Plate Count using Standard Method 9215 A & B, equipping you with the essential skills, knowledge, and confidence to ensure reliable and compliant water quality assessments.

Start applying these proven methods today and become a leader in water microbiology testing—promoting public health, environmental protection, and regulatory compliance in your organization. Let's build a future where safe water and environmental stewardship are achievable goals.

A graphic of a chessboard with several chess pieces. A large gold king piece is in the foreground, with a silver pawn and a silver knight behind it. In the background, there are concentric circles and the text 'UK Training PARTNER'.

Blackbird Training Cities

Europe



Malaga (Spain)



Sarajevo (Bosnia and Herzegovina)



Oporto (Portugal)



Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Annecy (France)



Bordeaux (France)



Copenhagen (Denmark)



Birmingham (UK)



Lyon (France)



Moscow (Russia)



Stockholm (Sweden)



Podgorica (Montenegro)



Batumi (Georgia)



Salzburg (Austria)



Florence (Italy)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany)



Paris (France)



Athens (Greece)



Barcelona (Spain)



Munich (Germany)



Geneva (Switzerland)



Prague (Czech)



Vienna (Austria)



Rome (Italy)



Brussels (Belgium)



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Zurich (Switzerland)



Manchester (UK)



Milan (Italy)



Blackbird Training Cities

USA & Canada



Los Angeles (USA)



Orlando, Florida (USA)



Online



Phoenix, Arizona (USA)



Houston, Texas (USA)



Boston, MA (USA)



Washington (USA)



Miami, Florida (USA)



New York City (USA)



Seattle, Washington (USA)



Washington DC (USA)



In House



Jersey, New Jersey (USA)



Toronto (Canada)

ASIA



Baku (Azerbaijan)
(Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)



Bali (Indonesia)



Bangkok



Beijing (China)



Singapore (Singapore)



Sydney



Tokyo (Japan)



Jeddah (KSA)



Riyadh (KSA)



Melbourne (Australia)
(Kuwait)



Phuket (Thailand)



Shanghai (China)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City



Seoul (South Korea)



Pulau Ujong (Singapore)



Irbid (Jordan)



Jakarta (Indonesia)



Amman (Jordan)



Beirut

UK Training
PARTNER

Blackbird Training Cities

AFRICA



Kigali (Rwanda)



Cape Town (South Africa)



Accra (Ghana)



Lagos (Nigeria)



Marrakesh (Morocco)



Nairobi (Kenya)



Zanzibar (Tanzania)



Tangier (Morocco)



Cairo (Egypt)



Sharm El-Sheikh (Egypt)



Casablanca (Morocco)



Tunis (Tunisia)



Blackbird Training Clients

 <p>MANNAI CORPORATION MANNAI Trading Company WLL, Qatar</p>	 <p>GAC UNE FILIALE D' EGA Alumina Corporation Guinea</p>	 <p>Booking.com Booking.com Netherlands</p>	 <p>OXFAM Oxfam GB International Organization, Yemen</p>	 <p>Capital Markets Authority Kuwait</p>
 <p>WS Waltersmith Petroman Oil Limited Nigeria</p>	 <p>QNB Qatar National Bank (QNB), Qatar</p>	 <p>Qatar Foundation Qatar</p>	 <p>AFRICAN UNION ADVISORY BOARD ON CORRUPTION Tanzania</p>	 <p>KFAS Kuwait Foundation for the Advancement of Sciences KFAS Kuwait</p>
 <p>Reserve Bank of Malawi Malawi</p>	 <p>Central Bank of Nigeria Nigeria</p>	 <p>Ministry of Interior Kingdom of Saudi Arabia Ministry of Interior, KSA</p>	 <p>Mabruk Oil Company Libya</p>	 <p>Saudi Electricity Company KSA</p>
 <p>BPKH Badan Pengelola Keuangan Haji BADAN PENGELOLA KEUANGAN Haji, Indonesia</p>	 <p>NATO Italy</p>	 <p>ENI ENI CORPORATE UNIVERSITY, Italy</p>	 <p>GULF BANK Gulf Bank Kuwait</p>	 <p>General Organization for Social Insurance KSA</p>
 <p>Defence Space Administration Nigeria</p>	 <p>National Industries Group (Holding), Kuwait</p>	 <p>Hamad Medical Corporation Qatar</p>	 <p>USAID Pakistan</p>	 <p>STC STC Solutions, KSA</p>
 <p>North Oil Company North Oil company,</p>	 <p>EKO Electricity</p>	 <p>OMAN BROADBAND Oman Broadband</p>	 <p>UNITED NATIONS UN.</p>	 <p>Authority for Electricity Regulation, Oman Authority for</p>

UK Training
PARTNER

Blackbird Training Categories

Management & Admin

Entertainment & Leisure
Professional Skills
Finance, Accounting, Budgeting
Media & Public Relations
Project Management
Human Resources
Audit & Quality Assurance
Marketing, Sales, Customer Service
Secretary & Admin
Supply Chain & Logistics
Management & Leadership
Agile and Elevation

Technical Courses

Artificial Intelligence (AI)
Hospital Management
Public Sector
Special Workshops
Oil & Gas Engineering
Telecom Engineering
IT & IT Engineering
Health & Safety
Law and Contract Management
Customs & Safety
Aviation
C-Suite Training



 International House 185 Tower Bridge
Road London SE1 2UF United Kingdom

 +44 7401 1773 35
+44 7480 775526

 Sales@blackbird-training.com

 www.blackbird-training.com

UK Training
PARTNER

