

## Job Description

<b>Job Title:</b>	<b>Scientific Officer (Microbiology)</b>
<b>Department:</b>	Environment, Food & Agriculture
<b>Division:</b>	Government Laboratory
<b>Grade:</b>	Pay Band 14
<b>Responsible To:</b>	Higher Scientific Officer (Head of Microbiology)
<b>Responsible For:</b>	(Not responsible for other staff)

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### **Purpose:**

To perform microbiological examinations and/or other testing of samples and to carry out related investigations to the standards of quality and service required by the Laboratory.

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### **Main Duties and Key Accountabilities:**

- 1) Microbiological or other testing of samples in a timely and efficient manner, following standard methods and other operating procedures, utilising any or all of the whole range of equipment available in the Microbiology Laboratory, to include:
  - a) Sample preparation
  - b) Quality assurance
  - c) Calculation and recording of results
  - d) Assessment of the accuracy and acceptability of results and recognition of anomalies

In testing samples the assistance of the Laboratory Assistant may be requested where that aids efficiency or timeliness of output, subject to that individual's training and capability including approval to work.

- 2) Demonstrate continuing competence in the performance assessment programmes.
- 3) The Laboratory operates a quality system that includes formal training records and 'approvals to work'. The job holder is expected to maintain his or her own training records including ensuring the currency of any applicable approvals to work, together with any necessary associated verification of proficiency.
- 4) Undertake such functions normally assigned to the Laboratory Assistant (Microbiology) as may be necessary for efficient and effective working whenever that role holder is unavailable or otherwise unable for any reason to provide the appropriate service in a timely manner.
- 5) Experienced Scientific Officers will be expected to assist with or undertake the development of new procedures, and problem solving related to samples and investigative work.
- 6) Undertake site visits for sampling or other investigative purposes, as may from time to time be required.

- 7) From time to time experienced Scientific Officers will be expected to train other staff in new methodology and equipment, including staff at the same or higher level, where appropriate also signing other staff training approvals. They may also be required to supervise and train Laboratory Assistants.
- 8) In the absence of the Higher Scientific Officer (Head of Microbiology), experienced competent Scientific Officers may be required to deputise for the role of Checking Officer.
- 9) The job holder is expected to manage his/her own time subject to such guidance or direction as may be given in respect of specific tasks.
- 10) In the interests of the efficiency and effectiveness of the Government Laboratory it may be necessary for the role holder to work temporarily, permanently or periodically in other sections or areas of work within the Laboratory.

In undertaking their duties Scientific Officers are responsible for ensuring that their own work complies with the standards set out in the Laboratory's quality system.

In addition to the specific tasks described above, the role holder shall perform such duties and observe and conform with such reasonable instructions as the Department, or person duly authorised by the Department, may from time to time give.

### **Service Delivery**

The role holder will be accountable for the delivery of part of the analytical service provided by the Government Laboratory in accordance with the Quality System and the Health & Safety Manual, including the management of his/her time, subject to such guidance as may be given from the role holder's line manager.

### **Performance Management & Improvement**

All Civil Servants have a personal responsibility for performance management. The role holder will be expected to contribute to their annual performance development review and interim performance reviews.

### **Health & Safety**

Scientific Officers are responsible for their own health and safety and the impact of their actions on others. The role holder must understand the concept of risk associated with health and safety and have sufficient knowledge of health and safety requirements in a laboratory environment to operate in a safe manner having regard to own and others' health. In undertaking their duties Scientific Officers are responsible for ensuring that their own work complies with the health and safety policies.

### **Reporting Framework:**

Scientific Officers (Microbiology) report to the Higher Scientific Officer (Microbiology) of the Government Laboratory, Department of Environment, Food & Agriculture, who is responsible as 'Reporting Officer' for the implementation of, and compliance with, the provisions of the Isle of Man Civil Service Performance & Development Review Scheme.

### **Integrity:**

As an appointee of the Government Laboratory, Department of Environment, Food & Agriculture, the role holder is expected to recognise that their everyday business requires the highest level of personal integrity. Each Officer has a personal responsibility to maintain the

confidentiality of all Government Laboratory and Department business and to uphold such confidences.

### **Qualification and Experience:**

The following specific skills are required for discharge of the normal Scientific Officer duties:

- 1) High level of practical microbiology laboratory skills including aseptic technique and including sampling of common materials (including food and water), and understanding of considerations necessary to prevent contamination of samples.
- 2) Ability to use the range of equipment available in the Microbiology Laboratory in a safe and correct manner.
- 3) Technical competence, able to meet the required testing performance standards as a matter of course.
- 4) Ability to learn new techniques with normal training.
- 5) Reliability and ability to plan and organise work to achieve maximum efficiency particularly when unsupervised, both inside and outside the Laboratory.
- 6) Interpersonal communication skills to deal with staff, public and clients.
- 7) Sufficient knowledge of methods with which the Scientific Officer is authorised to use, to be able to train other staff.
- 8) Knowledge and familiarity of operation of quality systems and quality control procedures relating to tests, and ability to assess the suitability of test results using acceptability criteria.
- 9) Ability to operate basic software including spreadsheets and databases.
- 10) Intuitive and reasoning skills sufficient to be able to work on the development of new methods and procedures.

This is a graduate level post, the normal entry requirement to which is a degree in microbiology or with microbiology as a significant component, together with sufficient postgraduate practical microbiology experience in a laboratory environment testing water and/or food to ensure competence at least with a core range of test methods. However, as this is a complex role it is recognised that continual development over several years is likely before an appointee fully attains all the above skills to the fullest extent required, with progress monitored through the Performance and Development Review Scheme.

### **Department Ethos**

The Department of Environment, Food & Agriculture is committed to the following statement of values, and to the principles behind them. All staff are expected to adopt and abide by them:

*In DEFA we work together as a team taking pride in delivering the very best, sustainable, service to make a positive difference to our community.*

*Ours is an environment where:*

- *We value, trust and respect one another;*
- *We communicate clearly, openly and honestly;*
- *Innovation and creativity are recognised and appreciated;*
- *We positively influence and inspire each other;*
- *Continuous development is promoted.*

**Competency levels:**

The competency levels for this role are:

**Leading and working together****Level B**

*Actively supports/manages staff to deliver objectives; generates enthusiasm and commitment in others and demonstrates this in their own approach; works collaboratively with colleagues to deliver results; develops effective and productive working relationships with colleagues and with contacts in other Departments/externally. Manages disagreements with tact and diplomacy.*

**Communicating and influencing****Level B**

*Communicates openly with colleagues; is confident speaking in a group or team situation and expresses views in a clear and succinct way. Influences and convinces others to accept or agree to ideas; takes active steps to build acceptance of proposals using knowledge of the organisation.*

**Achieving results****Level B**

*Prioritises own (and others') work to achieve team goals; schedules activities and resources to deliver to agreed timescale; communicates openly about changes to plans; proposes appropriate solutions and considers consequences of different options; makes decisions in a timely manner and recommends/refers important decisions as necessary; strongly focused on achieving results; takes responsibility for the delivery of team objectives.*

**Delivering a quality service****Level B**

*Enjoys delivering excellent service to internal and external customers; treats customers and customer problems as top priority; takes a pride in delivering work of a consistently high standard; shows an awareness of the cost of resources and uses these efficiently.*

**Changing and learning****Level B**

*Assists, coaches and advises colleagues to develop competence and confidence; actively looks for new, better ways of working; offers opinions in discussions which are not always the most obvious. Is versatile and adaptable, and prepared to change their views. Applies up-to-date specialist skills, knowledge and experience in their work.*

**Showing commitment and resilience****Level B**

*Adopts an energetic approach to work and is enthusiastic and interested in their work; stays calm under pressure, and in control when under stress.*

Signature (Job Holder)\_\_\_\_\_

Date\_\_\_\_\_

Signature (Line Manager)\_\_\_\_\_

Date\_\_\_\_\_

**Isle of Man Public Service  
Person Specification**

**Post:** Scientific Officer (Microbiology)

**Department:** Environment, Food and Agriculture - Government Laboratory

**Job Summary:** To perform microbiological examinations and/or other testing of samples and associated activities to the standards of quality and service required by the Laboratory

Attributes	Essential or Desirable	Method of Assessment
<p><b>Qualifications</b></p> <p>5 GCSEs at Grade C or above including English Language (or equivalent)</p> <p>Degree or equivalent in microbiology or with microbiology a major part <b>or</b> at least 5 years' practical experience of microbiological testing with evidence of progression of knowledge and understanding of environmental and food micro-organisms and their identification and enumeration, to a level commensurate with a degree.</p>	E  E	CV/Pre-employment check  CV/Pre-employment check  NB applicants who do not hold <b>either</b> a relevant degree or equivalent <b>or</b> have at least 5 years' experience will not be shortlisted
<p><b>Experience</b></p> <p>At least 2 years' practical microbiology laboratory experience, not including college or university course undergraduate practical components, with proven competence in aseptic technique, sub-culturing and colony counting.</p> <p>Practical experience of microbiological examination of food and/or water for relevant organisms</p> <p>Experience working in a UKAS accredited laboratory, with own training records demonstrating approvals to work in a range of microbiology enumeration methods.</p>	E  D  D	CV/Interview  CV/Interview  CV/Interview
<p><b>Knowledge and Skills</b></p> <p>Degree-level knowledge and understanding of microbiology, including knowledge and understanding of micro-organisms, particularly those that may be encountered in food and water, and of the different techniques for enumeration, both classical and modern</p> <p>Understanding of health and safety in a microbiology laboratory</p>	E  E	CV/Interview  CV/Interview

Skilled in basic microbiological techniques including total viable counts, most probable number methods and membrane filtration.	E	CV/Interview
Familiarity with basic microbiology laboratory equipment such as automatic pipettors, colony counters, balances, autoclaves, gravimetric diluters, automatic dispensers, spiral platers and safety cabinet	E	CV/Interview
Familiarity with computers including use of Microsoft Windows, Excel and Access	D	CV/Interview
Excellent planning and organisational skills	E	CV/Interview
Demonstrate excellent interpersonal and communication skills to interrelate with staff, public and clients.	E	CV/Interview
<b>Disposition</b>		
Commitment to quality customer service	E	CV/Interview
Ability to learn new techniques readily	E	CV/Interview
Reliability	E	CV/Interview
Willingness to take on new challenges	E	CV/Interview
Personal motivation to achieve results	E	CV/Interview
<b>Circumstances/Interests</b>		
Full and valid car driving licence	D	Application
Isle of Man worker	D	Application Form/ Pre-employment check