
Overview

This standard covers the competences you need to carry out simple scientific or technical tests using manual equipment in accordance with approved procedures and practices.

You will be required to demonstrate that you can select and obtain the appropriate equipment and materials for the manual tests required. You will conduct the manual tests using the required sample in accordance with the correct practices and procedures. You will record the results of the manual test in accordance with workplace procedures.

The activity is likely to be undertaken by someone in a science related work setting, including individuals working in hospitals, scientific laboratories, schools and universities.

Performance criteria

- You must be able to:*
- P1 ensure that your work is carried out in accordance with workplace procedures
 - P2 use safe practices and the appropriate personal protection equipment (PPE) when doing scientific or technical activities
 - P3 obtain the appropriate equipment and materials for the manual tests required
 - P4 conduct manual laboratory tests on samples in accordance with the correct procedures and techniques
 - P5 record the results of manual tests in accordance with workplace procedures
 - P6 dispose of waste items from manual laboratory tests in accordance with workplace procedures
 - P7 return equipment and materials that can be used for future testing to the correct storage location
 - P8 communicate the required information laboratory activities to authorised people in accordance with departmental and organisational procedures

Knowledge and understanding

- You need to know and understand:*
- K1 the health and safety requirements of the area in which you are carrying out the scientific or technical activities
 - K2 the implications of not taking account of legislation, regulations, standards and guidelines when conducting scientific or technical activities
 - K3 the scientific or technical techniques and processes you must use correctly in the workplace
 - K4 the importance of wearing protective clothing, gloves and eye protection for scientific or technical activities
 - K5 the importance of correct identification, and any unique workplace coding system
 - K6 the lines of communication and responsibilities in your department, and their links with the rest of the organisation
 - K7 the limits of your own authority and to whom you should report if you have problems that you cannot resolve
 - K8 the minimum size/volume of sample required for the scientific or technical tests conducted
 - K9 the types of sample and container used for transport and scientific or technical testing
 - K10 how to assess if a sample is suitable for analysis
 - K11 how to use and take a reading from manual test kits used in the workplace
 - K12 the procedure to be followed when samples do not match up with the test output specification or accompanying documentation
 - K13 the procedure to be followed when a broken or leaking sample is identified in the workplace
 - K14 the procedure to be followed if a hazardous or high risk sample was received in the workplace
 - K15 the methods used for numbering and labelling samples in the workplace
 - K16 the procedures for storing tested samples when archiving is required
 - K17 the factors which might adversely affect the integrity of the sample during storage or transport

Scope/range

1. carry out all of the following operations for manual equipment:
 - 1.1 transport samples in the workplace, and store them appropriately
 - 1.2 select a suitable work area for the manual tests
 - 1.3 select and set up the necessary equipment correctly
 - 1.4 use the necessary quantity of sample for the manual tests
 - 1.5 dispose of waste safely and correctly
 - 1.6 ensure that the test done meet the specification for the required quality and accuracy

2. use one of the following resources:
 - 2.1 materials
 - 2.2 utilities

3. check two of the following conditions for the scientific or technical test:
 - 3.1 health and safety environment
 - 3.2 time
 - 3.3 recording system
 - 3.4 cleanliness
 - 3.5 external influence giving rise to variations

4. record details of work activities, and communicate the details to the appropriate people, using:
 - 4.1 verbal report plus one method from the following:
 - 4.2 written or typed report
 - 4.3 computer-based record
 - 4.4 specific workplace documentation
 - 4.5 electronic mail

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