



## **Component Specification**

### **Organic Manure Application**

**Level 5**

**5N1751**

## 1. Introduction

The Further Education and Training Awards Council is the single national awarding body in further education and training in Ireland. It is responsible for determining the standards for named awards at levels 1 to 6 on the National Framework of Qualifications. All named awards are devised in line with the National Qualifications Authority of Ireland's determinations and guidelines.

## 2. The National Framework of Qualifications

The National Framework of Qualifications comprises 10 levels ranging from initial learning (level 1) to the most advanced levels of learning (level 10).

At each level there are one or more award types. An award type is a grouping of awards that share similar features. The National Qualifications Authority of Ireland has determined Award Type Descriptors for each award type. See [www.nqai.ie](http://www.nqai.ie). The Award Type Descriptor identifies the key strands and sub-strands of knowledge, skill and competence for that award type.

## 3. Guide to Level

Learning outcomes at this level include a broad range of skills that require some theoretical understanding. The outcomes may relate to engaging in a specific activity, with the capacity to use the instruments and techniques relating to an occupation. They are associated with work being undertaken independently, subject to general direction.

<b>Strand</b>	<b>Sub-strand</b>	<b>Nature of learning</b>
Knowledge	Breadth	Broad range of knowledge
	Kind	Some theoretical concepts and abstract thinking, with significant depth in some areas. Some underpinning theory
Know How & Skill	Range	Demonstrate a broad range of specialised skills and tools
	Selectivity	Evaluate and use information to plan and develop investigative strategies and to determine solutions to varied unfamiliar problems
Competence	Context	Act in a range of varied and specific contexts, taking responsibility for the nature and quality of outputs; identify and apply skill and knowledge to a wide variety of contexts
	Role	Exercise some initiative and independence in carrying out defined activities; join and function within multiple, complex and heterogeneous groups
	Learning to Learn	Learn to take responsibility for own learning within a managed environment
	Insight	Assume full responsibility for consistency of self- understanding and behaviour

*Extract from 'Determinations for the Outline National Framework of Qualifications': NQAI ([www.nqai.ie](http://www.nqai.ie))*

#### **4. Award Specifications**

FETAC determines the standards for all awards in partnership with relevant stakeholders. This award was developed in line with the Council policy on Standards Development published in September 2005.

Standards are published in the form of Award Specifications. A Specification is devised in respect of each named award. Each Specification provides a comprehensive description of the features, characteristics and standards of the award.

A **Certificate Specification** is published for each named **major award**.

A **Component Specification** is published for each named **minor award**. Please note that each component (i.e. minor award) is associated with one or more Certificates (i.e. major, special purpose or supplemental award). See [www.fetac.ie](http://www.fetac.ie).

A **Specific Purpose Specification** is published for each **special purpose award**.

A **Supplemental Specification** is published for each **supplemental award**.

Standards are expressed in terms of **learning outcomes** i.e. concise statements of what the learner is expected to know or be able to do in order to achieve that award.

Learning outcomes for all awards (i.e. major, special purpose, supplemental awards) are contained within the associated Component Specifications.

## 5. Component Details

<b>Title</b>	Organic Manure Application
<b>Teideal as Gaeilge</b>	To be confirmed by FETAC (TBC)
<b>Award Type</b>	Minor
<b>Code</b>	5N1751
<b>Level</b>	5
<b>Credit Value</b>	5
<b>Purpose</b>	The purpose of this award is to equip the learner with the relevant knowledge, skill and competence to apply chemical fertilisers in accordance with crop nutrient requirements and environmental legislation.
<b>Learning Outcomes</b>	Learners will be able to: <ol style="list-style-type: none"><li>1 Outline the pollution potential for the range of farm manures and farm wastes for biochemical oxygen demand (BOD), soil type and underlying geology, weather and spreading interactions</li><li>2 Interpret nitrates directives and cross compliance requirements as they relate to application of organic manure and slurry</li><li>3 Review factors in maximizing the nutrient value of farm manure including fertilizer value, storage, dilution, timing of application and application rates</li><li>4 State the farmers legal and regulatory obligations, restrictions and responsibilities for manure and slurry application</li><li>5 State safety precautions to be followed when handling farm manure and slurry while storing, agitating, stacking and spreading</li><li>6 Outline manure and slurry collection, storage and spreading systems and equipment</li><li>7 Prepare a tractor and manure and slurry equipment for work</li><li>8 Spread manure and slurry safely and accurately in accordance with current legislation and best practice</li><li>9 Prepare manure and slurry equipment for storage</li><li>10 Spread manure and slurry safely and accurately under limited supervision in a farm or horticultural setting.</li></ol>

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## Assessment

### General Information

Details of FETAC's assessment requirements are set out in [Assessment Guidelines for Providers](#).

All FETAC assessment is criterion referenced. Successful achievement of the award is based on learners attaining the required standards of knowledge, skill or competence.

The techniques set out below are considered the optimum approach to assessment for this component. In exceptional circumstances providers may identify alternative assessment techniques through the provider's application for programme validation which are **reliable** and **valid** but which are more appropriate to their context.

Assessment of a number of components may be integrated across programmes for delivery, provided that the learning outcomes of each minor award are assessed.

Group or team work may form part of the assessment, provided each learner's achievement is separately assessed.

All providers are required to submit an assessment plan as part of their application for programme validation. Assessment Plans will include information relating to scheduling and integration of assessment. [See FETAC's Provider Guidelines for Programme Validation](#).

### Assessment Techniques

In order to demonstrate that they have reached the standards of knowledge, skill and competence identified in all the learning outcomes, learners are required to complete the assessment(s) below.

The assessor is responsible for devising assessment instruments (e.g. project and assignment briefs, examination papers), assessment criteria and mark sheets, consistent with the techniques identified below and FETAC's assessment requirements.

Programme validation will require providers to map each learning outcome to its associated assessment technique. [See FETAC's Provider Guidelines for Programme Validation](#).

All learning outcomes **must** be assessed.

Skills Demonstration 60%

Examination - Theory 40%

### Description

#### Skills Demonstration

*A skills demonstration is used to assess a wide range of practical based learning outcomes including practical skills and knowledge. A skills demonstration will require the learner to complete a task or series of tasks that demonstrate a range of skills.*

Weighting Factor:

Where a critical fault occurs the entire skills demonstration must be

terminated.

0 marks for termination of skill demonstration due to a critical fault or failure to complete the task.

1 mark for completing the task with 3 or more minor faults

2 marks for completing the task with less than 3 minor faults

3 marks for exceeding the criteria for the task with no minor faults

Examples of critical faults: compromises safety, animal welfare, the environment

Examples of minor faults: Incorrect sequence, too slow, requires guidance

The learner must achieve at least 40 of the 60 marks available, to pass this assessment. The learner must pass this assessment to achieve the award

Prepares tractor and equipment for work

1. Carries out safety assessment for preparing tractor and spreader

2. Assesses compatibility of tractor with spreader and agitator

3. Checks, cleans and greases spreader for work

4. Checks, cleans and greases agitator or loader for work

Prepares manure or slurry for spreading

5. Carries out safety assessment for preparing manure or slurry for spreading

6. Ensures that all humans and livestock are excluded from the vicinity of the stacking or agitation area

7. Lowers agitator into tank and prepares for agitation or selects best location for loading operation

8. Commences agitation by gradually increasing PTO (power take off) speed after engaging PTO or stacks manure to enable rapid loading of manure on to spreader

Spreads manure or slurry

9. Carries out safety assessment for spreading manure or slurry

10. Fills slurry tanker with slurry or loads spreader with manure

11. Measures the discharge rate of the spreader

12. Determines forward speed to achieve target application rate

13. Calibrates tractor forward speed

14. Spreads slurry or manure with accurate bout matching

Prepares spreader for storage

15. Carries out safety assessment for preparing equipment for storage

16. Cleans all residues from the outside of the spreader and the tractor making sure that washings run to a soiled water or slurry tank

17. Greases all nipples

18. Checks for undue wear or damage

19. Coats all metal parts with rust inhibitor

20. Maintains record of all applications.

Overall Marks 60

### **Examination - Theory**

*An examination provides a means of assessing a learner's ability to recall and apply knowledge, skills and understanding within a set period of time and under clearly specified conditions.*

*A theory-based examination assesses the ability to recall, apply and understand specific theory and knowledge.*

The assessor will devise a theory-based examination to assess learning outcomes 1 - 6.

Overall Marks 40

<b>Recognition of Prior Learning (RPL)</b>	Learners may be assessed on the basis of their prior knowledge and experience. Providers must be specifically quality assured to assess learners by this means. To do so they must complete B10, see Provider's Quality Assurance Guidelines and be included on the Register of RPL approved providers. See RPL Guidelines at <a href="http://www.fetac.ie">www.fetac.ie</a> for further information and registration details.
<b>Grading</b>	Pass                      50% - 64% Merit                        65% - 79% Distinction                80% - 100%
<b>Specific Validation Requirements</b>	There are no specific validation requirements for this award
<b>Supporting Documentation</b>	None
<b>Access</b>	To access programmes leading to this award the learner should have reached the standards of knowledge, skill and competence associated with the preceding level of the National Framework of Qualifications. This may have been achieved through a formal qualification or through relevant life and work experience.
<b>Transfer</b>	Successful completion of this component award enables the learner to transfer to programmes leading to other certificates where this component is a mandatory or an elective requirement.