



# National Occupational Standards for Sustainability

## Consultation Document – ‘Efficient Water Usage’

### Background to the work

Within the current economic and political climate there is a huge amount of emphasis put on ‘sustainable development’. There is now widespread recognition that our current way of life, in terms of the environment, economy, and social justice, is simply not sustainable.

Cogent, has secured government funding to launch a review of sustainability issues in our sector and to use the results to create a comprehensive, nationally recognised set of workplace standards that all employers can access and use.

The initiative will help the industry address Government policies for making industry more sustainable and more environmentally friendly. It is hoped that these occupational standards will define what every worker should know and practice in order to achieve the benefits to be gained from long-term sustainability. In addition it is hoped that it will improve the sector’s environmental and ethical credentials, efficiency and competitiveness, and provide long-term economic benefits.

### National Occupational Standards for Sustainability – The Vision

Cogent’s suite of sustainability NOS will seek to define the skills and knowledge needed within an organisation to ensure the sustainable development of the business.

The standards will look beyond environmental awareness to address the real improvements in efficiency and competitiveness which companies are looking to achieve.

They will draw together existing standards, and develop additional material, to cover issues such as energy and climate change, transport, water usage, waste and emissions management, the environment and corporate and social responsibility.

The purpose of the standards is to give companies mechanisms for implementing sustainable practices through staff training and development.

### Scope of the standards

The range of the standards will be sufficiently broad to cover the different levels of responsibility within an organisation, from the high-level manager to the process operator.

## The Draft Framework of National Occupational Standards for Sustainability

<b>Develop Sustainability Strategy</b>	1 Develop a strategy that strives to achieve sustainability	
<b>Manage sustainable practices</b>	Energy efficiency	2 Promote energy efficiency
	Waste	3 Promote waste minimisation
	Water usage	4 Promote efficient water usage
	Transport	5 Promote efficient transport usage
	Environmental	6 Co-ordination and management of the assessment process and initial Environmental Statement compilation
	Corporate social responsibility	7 Ensure compliance with legal, regulatory, ethical and social requirements
<b>Implement sustainable practices</b>	Energy efficiency	8 Control energy efficiency
	Waste	9 Control waste minimisation
	Water usage	10 Control water usage efficiency
	Transport	11 Control transport efficiency
	Environmental	12 Review environmental performance 13 Improve environmental performance 14 Environmental auditing 15 Report environmental performance 16 Prepare, screen and scope an Environmental Impact Assessment 17 Environmental Impact Assessment for planners 18 Final Environmental Statement reporting, communication and follow up 19 Assess the environmental impact of projects
	Corporate social responsibility	-
<b>Contribute to sustainable practices</b>	20 Contribute to sustainable business practice	
	21 Develop an awareness of environmental good practice	

## Consultation Task – Efficient Water Usage

For illustrative purposes we have selected one of the themes within the standards, **efficient water usage**, and presented the relevant units. There are three units presented, illustrating three different levels of involvement. Please familiarise yourself with the following introduction before reviewing the content of the individual units.

	Who is this unit for?	What does the unit cover?
Unit 4 Promote efficient water usage	At a management level this unit describes the competence required by those responsible for the design and implementation of programmes for efficient water usage	You would expect individuals to be able to demonstrate high levels of technical skills, knowledge and understanding associated with the development of initiatives for efficient water usage
Unit 10 Control water usage efficiency	At a supervisory level this unit describes the competence required to practically implement programmes and associated measures to improve water usage	You would expect individuals to be able to demonstrate technical skills, knowledge and understanding to facilitate the implementation of initiatives for efficient water usage
Unit 20 Contribute to sustainable business practice	At an operational level this unit describes the competence required by those who contribute to the implementation of initiatives for efficient water usage	You would expect individuals to be able to demonstrate an awareness of the need to support efficient use of water and adopt the appropriate working practices as part of their day to day routine

### Things to think about

- How do the units presented work together as a set? Do they describe the different roles within an organisation for this area of sustainable practice?
- Does each unit capture the right skills and knowledge to ensure an individual would be competent in carrying out this function?
- Is there anything missing within any of the units, or within the framework as a whole?
- Are there any other key sustainability issues which are not captured in the framework?
- Is the language appropriate, clear and relevant to your business/industry?

### Please send all of you comments, views and suggestions to...

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## National Occupational Standards

<b>Unit Title:</b>	Unit 4: Promote efficient water usage	
<b>Overview:</b>	<p>This unit is about developing policy and guidelines to support and promote the efficient use of water.</p> <p>This standard would be appropriate for:</p> <ul style="list-style-type: none"> <li>• A manager with responsibility for water usage</li> <li>• An owner/manager of a business seeking to improve the water usage for the organisation</li> <li>• An individual with a specific brief to develop an water usage efficiency</li> <li>• A consultant providing advice on water usage</li> </ul>	
<b>Scope:</b>	N/A	
<b>Additional Notes:</b>	The following terms have a specific meaning in this unit:	
	<b>Barriers</b>	These can be economic, practical, social or legal compliance
	<b>Activities</b>	Incorporating for example: purchasing, supply, production, storage, packaging, transport and all aspects of business support.
	<b>Benefits</b>	Social, economic and environmental
	<b>Benchmark</b>	A comparative measure of an organisation against industry best practice
<b>Previous Version:</b>	<p>This is a tailored version of the units</p> <ul style="list-style-type: none"> <li>➤ SFP.107S Promote efficient water usage in a food environment, and</li> <li>➤ SFP.108K Principles of efficient water usage in a food environment</li> </ul> <p>which were developed by Improve in March 2009 for the food production industries.</p>	



This section outlines the skills an individual must demonstrate in order to meet the standards in this area.



## Performance Criteria

In achieving this unit within the limits of your responsibility you must:

1. identify the legal requirements that control the extraction, use and discharge of water
2. establish current levels of water usage for activities
3. benchmark organisational water usage to determine effectiveness
4. specify efficiency targets for each area of water usage
5. identify potential barriers that may limit water efficiency
6. specify the monitoring procedures in respect of water usage
7. advise on the design of processes and products to help minimise water usage
8. promote and support the implementation of water efficiency measures
9. define and allocate roles/responsibilities to support measures to improve water efficiency
10. establish training needs and organise training to those responsible for improving water efficiency
11. support the implementation of monitoring procedures to control water efficiency
12. establish methods to evaluate the impact of measures to improve water efficiency
13. support the implementation of monitoring and control procedures
14. evaluate impact of measures to improve water efficiency
15. specify benefits achieved through efficiency measures



This section outlines the knowledge an individual must demonstrate in order to meet the standards in this area.



### **Knowledge and Understanding**

Within the limits of your responsibility you must demonstrate that you know and understand:

1. the legal requirements that control water extraction, consumption, treatment and discharge
2. government targets for sustainable water usage
3. the impact of water usage on the environment and sustainability
4. how water usage impacts on environmental issues such as climate change
5. the benefits of efficient water usage to the organisation
6. water usage as part of organisational activities including embedded water
7. water supply availability, treatment methods and quality
8. how to establish current levels of water usage in respect to all organisational activities
9. how to analyse organisational water usage data
10. the value of water metering and monitoring
11. the principles of benchmarking as a method of identifying opportunities for improving efficient water usage
12. the processes used to support water treatment, recycling, reuse and discharge control
13. the factors that limit organisational water recycling and reuse
14. water discharge including, treatment methods and quality specifications
15. the potential causes/sources of water pollution and its associated implications
16. the opportunities available for reducing water usage and improving water efficiency
17. the barriers that can limit water efficiency and how these barriers can be overcome
18. how process and product design can impact on efficient water usage
19. how effective process control and quality assurance can support efficient water usage
20. how to use a cost/benefit analysis to assess the impact of water usage on the organisation
21. methods of promoting efficient water usage
22. how to monitor and control water usage
23. how to define and allocate roles/responsibilities for all those involved in improving efficient water usage
24. how to establish training needs and organise staff training to support efficient water usage
25. how to evaluate the impact of the measures used to improve efficient water usage



## National Occupational Standards

<b>Unit Title:</b>	Unit 10: Control water usage efficiency	
<b>Overview:</b>	<p>This unit is about maintaining, monitoring and improving water efficiency. You will need to inform others of their responsibilities; monitor work practices and processes and identify and effectively deal with any inefficient activities.</p> <p>This unit is for you, if you have responsibility for supporting efficient water usage for all or part of the production process.</p>	
<b>Scope:</b>	N/A	
<b>Additional Notes:</b>	The following terms have a specific meaning in this unit:	
	<b>Barriers</b>	These can be economic, practical, the personal beliefs and attitudes of people, social or legal
	<b>Sustainable</b>	Something that has the capacity of being maintained over the longterm, economically, environmentally and socially.
	<b>Targets</b>	Relating to resource usage and including water usage, energy usage and waste minimisation
	<b>Area of responsibility</b>	Can include areas used to support: purchasing, supply, production, storage, packaging, transport and all aspects of business support.
	<b>Others</b>	These can be: production staff, customers and contractors
	<b>Benefits</b>	Economic, social, environmental
<b>Previous Version:</b>	<p>This is a tailored version of the units</p> <ul style="list-style-type: none"> <li>➤ SFP.115S Control water usage efficiency in a food environment, and</li> <li>➤ SFP.116K Understand how to reduce water usage in a food environment</li> </ul> <p>which were developed by Improve in March 2009 for the food production industries.</p>	



This section outlines the skills an individual must demonstrate in order to meet the standards in this area.



## Performance Criteria

In achieving this unit within the limits of your responsibility you must:

1. obtain and interpret organisational water usage targets
2. inform others accurately of their responsibilities in relation to organisational targets that promote efficient water usage
3. ensure production processes and working practices comply with organisational targets, quality specifications and legal requirements
4. ensure production processes and working practices make efficient use of water
5. monitor the working practices and evaluate water usage and efficiency
6. support others to avoid wasting water
7. encourage others positively to overcome barriers and improve working practices and water efficiency
8. provide training and development opportunities to improve water efficiency
9. identify and make opportunities to encourage others to adopt more water efficient working practices
10. develop and communicate recommendations for efficiency improvements to others
11. present clear recommendations that support the further development of water efficiency, at an appropriate time and with the right level of detail



This section outlines the knowledge an individual must demonstrate in order to meet the standards in this area.



## Knowledge and Understanding

Within the limits of your responsibility you must demonstrate that you know and understand:

1. the impact of water usage on the environment
2. how the effective management of water supports sustainable business practices
3. organisational water quality standards
4. how legislation impacts on the organisation water extraction, usage and disposal
5. how water is obtained, treated, used and discharged by the organisation
6. organisational targets for water usage and efficiency
7. how and why water usage is monitored and controlled within area of responsibility
8. how the effective management and organisation of work can help minimise water usage
9. how staff training and development can help to maintain the effective utilisation of water
10. organisational procedures for water, extraction, storage, treatment, recycling, reuse and discharge
11. how to identify potential sources of water pollution within area of responsibility
12. how water usage is controlled and minimised within area of responsibility
13. how others can impact on water usage
14. the barriers that can limit the impact of water management and how these barriers can be overcome
15. how failure to meet organisational quality specifications can impact on water usage



## National Occupational Standards

<b>Unit Title:</b>	Unit 20: Contribute to sustainable business practice	
<b>Overview:</b>	This unit is about working in a sustainable way. You will need to work effectively to ensure the efficient use of resources and to minimise waste. In addition, you need to assess your own performance and identify and implement opportunities to improve efficiency.	
<b>Scope:</b>	N/A	
<b>Additional Notes:</b>	The following terms have a specific meaning in this unit:	
	<b>Resources</b>	Raw materials, product, packaging, energy, water, transport
	<b>Waste</b>	Raw materials, product, packaging
	<b>Social benefits</b>	Local, national and global
<b>Sustainability</b>	In relation to environmental, economic and social factors	
<b>Previous Version:</b>	<p>This is a tailored version of the units</p> <ul style="list-style-type: none"> <li>➤ SFP.119S Contribute to sustainable food manufacturing environment, and</li> <li>➤ SFP.120K Understand how to contribute to sustainable food manufacture</li> </ul> <p>which were developed by Improve in March 2009 for the food production industries.</p>	



This section outlines the skills an individual must demonstrate in order to meet the standards in this area.



## Performance Criteria

In achieving this unit you must:

1. work effectively according to organisational production specifications
2. assess own performance to identify possible efficiency improvements
3. report accurately any opportunities to improve the efficiency of resource usage
4. report promptly and accurately variations in resource usage and any actions you have taken in response
5. implement actions to improve the efficiency of resource usage
6. work effectively to avoid and minimise waste



This section outlines the knowledge and understanding an individual must demonstrate in order to meet the standards in this area.



## **Knowledge and Understanding**

Within the limits of your responsibility you must demonstrate that you know and understand:

1. what is meant by sustainability
2. why it is important to work to organisational production specifications
3. how to assess own performance for opportunities to improve efficiency
4. the importance of reporting incidences of inefficient resource usage
5. how not working to organisational production specifications can effect sustainability
6. energy and the opportunities available for reducing energy usage
7. the opportunities available for reducing water usage
8. how the efficient use of water supports sustainability
9. how minimising waste supports sustainable food manufacture
10. how the efficient use of resources supports the economic sustainability of the organisation
11. the social benefits of sustainable business practices
12. individual responsibilities relevant to sustainable business practices