# **CONSTRUCT ONSITE SANITATION FACILITIES**

UNIT CODE: CON/OS/CET/CR/12/6/A

### **UNIT DESCRIPTION**

This unit covers the competencies required to construct onsite sanitation facilities. It involves Preparing construction schedule, organizing the construction site and construction of the various onsite sanitation facilities

### ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
	These are <b>assessable</b> statements which specify the required
These describe the <b>key outcomes</b> which make	level of performance for each of the elements.
up workplace function	
up workplace function	Bold and italicized terms are elaborated in the Range
1. Prepare	1.1 Engineering drawings are Interpreted based on the
construction	engineering codes
schedule	1.2 <i>Construction activities</i> are identified based on scope of
	work
	1.3 Project management timelines are Prepared based on
	project specifications
2. Organize the	2.1 Site is cleared and secured based on the contract document.
construction Site	2.2 Human resource, construction plant and equipment are
	identified and mobilized based on the contract document
	2.3 <i>Onsite infrastructure</i> is put in place based on contract
	document and legal requirements
3. Construct the	3.1 <i>Construction materials</i> are sourced and mobilized based on
various onsite	the bill of quantities
sanitation	3.2 Onsite sanitation facilities are set out based on the
facilities	engineering drawings.
	3.3 <i>Onsite sanitation facility units</i> are constructed based on the
	design drawings
	3.4 Labor payments are done based on the progress report and
	attendance list.
	3.5 As-built drawings are prepared and submitted based on the
	actual construction works
	3.6 Substantial completion certificate is prepared based on
	FIDIC regulations
	3.7 Payment certificate is prepared based on progress report.
	3.8 Completion certificate is prepared based on the legal
	requirements

#### **RANGE**

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This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

Variables	Range
Construction activities on	Surveying
construction schedule may	Excavation
include but not limited to:	Laying and jointing
	Setting out
	Alignment and gradient
	Timbering to trenches
	Backfilling
	Concrete works
	Steel works
	Timber works
	<ul> <li>Roofing</li> </ul>
	Electrical works
	Plumbing works
	• Finishes
On-site infrastructures in	• Stores
the construction Site may	Site office
include but not limited to:	• Fences
	Site latrine
Construction materials and	Cement
tools may include but not	<ul> <li>Aggregates(course and fine)</li> </ul>
limited to:	• bricks
	• stones
	• timber
	• steel
	Tape measure
	Hack saws
	Pipe wrenches
	Leveling tools
	Hammer
	Set of protective gear
Onsite sanitation facility	Septic Tanks
units may include but not	Bio-Digesters
limited to:	Anaerobic Baffled Reactors
	Latrines- pit, VIP, Aqua privy
	Soak Pits
	Imhoff tank

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## REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

### **Required Skills**

The individual needs to demonstrate the following skills:

#### Generic skills:

- Communication
- Analytical
- Organizing
- Decision making
- Planning
- Record keeping
- Problem solving
- First aid
- Supervising
- Time management

#### **Technical skills:**

- Analysis
- Reporting
- Performance appraising
- Trouble shooting
- Data logging
- Technical specifications
- Safety measures
- Statutory regulations
- Surveying skills
- Plumbing and Pipefitting
- Construction skills
- Site organization

### Required Knowledge

The individual needs to demonstrate knowledge of:

- Technical specifications
- Statutory regulations
- Quality Assurance
- Computer Aided design

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- Occupational health, safety
- Statistics
- Wastewater treatment processes
- Soil analysis methods
- Surveying
- Statutory regulations and legislation in water
- Engineering mathematics
- Technical drawing
- Onsite sanitation facilities
- Waste water characteristics
- Construction management

### **EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

	Critical Aspects of	Assessment requires evidence that the candidate:
1.	Competency	Tissessment requires extractice that the canadate.
	Competency	1.1 Prepared construction schedule
		1.2 Organised construction site
		1.3 Constructed various onsite sanitation facilities
2.	Resource	The following resources <b>must</b> be provided:
	Implications	2.1 Concrete lab
		2.2 Soil laboratory
		2.3 Surveying equipment
		2.4 Construction plant
		2.5 Timber workshop
		2.6 Plumbing and Pipe workshop
		2.7 Electro mechanical workshop
		2.8 Human resource
3.	Methods of	Competency may be assessed through:
	Assessment	3.1 Practical
		3.2 Verbal assessment
		3.3 Written assessment
		3.4 Construction reports
		3.5 Industrial attachment
		3.6 Project
4.	Context of	Assessment may be done:
	Assessment	4.1 On job training
		4.2 Coursework
		4.3 Industrial assessment

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5.	Guidance	Holistic assessment with other units relevant to the building
	information for	sector workplace and job role is recommended.
	assessment	

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