

Assessment Evidence Guide

for

“Crush Plant Operator”

Level-3

Perform Computer Operations

(Formative Assessment)



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Perform Computer Operations Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time :		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task 1: Candidate is required to prepare a presentation in Power Point, specified by assessor.</p> <p>Assessment Task 2: Candidate is required to prepare a spreadsheet in MS Excel, specified by assessor.</p> <p>And complete:</p> <ol style="list-style-type: none"> 1. Knowledge assessment test (Written or Oral) 2. Portfolios at the time of assessment (if any)
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Insert Slides with different Layouts according to requirements of presentation.</p> <p>Performance Criteria 2: Insert text, tables, images, etc. according to the requirement.</p> <p>Performance Criteria 3: Apply a set of effects to animate the slide according to requirement.</p> <p>Performance Criteria 4: Apply Slide Transitions on Slides according to requirement.</p> <p>Performance Criteria 5: Apply Sound Effects on Objects/text/images according to requirement.</p> <p>Performance Criteria 6: Check leads and cable for any visual damage before use</p> <p>Assessment Task 2</p> <p>Performance Criteria 1: Develop a worksheet as per given data.</p> <p>Performance Criteria 2: Format the worksheet according to given criteria.</p> <p>Performance Criteria 3: Apply Formulas according to the requirement.</p> <p>Performance Criteria 4: Generate Charts/Graphs according to the given data.</p> <p>Performance Criteria 5: Print Worksheet according to requirements.</p> <p>Performance Criteria 6: Use appropriate non- verbal communication.</p>

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	<p>COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/></p> <p>Name of the Assessor: Assessor's code:</p> <p>Signature of the Assessor:.....</p>

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							
Each Assessment Task (with performance criteria)							
Assessment Task 1			Description of Assessment Task 1 Prepare a presentation in Power Point, specified by assessor.				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1.	Insert Slides with different Layouts according to requirements of presentation.						
2.	Insert text, tables, images, etc. according to the requirement.						
3.	Apply a set of effects to animate the slide according to requirement.						
4.	Apply Slide Transitions on Slides according to requirement.						
5.	Apply Sound Effects on Objects/text/images according to requirement.						
6.	Check leads and cable for any visual damage before use						
Competent <input type="checkbox"/>				Not Yet Competent <input type="checkbox"/>			

Assessment Task 2		Description of Assessment Task 2 Prepare a spreadsheet in MS Excel, specified by assessor.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Develop a worksheet as per given data.			
2.	Format the worksheet according to given criteria.			
3.	Apply Formulas according to the requirement.			
4.	Generate Charts/Graphs according to the given data.			
5.	Print Worksheet according to requirements.			
6.	Use appropriate non- verbal communication.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Written Assessment Guide
for
“Crush Plant Operator”
Level-3
Perform Computer Operations



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Perform Computer Operations Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
------------------------	--

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Perform Computer Operations Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30min		

WRITTEN ASSESSMENT

Question	Candidate's Answer
1. What is MS Excel spreadsheet?	
2. What are the four uses of Microsoft Power Point?	
3. What is physical hazard?	
4. Define barricade.	
5. What is a risk in safety?	
6. What are the 5 C's of communication?	
7. Write any five barriers to communication?	

ANSWER KEY

Sr.	Answers
1.	Spreadsheets present tables of values arranged in rows and columns that can be manipulated mathematically using both basic and complex arithmetic operations and functions.
2.	Documents ,Performed calculations ,Analyzed data ,Reports in slides shows
3.	Physical hazards are environmental factors that can harm an employee without necessarily touching them, including heights, noise, radiation and pressure.
4.	The definition of a barricade is a barrier that stops the progress of something
5.	'Risk is the likelihood that a person may be harmed or suffers adverse health effects if exposed to a hazard.
6.	<ul style="list-style-type: none">• Clarity,• Consistency,• Creativity• Content• Connections
7.	<ul style="list-style-type: none">• The use of jargon. Over-complicated or unfamiliar terms.• Emotional barriers and taboos.• Lack of attention, interest, distractions, or irrelevance to the receiver.• Differences in perception and viewpoint.• Physical disabilities such as hearing problems or speech difficulties.• Language differences and the difficulty in understanding unfamiliar accents.• Cultural differences.

Assessment Evidence Guide

For

“Crush Plant Operator”

Level-3

**Manage Inventory of Raw Material for
Production Process**
(Formative Assessment)



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Manage Inventory of Raw Material for production Process Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time:		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task 1: Candidate is required to cross check and inspect the raw material with log register and propose adjustment in production plan assign by assessor.</p> <p>Assessment Task 2: Candidate is required to calculate the grade wise quantity of production and write in the log register/dispatch sheet assign by assessor.</p> <p>And complete:</p> <p>3. Knowledge assessment test (Written or Oral)</p> <p>4. Portfolios at the time of assessment (if any)</p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Calculate the amount of materials available on site</p> <p>Performance Criteria 2: Cross check with the log register</p> <p>Performance Criteria 3: Adjust the demands in accordance with the available raw materials</p> <p>Performance Criteria 4: Manage the production plan accordingly</p> <p>Performance Criteria 5: Check materials quality & quantity visually as per standard procedures</p> <p>Performance Criteria 6: Follow COVID-19 SOP's</p> <p>Performance Criteria 7: Carry out Personal interaction clearly and concisely.</p>
	<p>Assessment Task 2</p> <p>Performance Criteria 1: Dump the materials as per graded sizes</p> <p>Performance Criteria 2: Check the materials quality & quantity visually as per standard procedures</p> <p>Performance Criteria 3: Maintain log book of materials In/Out</p> <p>Performance Criteria 4: Manage Log Register on daily basis</p> <p>Performance Criteria 5: Enter data corresponding to every type of raw material</p> <p>Performance Criteria 6: Audit the Log register with available materials at site</p> <p>Performance Criteria 7: Report to the incharge in case any issues are found</p> <p>Performance Criteria 8: Prepare production / dispatch record sheet</p>

	Performance Criteria 9: Convey the information using the appropriate medium and ideas.
--	---

Continued on following page

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	<p>COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/></p> <p>Name of the Assessor: Assessor's code:</p> <p>Signature of the Assessor:.....</p>

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							
Each Assessment Task (with performance criteria)							
Assessment Task 1			Description of Assessment Task 1 Cross check and inspect the raw material with log register and propose adjustment in production plan assign by assessor.				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1.	Calculate the amount of materials available on site						
2.	Cross check with the log register						
3.	Adjust the demands in accordance with the available raw materials						
4.	Manage the production plan accordingly						
5.	Check materials quality & quantity visually as per standard procedures						
6.	Follow COVID-19 SOP's						
7.	Carry out Personal interaction clearly and concisely.						
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>				

Each Assessment Task (with performance criteria)			
Assessment Task 2		Description of Assessment Task 2 Calculate the grade wise quantity of production and write in the log register/dispatch sheet assign by assessor.	
During the practical assessment, candidate demonstrated the following:		Yes	No
1.	Dump the materials as per graded sizes		
2.	Check the materials quality & quantity visually as per standard procedures		
3.	Maintain log book of materials In/Out		
4.	Manage Log Register on daily basis		
5.	Enter data corresponding to every type of raw material		
6.	Audit the Log register with available materials at site		
7.	Report to the incharge in case any issues are found		
8.	Prepare production / dispatch record sheet		
9.	Convey the information using the appropriate medium and ideas.		
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>	

Written Assessment Guide

For

“Crush Plant Operator”

Level 3

**Manage Inventory of Raw Material for
Production Process**



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Manage Inventory of Raw Material for production Process Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
------------------------	--

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Manage Inventory of Raw Material for production Process Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

WRITTEN ASSESSMENT

Question	Candidate's answer
1. Enlist the types of aggregate	
2. Classify the types of aggregate according to nature of size.	
3. Classify the types of aggregate according to nature of shape.	
4. Classify the types of aggregate based on geographical origin.	
5. What are the characteristics of a coarse aggregate?	
6. Define the size of fine aggregate grains?	
7. Define aggregate gradation.	
8. Enlist the types of gradation.	
9. Enlist safety control measures.	
10. What is an emergency plan?	
11. MSDS stands for?	
12. Define fire extinguisher?	
13. Enlist four types of communication.	

ANSWER KEY

Sr.	Answers
1.	Gravel, rock and sand.
2.	Fine aggregate Coarse aggregate.
3.	Rounded, irregular, angular, flaky, and elongated.
4.	Natural aggregate Artificial aggregate
5.	It is hard, tough, sound, durable, clean and free from any organic matter, chemicals and coating of clay.
6.	The size of its grains should be such that the pass-through sieve #4 (4.75mm) as per ASTM (American society for testing and materials)
7.	Aggregate gradation is the distribution of various particle sizes in the mix.
8.	<ul style="list-style-type: none">• Uniformly graded• Open graded• Gap graded• Dense or well graded
9.	Control measures include actions that can be taken to reduce the potential of exposure to the hazard
10.	An emergency plan specifies procedures for handling sudden or unexpected situations
11.	Material Safety Data Sheet
12.	Dry chemical fire extinguishers work with a pressurized spray of a dry chemical that will blanket a fire and extinguish it.
13.	<ul style="list-style-type: none">• Verbal Communication.• Non-verbal / Interpersonal communication.• Written Communications.• Formal & Informal.• Visual Communication

Assessment Evidence Guide

For

“Crush Plant Operator”

Level-3

Operate Crushing Plant Software
(Formative Assessment)



National Vocational & Technical
Training Commission

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology "Crush Plant Operator"	CS Code:	Level: 3	Version: 01
Competency Standard Title: Operate Crushing Plant Software Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time:		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task 1: Candidate is required to input recipe/production order in software and prepare the trial product assign by assessor.</p> <p>Assessment Task 2: Candidate is required to input recipe/production order in PLC and prepare the trial product assign by assessor.</p> <p>And complete:</p> <p>5. Knowledge assessment test (Written or Oral)</p> <p>6. Portfolios at the time of assessment (if any)</p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Turn the ignition switch</p> <p>Performance Criteria 2: Check and adjust the rpm of engine</p> <p>Performance Criteria 3: Adjust the position of conveyer belts</p> <p>Performance Criteria 4: Check hydraulic temperature</p> <p>Performance Criteria 5: Start product conveyors</p> <p>Performance Criteria 6: Start crusher</p> <p>Performance Criteria 7: Start dirt conveyors</p> <p>Performance Criteria 8: Adjust speed of feeder</p> <p>Performance Criteria 9: Trial and error with rotor speed and apron setting until get the product as per work order, and Start Production</p> <p>Performance Criteria 10: Finish Production</p> <p>Performance Criteria 11: Empty the feeder and dirt conveyors</p> <p>Performance Criteria 12: Stop crusher ,product conveyors and engine respectively</p> <p>Performance Criteria 13: Identify appropriate lines of communication with supervisors and colleagues.</p> <p>Performance Criteria 14: Follow COVID-19 SOP's</p> <p>Performance Criteria 15: Identify potential hazards at work site</p>

	<p>Assessment Task 2</p> <p>Performance Criteria 1: Set programme value for different crushing and quantity in PLC</p> <p>Performance Criteria 2: Set system parameters to control equipment</p> <p>Performance Criteria 3: Control auto and manual operation of plant through PLC</p> <p>Performance Criteria 4: Identify error and reset the display for safe operations</p> <p>Performance Criteria 5: Calibrate and parameterisation error</p> <p>Performance Criteria 6: Identify risk associated with job to be done.</p> <p>Performance Criteria 7: Assess the specific and relevant information from the appropriate sources</p>
--	--

Continued on following page

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Nature of Activity							
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							
Each Assessment Task (with performance criteria)							

Assessment Task 1		Description of Assessment Task 1		
		Input recipe/production order in software and prepare the trial product assign by assessor.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Turn the ignition switch			
2.	Check and adjust the rpm of engine			
3.	Adjust the position of conveyer belts			
4.	Check hydraulic temperature			
5.	Start product conveyors			
6.	Start crusher			
7.	Start dirt conveyors			
8.	Adjust speed of feeder			
9.	Trial and error with rotor speed and apron setting until get the product as per work order, and Start Production			
10.	Finish Production			
11.	Empty the feeder and dirt conveyors			
12.	Stop crusher ,product conveyors and engine respectively			
13.	Identify appropriate lines of communication with supervisors and colleagues.			
14.	Follow COVID-19 SOP's			
15.	Identify potential hazards at work site			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 2		Description of Assessment Task 2 Input recipe/production order in PLC and prepare the trial product assign by assessor.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Set programme value for different crushing and quantity in PLC			
2.	Set system parameters to control equipment			
3.	Control auto and manual operation of plant through PLC			
4.	Identify error and reset the display for safe operations			
5.	Calibrate and parameterisation error			
6.	Identify risk associated with job to be done.			
7.	Assess the Specific and relevant information from the appropriate sources			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Written Assessment Guide
For
“Crushing Plant Operator”
Level 3

Operate Crushing Plant Software



National Vocational & Technical
Training Commission

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator ”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Operate Crushing Plant Software Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
------------------------	--

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator ”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Operate Crushing Plant Software Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

WRITTEN ASSESSMENT

Question	Candidate's answer
1. How we can set the speed of engine?	
2. Enlist the plant operation modes.	
3. What is full form of PLC?	
4. How we can adjust the work order in plant operation?	
5. List the main step to stop the plant operation.	
6. How to check the hydraulic temperature?	
7. Enlist two parameters to control system.	
8. MSDS stands for?	
9. What is an emergency plan?	
10. Define safety control measures.	
11. Enlist three types of communication.	
12. Model of Communication SMCR is stands for?	

ANSWER KEY

Sr.	Answers
1.	Adjust the rpm of engine.
2.	Auto(Software), manual (PLY)
3.	Programmable logic control
4.	Selecting and adjusting the apron according to work order
5.	1. Empty the feeder, dirt conveyors 2. Stop crusher, product conveyors 3. Stop engine
6.	Industrial thermometer
7.	Voltage ,Current ,Speed ,Workload
8.	Material Safety Data Sheet
9.	An emergency plan specifies procedures for handling sudden or unexpected situations
10.	Control measures include actions that can be taken to reduce the potential of exposure to the hazard
11.	<ul style="list-style-type: none">• Verbal Communication.• Non-verbal / Interpersonal communication.• Written Communications.• Formal & Informal• Visual Communication
12.	Sender-Message-Channel-Receiver (SMCR)

Assessment Evidence Guide

for

“Crush Plant Operator”

Level-3

Prepare Crushing Plant

for Production

(Formative Assessment)



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology "Crush Plant Operator"	CS Code:	Level: 3	Version: 01
Competency Standard Title: Prepare Crushing Plant for Production Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time:		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task 1: Candidate is required to prepare production plan and ready the plant for the production as per job order assign by assessor.</p> <p>And complete:</p> <p>7. Knowledge assessment test (Written or Oral)</p> <p>8. Portfolios at the time of assessment (if any)</p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Interpret production plan given by plant in-charge</p> <p>Performance Criteria 2: Identify the type of product required, time to run and raw/reclaim materials required</p> <p>Performance Criteria 3: Check availability of raw material as per production plan</p> <p>Performance Criteria 4: Check availability of transportation machinery (Dumper & loader, etc.)</p> <p>Performance Criteria 5: Generate demand for material and generator</p> <p>Performance Criteria 6: Inspect oil, water and filter of compressor and generator</p> <p>Performance Criteria 7: Maintain the oil level in all gear boxes, hydraulic unit as per the procedures set by the manufacturer</p> <p>Performance Criteria 8: Inspect tension on all v-drive belts</p> <p>Performance Criteria 9: Inspect conveyor belt for alignment and excessive wear</p> <p>Performance Criteria 10: Grease, lubricate and tighten bearings and gate pivot points</p> <p>Performance Criteria 11: Check emptiness of crush plant</p> <p>Performance Criteria 12: Inspect adequacy of voltage/frequency (for single and three phase) supply PLC according to machinery requirement</p> <p>Performance Criteria 13: Check damage wiring and loose electrical fitting ,sensor and switches</p> <p>Performance Criteria 14: Check tightness of all hydraulic and pneumatic</p>

	<p>connections and the condition of flexible tubes and rubber seals</p> <p>Performance Criteria 15: Operate manually valves and gates of plant</p> <p>Performance Criteria 16: Inspect that all equipment is set and adjusted according to production schedule as required</p> <p>Performance Criteria 17: Report maintenance requirements</p> <p>Performance Criteria 18: Test run of plant</p> <p>Performance Criteria 19: Check RPM sensor of conveyor belt for accurate values</p> <p>Performance Criteria 20: Perform trial loading for calibration</p> <p>Performance Criteria 21: Check the connectivity of earthing with power equipment</p> <p>Performance Criteria 22: Check leads and cable for any visual damage before use.</p> <p>Performance Criteria 23: Tag damaged lead, cable and connection points and report to the supervisor.</p> <p>Performance Criteria 24: Follow COVID-19 SOP's</p> <p>Performance Criteria 25: Perform mock first aid treatment for minor injuries</p> <p>Performance Criteria 26: Raise fire alarms</p> <p>Performance Criteria 27: Select suitable fire extinguishers</p> <p>Performance Criteria 28: Perform PASS (Pull, aim, squeeze and sweep) on fire extinguisher</p> <p>Performance Criteria 29: Recognize the safety signs and symbols</p> <p>Performance Criteria30: Identify potential hazards at work site</p> <p>Performance Criteria 31: Identify the risk of slip, trip and fall at work place</p> <p>Performance Criteria 32: Perform fall protection measures as per job requirements</p> <p>Performance Criteria 33: Report unsafe condition to immediate supervisor</p> <p>Performance Criteria 34: Convey the information using the appropriate medium and ideas.</p> <p>Performance Criteria 35: Use appropriate non- verbal communication.</p>
--	---

Continued on following page

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							
Each Assessment Task (with performance criteria)							

Assessment Task 1		Description of Assessment Task 1		
		Prepare production plan and ready the plant for the production as per job order assign by assessor.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Interpret production plan given by plant in-charge			
2.	Identify the type of product required, time to run and raw/reclaim materials required			
3.	Check availability of raw material as per production plan			
4.	Check availability of transportation machinery (Dumper & loader, etc.)			
5.	Generate demand for material and generator			
6.	Inspect oil, water and filter of compressor and generator			
7.	Maintain the oil level in all gear boxes, hydraulic unit as per the procedures set by the manufacturer			
8.	Inspect tension on all v-drive belts			
9.	Inspect conveyor belt for alignment and excessive wear			
10.	Grease, lubricate and tighten bearings and gate pivot points			
11.	Check emptiness of crush plant			
12.	Inspect adequacy of voltage/frequency (for single and three phase) supply PLC according to machinery requirement			
13.	Check damage wiring and loose electrical fitting ,sensor and switches			
14.	Check tightness of all hydraulic and pneumatic connections and the condition of flexible tubes and rubber seals			
15.	Operate manually valves and gates of plant			
16.	Inspect that all equipment is set and adjusted according to production schedule as required			
17.	Report maintenance requirements			
18.	Test run of plant			
19.	Check RPM sensor of conveyor belt for accurate values			
20.	Perform trial loading for calibration			
21.	Check the connectivity of earthing with power equipment			
22.	Check leads and cable for any visual damage before use.			
23.	Tag damaged lead, cable and connection points and report to the supervisor.			
24.	Follow COVID-19 SOP's			
25.	Perform mock first aid treatment for minor injuries			
26.	Raise fire alarms			
27.	Select suitable fire extinguishers			
28.	Perform PASS (Pull, aim, squeeze and sweep) on fire extinguisher			
29.	Recognize the safety signs and symbols			

30.	Identify potential hazards at work site			
31.	Identify the risk of slip, trip and fall at work place			
32.	Perform fall protection measures as per job requirements			
33.	Report unsafe condition to immediate supervisor			
34.	Convey the information using the appropriate medium and ideas.			
35.	Use appropriate non- verbal communication.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Written Assessment Guide
For
“Crushing Plant Operator”
Level 3

**Prepare Crushing Plant
for Production**



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology "Crush Plant Operator"	CS Code:	Level: 3	Version: 01
Competency Standard Title: Prepare Crushing Plant for Production Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
------------------------	--

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Prepare Crushing Plant for Production Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

WRITTEN ASSESSMENT

Question	Candidate's answer
1. Interpret the Installation layout of drawing?	
2. Define work order.	
3. Enlist the main transportation machinery	
4. Write down any three pre-operative checks	
5. How to maintain the crush plant before starting?	
6. What is the basic step of routine calibration?	
7. What is the full form of rpm?	
8. Define fire extinguisher?	
9. Define electrical shock.	
10. Define earthing.	
11. Enlist three types of communication.	

ANSWER KEY

Sr.	Answers
1.	Control the vehicle movements and other related issues during production according to layout
2.	It is a task or job for the customer that can be schedule and assign to someone.
3.	Dumper and loader
4.	Inspect oil, water and filter, maintain the oil level in all gear boxes, hydraulic unit, tighten all bolts and bearing set screws
5.	By maintaining the maintenance logbook, ensure the software and panel working
6.	Check rpm sensor of conveyer belt, and perform trail loading
7.	Revolution per minute
8.	Dry chemical fire extinguishers work with a pressurized spray of a dry chemical that will blanket a fire and extinguish it.
9.	An electric shock occurs when a person comes into contact with an electrical energy source. Electrical energy flows through a portion of the body causing a shock.
10.	"The process in which the instantaneous discharge of the electrical energy takes place by transferring charges directly to the earth through low resistance wire.
11.	<ul style="list-style-type: none">• Verbal Communication.• Non-verbal / Interpersonal communication.• Written Communications.• Formal & Informal• Visual Communication

Assessment Evidence Guide

For

“Crushing Plant Operator”

Level-3

Perform Production on Plant
(Formative Assessment)



National Vocational & Technical
Training Commission

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology "Crush Plant Operator"	CS Code:	Level: 3	Version: 01
Competency Standard Title: Perform Production on Plant Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time:		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task 1: Candidate is required to perform test run, rectification of malfunctioning and maintain crushing record according to the instructions given by assessor.</p> <p>Assessment Task 2: Candidate is required to perform cleaning the plant after production & shut down according to the instructions given by assessor.</p> <p>And complete:</p> <p>9. Knowledge assessment test (Written or Oral)</p> <p>10. Portfolios at the time of assessment (if any)</p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: ON the ignition switch</p> <p>Performance Criteria 2: Enter and adjust Input data as per work order</p> <p>Performance Criteria 3: Set parameter of plant operations</p> <p>Performance Criteria 4: Select quantity in cubic meter for Aggregates</p> <p>Performance Criteria 5: Select screens</p> <p>Performance Criteria 6: Run 1st trial of aggregate</p> <p>Performance Criteria 7: Conduct the sieve test</p> <p>Performance Criteria 8: Make adjustments as per work order specifications of aggregates</p> <p>Performance Criteria 9: Modify the recipe as per work order given by supervisor</p> <p>Performance Criteria 10: Prepare sample at site as per standard procedures and sampling rules.</p> <p>Performance Criteria 11: Diagnose the software indicated fault</p> <p>Performance Criteria 12: Switch plant from automatic to manual operations</p> <p>Performance Criteria 13: Discharge the in-process load before rectification of fault</p> <p>Performance Criteria 14: Rectify fault before next operation in accordance with procedures</p> <p>Performance Criteria 15: Identify physical hazards (risk of slip, trip and fall etc.) at work site.</p> <p>Performance Criteria 16: Follow COVID-19 SOP's</p> <p>Performance Criteria 17: Maintain a fully stocked first aid kit</p> <p>Performance Criteria 18: Recognize the safety signs and symbols</p> <p>Performance Criteria 19: Identify potential hazards at work site</p> <p>Performance Criteria 20: Check the connectivity of earthing with power equipment</p> <p>Performance Criteria 21: Check leads and cable for any visual damage before use.</p> <p>Performance Criteria 22: Tag damaged lead, cable and connection points and report to the supervisor.</p> <p>Performance Criteria 23: Carry out Personal interaction clearly and concisely.</p>

	<p>Assessment Task 2</p> <p>Performance Criteria 1: Empty the feeder, conveyors and crusher</p> <p>Performance Criteria 2: Clean the conveyor that discharges the aggregates into the storage area</p> <p>Performance Criteria 3: Run the empty crusher for 5-10 minutes.</p> <p>Performance Criteria 4: Stop the feeder, dirt conveyor belt, crusher and product conveyor respectively and then shutdown the system.</p> <p>Performance Criteria 5: Inspect for damages/ leaks etc. and report / take appropriate action</p> <p>Performance Criteria 6: Greasing all required parts manually.</p> <p>Performance Criteria 7: Listen other's point of view without interruption.</p> <p>Performance Criteria 8: Identify the risk of slip, trip and fall at work place</p> <p>Performance Criteria 9: Perform fall protection measures as per job requirements</p>
--	--

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							
Each Assessment Task (with performance criteria)							

Assessment Task 1		Description of Assessment Task 1: Perform test run, rectification of malfunctioning and maintain crushing record according to the instructions given by assessor.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	ON the ignition switch			
2.	Enter and adjust Input data as per work order			
3.	Set parameter of plant operations			
4.	Select quantity in cubic meter for Aggregates			
5.	Select screens			
6.	Run 1st trial of aggregate			
7.	Conduct the sieve test			
8.	Make adjustments as per work order specifications of aggregates			
9.	Modify the recipe as per work order given by supervisor			
10.	Prepare sample at site as per standard procedures and sampling rules.			
11.	Diagnose the software indicated fault			
12.	Switch plant from automatic to manual operations			
13.	Discharge the in-process load before rectification of fault			
14.	Rectify fault before next operation in accordance with procedures			
15.	Identify physical hazards (risk of slip, trip and fall etc.) at work site.			
16.	Remove obstacles from work area.			
17.	Identify risk associated with job to be done.			
18.	Select and wear appropriate PPEs.			
19.	Operate tools according to standard safety procedures.			
20.	Check the connectivity of earthing with power equipment			
21.	Check leads and cable for any visual damage before use.			
22.	Tag damaged lead, cable and connection points and report to the supervisor.			
23.	Carry out Personal interaction clearly and concisely.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 2		Description of Assessment Task 2:	
		Perform cleaning the plant after production & shut down according to the instructions given by assessor.	
During the practical assessment, candidate demonstrated the following:		Yes	No
1.	Empty the feeder, conveyors and crusher		
2.	Clean the conveyor that discharges the aggregates into the storage area		
3.	Run the empty crusher for 5-10 minutes.		
4.	Stop the feeder, dirt conveyor belt, crusher and product conveyor respectively and then shutdown the system.		
5.	Inspect for damages/ leaks etc. and report / take appropriate action		
6.	Greasing all required parts manually.		
7.	Listen other's point of view without interruption.		
8.	Identify the risk of slip, trip and fall at work place		
9.	Perform fall protection measures as per job requirements		
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>	

Written Assessment Guide
For
“Crushing Plant Operator”
Level 3

Perform Production on Plant



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology “Crush Plant Operator”	CS Code:	Level: 3	Version: 01
Competency Standard Title: Perform Production on Plant Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
------------------------	--

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Crush Plant Technology "Crush Plant Operator"	CS Code:	Level: 3	Version: 01
Competency Standard Title: Perform Production on Plant Maintain Safety at Crushing Plant Site Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

WRITTEN ASSESSMENT

Question	Candidate's answer
1. What is the preliminary operation to start the plant?	
2. Write the name of test to check the right production of aggregates?	
3. How to adjust the work order for crushing?	
4. How to discharge the process load before rectification of fault?	
5. What type of sheet is required for Raw Materials record?	
6. Enlist the types of maintenance	
7. How much time is required to clean the crush plant after production/shutdown?	
8. What type of book is required to keep the crushing record (input and output flow)?	
9. Define barricade	
10. Define risk in occupational health and safety	
11. Define fire alarm.	
12. Write the modes of communication	

ANSWER KEY

Sr.	Answers
1.	1. ON the ignition switch 2. Enter and adjust Input data as per work order 3. Set parameter of plant operations
2.	Sieve analysis of aggregate
3.	By adjustments as per work order specifications of aggregates.
4.	Yes, remove the in-process load before rectification of fault.
5.	Raw Materials Consumption summary sheet
6.	1. Preventative 2. Periodic 3. Corrective
7.	Run the empty crusher for 5-10 minutes.
8.	Plant log book is used to keep the record for finished aggregates.
9.	The definition of a barricade is a barrier that stops the progress of something
10	'Risk is the likelihood that a person may be harmed or suffers adverse health effects if exposed to a hazard.
11	A device making a loud noise that gives warning of a fire.
12	There are three modes of communication; <ul style="list-style-type: none">• Interpersonal• Interpretive• Presentational.