

TRAINING REGULATIONS

SANITARY LANDFILL OPERATIONS NC III



Technical Education and Skills Development Authority
East Service Road, South Superhighway, Taguig, Metro Manila

*Technical Education and Skills Development Act of 1994
(Republic Act No. 7796)*

Section 22, “Establishment and Administration of the National Trade Skills Standards” of the RA 7796 known as the TESDA Act mandates TESDA to establish national occupational skill standards. The Authority shall develop and implement a certification and accreditation program in which private industry group and trade associations are accredited to conduct approved trade tests, and the local government units to promote such trade testing activities in their respective areas in accordance with the guidelines to be set by the Authority.

The Training Regulations (TR) serve as basis for the:

1. Competency assessment and certification;
2. Registration and delivery of training programs; and
3. Development of curriculum and assessment instruments.

Each TR has four sections:

Section 1 Definition of Qualification - refers to the group of competencies that describes the different functions of the qualification.

Section 2 Competency Standards - gives the specifications of competencies required for effective work performance.

Section 3 Training Arrangements - contains information and requirements in designing training program for certain Qualification. It includes curriculum design, training delivery; trainee entry requirements; tools and requirements; tools and equipment; training facilities and trainer's qualification.

Section 4 Assessment and Certification Arrangement - describes the policies governing assessment and certification procedure

TABLE OF CONTENTS

SANITARY LANDFILL OPERATIONS NC III

	Page No.	
SECTION 1	SANITARY LANDFILL OPERATIONS NC III QUALIFICATION	1
SECTION 2	COMPETENCY STANDARD	2 - 52
	<ul style="list-style-type: none">• Basic Competencies• Common Competencies• Core Competencies	<ul style="list-style-type: none">2 - 2223 - 3536 - 47
SECTION 3	TRAINING ARRANGEMENTS	48 - 70
	3.1 Curriculum Design	48
	<ul style="list-style-type: none">• Basic Competencies• Common Competencies• Core Competencies	<ul style="list-style-type: none">49 - 5455 - 5859 - 64
	3.2 Training Delivery	65
	3.3 Trainee Entry Requirements	66
	3.4 List of Tools, Equipment and Materials	67
	3.5 Training Facilities	68
	3.6 Trainers' Qualifications	68
	3.7 Institutional Assessment	68
SECTION 4	ASSESSMENT AND CERTIFICATION ARRANGEMENTS	69 - 70
COMPETENCY MAP		71
DEFINITION OF TERMS		72 – 75
ACKNOWLEDGEMENT		76

TRAINING REGULATIONS FOR SANITARY LANDFILL OPERATIONS NC III

SECTION 1 SANITARY LANDFILL OPERATIONS NC III QUALIFICATION

The **SANITARY LANDFILL OPERATIONS NC III** Qualification consists of competencies relating to operation and maintenance of sanitary landfills for municipal/city waste, particularly supervising in-coming wastes for active landfill cells, supervising and maintaining closed landfills.

The Units of Competency comprising this Qualification include the following:

UNIT CODE

BASIC COMPETENCIES

500311109	Lead Workplace Communication
500311110	Lead small teams
500311111	Develop and Practice Negotiation Skills
500311112	Solve Problems Related to Work Activities
500311113	Use Mathematical Concepts and Techniques
500311114	Use Relevant Technologies

UNIT CODE

COMMON COMPETENCIES

UTL9611201	Develop and update industry knowledge
UTL9611202	Perform workplace security and safety practices
UTL9611203	Maintain environmental health and awareness in the workplace

UNIT CODE

CORE COMPETENCIES

UTL325301	Supervise in-coming waste in the active cell
UTL325302	Supervise and maintain closed sanitary landfill facility

A person who has achieved this Qualification is competent to be:

- Sanitary Landfill Facility (SLF) Site Foreman**

SECTION 2 COMPETENCY STANDARDS

These guidelines are set to provide the Technical Vocational Education and Training (TVET) providers with information and other important requirements to consider when designing training programs for **SANITARY LANDFILL OPERATIONS NC III**.

BASIC COMPETENCIES

UNIT OF COMPETENCY : LEAD WORKPLACE COMMUNICATION

UNIT CODE : 500311109

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to lead in the dissemination and discussion of ideas, information and issues in the workplace.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Communicate information about workplace processes	1.1 Appropriate communication method is selected 1.2 Multiple operations involving several topics areas are communicated accordingly 1.3 Questions are used to gain extra information 1.4 Correct sources of information are identified 1.5 Information is selected and organized correctly 1.6 Verbal and written reporting is undertaken when required 1.7 Communication skills are maintained in all situations	1.1 Organization requirements for written and electronic communication methods 1.2 Effective verbal communication methods 1.3 Methods of Communication 1.4 Types of Question 1.5 Communication Tools 1.6 Questioning Techniques	1.1 Organizing information 1.2 Understanding and conveying intended meaning 1.3 Participating in variety of workplace discussions 1.4 Complying with organization requirements for the use of written and electronic communication methods 1.5 Reporting occupational hazards during safety meeting
2. Lead workplace discussions	2.1 Response to workplace issues are sought 2.2 Response to workplace issues are provided	2.1 Leading as a management function 2.2 Barriers of communication	2.1 Communicating effectively 2.2 Consulting the crew on the prepared menu for the month

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	immediately 2.3 Constructive contributions are made to workplace discussions on such issues as production, quality and safety	2.3 Effective verbal communication methods 2.4 Method/techniques of discussion 2.5 How to lead discussion 2.6 How to solicit response	
3. Identify and communicate issues arising in the workplace	3.1. Issues and problems are identified as they arise 3.2. Information regarding problems and issues are organized coherently to ensure clear and effective communication 3.3. Dialogue is initiated with appropriate personnel 3.4. Communication problems and issues are raised as they arise	3.1 Types of issues and problems in the workplace 3.2 Written and electronic communication methods 3.3 Communication barriers affecting workplace discussions	3.1 Identifying cause of problems 3.2 Communicating with the Master of the Ship on the possible shortage of the food supply due to change of ship's port 3.3 Identifying problems and issues 3.4 Organizing information on problems and issues 3.5 Relating problems and issues of call/voyage

RANGE OF VARIABLES

VARIABLE	RANGE
1. Communication method	1.1. Non-verbal gestures 1.2. Verbal 1.3. Face to face 1.4. Two-way radio 1.5. Speaking to groups 1.6. Using telephone 1.7. Written 1.8. Internet

EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Dealt with a range of communication/information at one time 1.2 Made constructive contributions in workplace issues 1.3 Sought workplace issues effectively 1.4 Responded to workplace issues promptly 1.5 Presented information clearly and effectively written form 1.6 Used appropriate sources of information 1.7 Asked appropriate questions 1.8 Provided accurate information
2. Resource Implications	The following resources should be provided: 2.1 Variety of Information 2.2 Communication tools 2.3 Simulated workplace
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1 Written Examination 3.2 Oral Questioning
4. Context for Assessment	4.1 Competency may be assessed in the workplace or in simulated workplace environment

UNIT OF COMPETENCY : **LEAD SMALL TEAMS**
(*Guide and lead others/ Be responsible to others*)

UNIT CODE : **500311110**

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes to lead small teams including setting and maintaining team and individual performance standards.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Provide team leadership	1.1 <i>Work requirements</i> are identified and presented to team members 1.2 Reasons for instructions and requirements are communicated to team members 1.3 <i>Team members' queries and concerns</i> are recognized, discussed and dealt with	1.1 Company policies and procedures 1.2 How performance expectations are set 1.3 Methods of Monitoring Performance 1.4 Client expectations 1.5 Team member's duties and responsibilities 1.6 Definition of Team 1.7 Skills and techniques in promoting team building 1.8 Up-to-date dissemination of instructions and requirements to members 1.9 Art of listening and treating individual team members concern	1.1 Communication skills required for leading teams 1.2 Team building skills 1.3 Negotiating skills 1.4 Evaluation skills
2. Assign responsibilities	2.1 Duties and responsibilities are allocated having regard to the skills, knowledge and aptitude required to properly undertake the assigned task and according to company policy	2.1 Concept of delegation 2.2 How to delegate 2.3 Understanding individual differences 2.4 Methods of monitoring performance 2.5 Duties and	2.1 Delegating skills 2.2 Identifying individual skills, knowledge and attitude as basis for allocating responsibilities 2.3 Identifying each team member duties and responsibilities

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	2.2 Duties are allocated having regard to individual preference, domestic and personal considerations, whenever possible	responsibilities of each team member 2.6 Knowledge in identifying each team member duties and responsibilities	
3. Set performance expectations for team members	3.1 Performance expectations are established based on client needs and according to assignment requirements 3.2 Performance expectations are based on individual team members duties and area of responsibility 3.3 Performance expectations are discussed and disseminated to individual team members	3.1 Definition of performance indicators/ criteria 3.2 Definition of team goals and expectations 3.3 Methods of monitoring performance 3.4 Client expectations 3.5 Team members duties and responsibilities 3.6 Defining performance expectations criteria	3.1 Identifying performance indicators 3.2 Evaluating performance 3.3 Setting individual performance target/ expectation indicators
4. Supervise team performance	4.1 Monitoring of performance takes place against defined performance criteria and/or assignment instructions and corrective action taken if required 4.2 Team members are provided with feedback , positive support and advice on strategies to overcome any deficiencies 4.3 Performance issues which cannot be rectified or	4.1 Understanding, monitoring of work 4.2 How to undertake corrective action 4.3 Understanding feedback and procedure 4.4 Feedback reporting procedure 4.5 Methods of monitoring performance 4.6 Team member's duties and responsibilities 4.7 Monitoring team operation to ensure client	4.1 Monitoring skills 4.2 Setting priorities 4.3 Evaluating performance 4.4 Informal/ formal counseling skill

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>addressed within the team are referenced to appropriate personnel according to employer policy</p> <p>4.4 Team members are kept informed of any changes in the priority allocated to assignments or tasks which might impact on client/customer needs and satisfaction</p> <p>4.5 Team operations are monitored to ensure that employer/client needs and requirements are met</p> <p>4.6 Follow-up communication is provided on all issues affecting the team</p> <p>4.7 All relevant documentation is completed in accordance with company procedures</p>	needs and satisfaction	

RANGE OF VARIABLES

VARIABLE	RANGE
1. Work requirements	1.1. Client Profile 1.2. Assignment instructions
2. Team member's concerns	2.1. Roster/shift details
3. Monitor performance	3.1. Formal process 3.2. Informal process
4. Feedback	4.1. Formal process 4.2. Informal process
5. Performance issues	5.1. Work output 5.2. Work quality 5.3. Team participation 5.4. Compliance with workplace protocols 5.5. Safety 5.6. Customer service

EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1. Maintained or improved individuals and/or team performance given a variety of possible scenario 1.2. Assessed and monitored team and individual performance against set criteria 1.3. Represented concerns of a team and individual to next level of management or appropriate specialist and to negotiate on their behalf 1.4. Allocated duties and responsibilities, having regard to individual's knowledge, skills and aptitude and the needs of the tasks to be performed 1.5. Set and communicated performance expectations for a range of tasks and duties within the team and provided feedback to team members
2. Resource Implications	The following resources should be provided: 2.1. Access to relevant workplace or appropriately simulated environment where assessment can take place 2.2. Materials relevant to the proposed activity or task
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1. Written Examination 3.2. Oral Questioning 3.3. Portfolio
4. Context for Assessment	4.1. Competency assessment may occur in workplace or any appropriately simulated environment 4.2. Assessment shall be observed while task are being undertaken whether individually or in-group

UNIT OF COMPETENCY : DEVELOP AND PRACTICE NEGOTIATION SKILLS

UNIT CODE : 500311111

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes required to collect information in order to negotiate to a desired outcome and participate in the negotiation.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Plan negotiations	1.1 Information on <i>preparing for negotiation</i> is identified and included in the plan. 1.2 Information on creating <i>non-verbal environments</i> for positive negotiating is identified and included in the plan. 1.3 Information on <i>active listening</i> is identified and included in the plan. 1.4 Information on different questioning techniques is identified and included in the plan. 1.5 Information is checked to ensure it is correct and up-to-date.	1.1 Knowledge on Codes of practice and guidelines for the organization 1.2 Knowledge of organizations policy and procedures for negotiations 1.3 Decision making and conflict resolution strategies procedures 1.4 Concept of negotiation	1.1 Communication skills (verbal and listening) 1.2 Active listening 1.3 Setting conflict 1.4 Preparing conflict resolution 1.5 Problem solving strategies on how to deal with unexpected questions and attitudes during negotiation 1.6 Interpersonal skills to develop rapport with other parties
2. Participate in negotiations	2.1 Criteria for successful outcome are agreed upon by all parties. 2.2 Desired outcome of all parties are considered. 2.3 Appropriate language is used throughout the negotiation.	2.1 Outcome of negotiation 2.2 Knowledge on Language 2.3 Different Questioning techniques 2.4 Problem solving strategies on how to deal with unexpected questions and	2.1 Negotiating skill 2.2 Communication skills (verbal and listening) 2.3 Observation skills 2.4 Interpersonal skills to develop rapport with other parties 2.5 Applying effective questioning techniques 2.6 Setting conflict

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>2.4 A variety of questioning techniques are used.</p> <p>2.5 The issues and processes are documented and agreed upon by all parties.</p> <p>2.6 Possible solutions are discussed and their viability assessed.</p> <p>2.7 Areas for agreement are confirmed and recorded.</p> <p>2.8 Follow-up action is agreed upon by all parties.</p>	<p>attitudes during negotiation</p> <p>2.5 Flexibility</p> <p>2.6 Empathy</p> <p>2.7 Decision making and conflict resolution strategies procedures</p> <p>2.8 Problem solving strategies on how to deal with unexpected questions and attitudes during negotiation</p>	

RANGE OF VARIABLES

VARIABLE	RANGE
1. Preparing for negotiation	1.1 Background information on other parties to the negotiation 1.2 Good understanding of topic to be negotiated 1.3 Clear understanding of desired outcome/s 1.4 Personal attributes 1.4.1 self - awareness 1.4.2 self esteem 1.4.3 objectivity 1.4.4 empathy 1.4.5 respect for others 1.5 Interpersonal skills 1.5.1 listening/reflecting 1.5.2 non- verbal communication 1.5.3 assertiveness 1.5.4 behavior labeling 1.5.5 testing understanding 1.5.6 seeking information 1.5.7 self -disclosing 1.6 Analytic skills 1.6.1 observing differences between content and process 1.6.2 identifying bargaining information 1.6.3 applying strategies to manage process 1.6.4 applying steps in negotiating process 1.6.5 strategies to manage conflict 1.6.6 steps in negotiating process 1.6.7 options within organization and externally for resolving conflict
2. Non - verbal environments	2.1 Friendly reception 2.2 Warm and welcoming room 2.3 Refreshments offered 2.4 Lead in conversation before negotiation begins
3. Active listening	3.1 Attentive 3.2 Don't interrupt 3.3 Good posture 3.4 Maintain eye contact 3.5 Reflective listening

EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Demonstrated sufficient knowledge of the factors influencing negotiation to achieve agreed outcome 1.2 Participated in negotiation with at least one person to achieve an agreed outcome
2. Resource Implications	The following resources should be provided: 2.1 Room with facilities necessary for the negotiation process 2.2 Human resources (negotiators)
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1 Written Examination 3.2 Oral Questioning 3.3 Portfolio
4. Context for Assessment	4.1 Competency to be assessed in real work environment or in a simulated workplace setting.

UNIT OF COMPETENCY : SOLVE PROBLEMS RELATED TO WORK ACTIVITIES

UNIT CODE : 500311112

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required solving problems in the workplace including the application of problem solving techniques and to determine and resolve the root cause of problems.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Explain the analytical techniques	1.1 All the analytical techniques are identified. 1.2 Use of each technique is applied in real life situations.	1.1 Problem identification techniques 1.2 Observation, investigation and analytical techniques 1.3 Cause and effect diagrams 1.4 PARETO analysis 1.5 SWOT analysis 1.6 GANT chart 1.7 PERT CPM and graph 1.8 SCATTERGRAMS	1.1 Conduct investigation and root cause analysis 1.2 Implement corrective actions
2. Identify the problem	2.1 Variances are identified from normal operating parameters; and product quality. 2.2 Extent, cause and nature of the problem are defined through observation, investigation and analytical techniques . 2.3 Problems are clearly stated and specified.	2.1 Competence includes a thorough knowledge and understanding of the process, normal operating parameters, and product quality to recognize non-standard situations 2.2 Competence to include the ability to apply and explain, sufficient for the identification of fundamental cause, determining the corrective action and provision of recommendations	2.1 Use range of formal problem solving techniques 2.2 Identify and clarify the nature of the problem 2.3 Evaluate the effectiveness of a present process in the galley 2.4 Apply analytical techniques

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		2.3 Relevant equipment and operational processes 2.4 Enterprise goals, targets and measures 2.5 Enterprise quality, OHS and environmental requirement 2.6 Enterprise information systems and data collation 2.7 Industry codes and standards 2.8 Normal operating parameters and product quality	
3. Determine fundamental causes of the problem	3.1 Possible causes are identified based on experience and the use of problem solving tools / analytical techniques. 3.2 Possible cause statements are developed based on findings. 3.3 Fundamental causes are identified per results of investigation conducted.	3.1 Relevant equipment and operational processes 3.2 Enterprise goals, targets and measures 3.3 Enterprise quality, OHS and environmental requirements 3.4 Enterprise information systems and data collation 3.5 Industry codes and standards	3.1 Analysis of root causes
4. Determine corrective action	4.1 All possible options are considered for resolution of the problem. 4.2 Strengths and weaknesses of possible options are considered.	4.1 Understand the procedure in undertaking corrective action 4.2 Principles of decision making strategies and techniques	4.1 Identify and clarify the nature of the problem 4.2 Devise the best solution 4.3 Evaluate the solution 4.4 Implement plan to

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>4.3 Corrective actions are determined to resolve the problem and possible future causes.</p> <p>4.4 Action plans are developed identifying measurable objectives, resource needs and timelines in accordance with safety and operating procedures.</p>	<p>4.3 Enterprise information systems and data collation</p> <p>4.4 Action planning</p>	<p>rectify the problem</p> <p>4.5 Implementing corrective and preventive actions based on root cause analysis</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1. Analytical techniques	1.1. Brainstorming 1.2. Intuitions/Logic 1.3. Cause and effect diagrams 1.4. Pareto analysis 1.5. SWOT analysis 1.6. Gant chart, Pert CPM and graphs 1.7. Scatter grams
2. Problem	2.1. Non – routine process and quality problems 2.2. Equipment selection, availability and failure 2.3. Teamwork and work allocation problem 2.4. Safety and emergency situations and incidents
3. Action plans	3.1. Priority requirements 3.2. Measurable objectives 3.3. Resource requirements 3.4. Timelines 3.5. Co-ordination and feedback requirements 3.6. Safety requirements 3.7. Risk assessment 3.8. Environmental requirements

EVIDENCE GUIDE

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1. Identified the problem 1.2. Determined the fundamental causes of the problem 1.3. Determined the correct / preventive action 1.4. Provided recommendation to manager <p>These aspects may be best assessed using a range of scenarios / case studies / what ifs as a stimulus with a walk through forming part of the response. These assessment activities should include a range of problems, including new, unusual and improbable situations that may have happened.</p>
2. Resource Implications	<p>2.1. Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations. A bank of scenarios / case studies / what ifs will be required as well as bank of questions which will be used to probe the reason behind the observable action.</p>
3. Methods of Assessment	<p>Competency in this unit may be assessed through:</p> <ol style="list-style-type: none"> 3.1. Written Examination 3.2. Oral Questioning
4. Context for Assessment	<p>4.1. In all workplace, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units.</p>

UNIT OF COMPETENCY : USE MATHEMATICAL CONCEPTS AND TECHNIQUES

UNIT CODE : 500311113

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required in the application of mathematical concepts and techniques.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify mathematical tools and techniques to solve problem	1.1 Problem areas are identified based on given condition. 1.2 Mathematical techniques are selected based on the given problem.	1.1 Fundamental operation (addition, subtraction, division, multiplication) 1.2 Units of measurement and its conversion 1.3 Fundamental of units 1.4 Standard formulas 1.5 Basic measuring tools/devices 1.6 Measurement system 1.7 Basic measuring tools/devices 1.8 Steps in solving problem	1.1 Identifying and selecting different measuring tools 1.2 Applying different formulas in solving problems 1.3 Describing the units of measurement and fundamental units 1.4 Stating arithmetic calculations involving the following; addition, subtraction, division, multiplication 1.5 Stating arithmetic calculations involving the following: addition, subtraction, division, multiplication 1.6 Applying theory into actual application on shipboard catering processes
2. Apply mathematical procedure/ solution	2.1 Mathematical techniques are applied based on the problem identified. 2.2 Mathematical computations are performed to the level of accuracy required for the problem.	2.1 Problem-based questions 2.2 Estimation 2.3 Use of mathematical tools and standard formulas 2.4 Mathematical techniques	2.1 Solving mathematical computations 2.2 Converting Metric to English 2.3 Selecting and using appropriate and efficient techniques and strategies to solve problems

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	2.3 Results of mathematical computation are determined and verified based on job requirements.		
3. Analyze results	3.1 Result of application is reviewed based on expected and required specifications and outcome. 3.2 Appropriate action is applied in case of error.	3.1 Techniques in analyzing the results 3.2 Process in reviewing the results 3.3 Precision and accuracy 3.4 Four fundamental operations 3.5 Steps in solving problem 3.6 Standard formulas 3.7 Conversion measurement	3.1 Analyzing the result based on the specified requirements 3.2 Interpreting and communicating the results of the analysis

RANGE OF VARIABLES

VARIABLE	RANGE
1. Mathematical techniques	May include: 1.1 Four fundamental operations 1.2 Measurements 1.3 Use/Conversion of units of measurements 1.4 Use of standard formulas
2. Appropriate action	2.1 Review in the use of mathematical techniques (e.g. recalculation, re-modeling) 2.2 Report error to immediate superior for proper action

EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Identified, applied and reviewed the use of mathematical concepts and techniques to workplace problems
2. Resource Implications	The following resources should be provided: 2.1 Calculator 2.2 Basic measuring tools 2.3 Case Problems
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1 Written Examination 3.2 Oral Questioning
4. Context for Assessment	4.1 Competency may be assessed in the work place or in a simulated work place setting

UNIT OF COMPETENCY : USE RELEVANT TECHNOLOGIES
(Apply technology effectively)

UNIT CODE : 500311114

UNIT DESCRIPTOR : This unit of competency covers the knowledge, skills, and attitude required in selecting, sourcing and applying appropriate and affordable technologies in the workplace

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Study/select appropriate technology	1.1 Usage of different technologies is determined based on job requirements. 1.2 Appropriate technology is selected as per work specification.	1.1 Awareness on technology and its function 1.2 Communication techniques 1.3 Health and safety procedure 1.4 Company policy in relation to relevant technology 1.5 Machineries/ equipment and their application 1.6 Software programs	1.1 Identifying relevant technology on job
2 Apply relevant technology	2.1 Relevant technology is effectively used in carrying out function. 2.2 Applicable software and hardware are used as per task requirement. 2.3 Management concepts are observed and practiced as per established industry practices.	2.1 Knowledge on operating instructions 2.2 Understanding software and hardware system 2.3 Communication techniques 2.4 Health and safety procedure 2.5 Company policy in relation to relevant technology 2.6 Different management concepts 2.7 Technology adaptability 2.8 Office technology 2.9 Industrial technology	2.1 Applying relevant technology 2.2 Communicating skills 2.3 Using software applications skills 2.4 Conducting risk assessment

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		2.10 System technology 2.11 Training technology 2.12 Different software/hardware 2.13 5S (Proper housekeeping)	
3 Maintain/enhance relevant technology	3.1 Maintenance of technology is applied in accordance with the <i>industry standard operating procedure, manufacturer's operating guidelines</i> and <i>occupational health and safety procedure</i> to ensure its operative ability. 3.2 Updating of technology is maintained through continuing education or training in accordance with job requirement. 3.3 Technology failure/defect is immediately reported to the concern/responsible person or section for <i>appropriate action</i> .	3.1 Awareness on technology and its function 3.2 Repair and maintenance procedure 3.3 Health and safety procedure 3.4 Company policy in relation to relevant technology 3.5 Upgrading of technology 3.6 Organizational set-up/work flow	3.1 Performing basic troubleshooting skills 3.2 Identifying failures or defects 3.3 Communication skills 3.4 Applying corrective and preventive maintenance

RANGE OF VARIABLES

VARIABLE	RANGE
1. Technology	May include: 1.1 Office technology 1.2 Industrial technology 1.3 System technology 1.4 Information technology 1.5 Training technology
2. Management concepts	May include: 2.1 Real Time Management 2.2 KAIZEN or continuous improvement 2.3 5s 2.4 Total Quality Management 2.5 Other management/productivity tools
3. Industry standard operating procedure	3.1 Written guidelines relative to the usage of office technology/equipment 3.2 Verbal advise/instruction from the co-worker
4. Manufacturer's operating guidelines/ instructions	4.1 Written instruction/manuals of specific technology/ equipment 4.2 General instruction manual 4.3 Verbal advise from manufacturer relative to the operation of equipment
5. Occupational health and safety procedure	5.1 Relevant statutes on OHS 5.2 Company guidelines in using technology/equipment
6. Appropriate action	6.1 Implementing preventive maintenance schedule 6.2 Coordinating with manufacturer's technician

EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Studied and selected appropriate technology consistent with work requirements 1.2 Applied relevant technology 1.3 Maintained and enhanced operative ability of relevant technology
2. Resource Implications	The following resources should be provided: 2.1 Relevant technology 2.2 Interview and demonstration questionnaires 2.3 Assessment packages
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1 Written Examination 3.2 Oral Questioning
4. Context for Assessment	4.1 Competency may be assessed in actual workplace or simulated environment

COMMON COMPETENCIES

UNIT OF COMPETENCY : DEVELOP AND UPDATE INDUSTRY KNOWLEDGE

UNIT CODE : UTL9611201

UNIT DESCRIPTOR : This unit covers skills and attitude required to apply best practices used in the industry and share knowledge gained through experience with others in the industry.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Seek information on the industry	1.1 Sources of information on the industry are correctly identified and accessed. 1.2 Information to assist effective work performance is obtained in line with job requirements. 1.3 Specific information on sector of work is accessed and updated. 1.4 Industry information is correctly applied to day-to-day work activities.	1.1 Sources of information for industry updates 1.2 Information to assist effective work performance 1.3 Verbal and written communication 1.4 Interaction with clients 1.5 Occupational safety and health standards 1.6 RA 9003 1.7 RA 6969 1.8 Local ordinances 1.9 Company policy 1.10 Safety- and – health consciousness 1.11 Resourcefulness 1.12 Diligence 1.13 Time-consciousness 1.14 Cost – consciousness 1.15 Personal integrity in doing routine management practices 1.16 Perseverance	1.1 Knowing the sources of information on the industry 1.2 Assessing and updating industry information to effect improved work performance 1.3 Applying industry information to day-to-day work activities 1.4 Practicing communication skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		1.17 Ability to work with others harmoniously	
2. Update industry knowledge	<p>2.1 Informal and/or formal research is used to update general knowledge of the industry.</p> <p>2.2 Updated knowledge is shared with customers and colleagues as appropriate and incorporated into day-to-day working activities.</p>	<p>2.1 Updated researches in industry sector</p> <p>2.2 Verbal and written communication</p> <p>2.3 Interaction with clients</p> <p>2.4 Sharing with customers and clients the updated industry information</p> <p>2.5 Company policy</p> <p>2.6 Safety- and-health consciousness</p> <p>2.7 Resourcefulness</p> <p>2.8 Diligence</p> <p>2.9 Time-consciousness</p> <p>2.9 Cost – consciousness</p> <p>2.10 Perseverance</p> <p>2.11 Ability to work with others harmoniously</p>	<p>2.1 Updating knowledge on industry through research</p> <p>2.2 Sharing updated knowledge with colleagues and customers as appropriate</p> <p>2.3 Practicing communication skills</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1. Sources of Information	Information sources may include but are not limited to: <ul style="list-style-type: none"> 1.1 Media 1.2 Reference books 1.3 Libraries 1.4 Industry association 1.5 Industry journals 1.6 Internet 1.7 Seminars 1.8 Forum 1.9 Personal observation and experience
2. Information to assist effective work performance	<ul style="list-style-type: none"> 2.1 Different sectors of the industry and the services available in each sector 2.2 Relationship between the customer representatives and other personnel 2.3 Relationship between the industry and other industries 2.4 Industry working conditions 2.5 Legislation that affects the industry <ul style="list-style-type: none"> 2.5.1 drugs and liquor 2.5.2 health and safety 2.5.3 hygiene 2.5.4 workers compensation 2.5.5 consumer protection 2.5.6 building regulations 2.6 Industrial relations issues and major organizations 2.7 Career opportunities within the industry 2.8 Work ethic required to work in the industry and industry expectations of staff quality assurance

EVIDENCE GUIDE

1. Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 Knew key sources of information on the industry 1.2 Updated industry knowledge 1.3 Accessed and used industry information
3. Resource implications	The following resources should be provided: 2.1 Sources of information on the industry 2.2 Industry knowledge
4. Methods of assessment	Competency may be assessed through: 3.1 Interview/questions 3.2 Practical demonstration 3.3 Portfolio of industry information related to trainee's work
2. Context of assessment	4.1 Competency may be assessed individually in the workplace or in a simulated workplace setting.

UNIT OF COMPETENCY : PERFORM WORKPLACE SECURITY AND SAFETY PRACTICES

UNIT CODE : UTL9611202

UNIT DESCRIPTOR : This unit of competency deals with the knowledge, skills and attitudes in following health, safety and security practices. It includes dealing with emergency situations and maintaining safe personal presentation standards.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Follow workplace procedures for health, safety and security practices	1.1 Correct health, safety and security procedures are followed in line with legislation and enterprise procedures 1.2 Breaches of health, safety and security procedures are identified and reported in line with enterprise procedure. 1.3 Suspicious behavior or unusual occurrences are reported in line with enterprise procedure.	1.1 Correct health, safety and security procedures 1.2 Types of breaches of health, safety and security procedures 1.3 Verbal and written communication 1.4 Interaction with clients 1.5 Personal Safety Equipment 1.6 Work hazards 1.7 Codes and Regulations 1.8 Occupational safety and health standards 1.9 RA 9003 1.10 RA 6969 1.11 Local ordinances 1.12 Safety- and -health consciousness 1.13 Resourcefulness 1.14 Diligence 1.15 Time-consciousness 1.16 Cost -consciousness 1.17 Perseverance 1.18 Ability to work with others harmoniously	1.1 Knowing the sources of information on the industry 1.2 Assessing and updating industry information to effect improved work performance 1.3 Applying industry information to day-to-day work activities 1.4 Practicing communication skills
2. Deal with emergency situations	2.1 Emergency and potential emergency situations are recognized and appropriate actions are taken within individual's scope of responsibility. 2.2 Emergency procedures are followed in line	2.1 Types of emergency situations and procedures 2.2 Verbal and written communication 2.3 Interaction with clients 2.4 Personal Safety Equipment 2.5 Work hazards 2.6 Occupational safety and health standards 2.7 RA 9003 2.8 RA 6969	2.1 Practicing intra and interpersonal skills 2.2 Applying appropriate actions to emergencies 2.3 Reporting emergency situations

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>with enterprise procedures.</p> <p>2.3 Assistance is sought from colleagues to resolve or respond to emergency situation.</p> <p>2.4 Details of emergency situations are reported in line with enterprise procedures.</p>	<p>2.9 Local ordinances</p> <p>2.10 Safety- and- health consciousness</p> <p>2.11 Resourcefulness</p> <p>2.12 Diligence</p> <p>2.13 Time-consciousness</p> <p>2.14 Cost-consciousness</p> <p>2.15 Perseverance</p> <p>2.16 Ability to work with others harmoniously</p>	
3. Maintain safe personal presentation standards	3.1 Safe personal standards are identified and followed in line with enterprise requirements.	<p>3.1 Types of emergency situations and procedures</p> <p>3.2 Personal safety standards</p> <p>3.3 Verbal and written communication</p> <p>3.4 Interaction with clients</p> <p>3.5 Personal Safety Equipment</p> <p>3.6 Work hazards</p> <p>3.7 Occupational safety and health standards</p> <p>3.8 RA 9003</p> <p>3.9 RA 6969</p> <p>3.10 Local ordinances</p> <p>3.11 Safety- and- health consciousness</p> <p>3.12 Resourcefulness</p> <p>3.13 Diligence</p> <p>3.14 Time -consciousness</p> <p>3.15 Cost -consciousness</p> <p>3.16 Perseverance</p> <p>3.17 Ability to work with others harmoniously</p>	<p>3.1 Practicing intra and interpersonal skills</p> <p>3.2 Following appropriate safety personal standards</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1 Health, Safety and Security Procedures	May include but are not limited to: <ol style="list-style-type: none"> 1.1 Use of personal protective clothing and equipment 1.2 Safe posture including sitting, standing, bending 1.3 Manual handling including lifting, transferring 1.4 Safe handling of chemicals, poisons and dangerous materials 1.5 Ergonomically sound furniture and work stations 1.6 Emergency fire and accident 1.7 Hazard identification and control 1.8 Security of documents, cash, equipment, people 1.9 Key control systems
2 Breaches of Procedure	May include but are not limited to: <ol style="list-style-type: none"> 2.1 Loss of keys 2.2 Strange or suspicious persons 2.3 Broken or malfunctioning equipment 2.4 Loss of property, goods or materials 2.5 Damaged property or fittings 2.6 Lack of suitable signage when required 2.7 Lack of training on health and safety issues 2.8 Unsafe work practices
3 Emergency	May include but is not limited to: <ol style="list-style-type: none"> 3.1 Personal injuries 3.2 Fire 3.3 Electrocution 3.4 Natural calamity i.e. earthquake/flood 3.5 Criminal acts i.e. robbery 3.6 Bomb

EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Complied with industry practices and procedures 1.2 Used interactive communication with others 1.3 Complied with workplace safety, security and hygiene practices 1.4 Identified faults and problems and the necessary corrective action 1.5 Promoted public relation among others 1.6 Complied with quality standards 1.7 Responded to emergency situations in line with enterprise guidelines 1.8 Complied with proper dress code
3 Resource implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Procedures manual on safety, security, health and emergency 2.2 Availability of tools, equipment, supplies and materials
3 Methods of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Written examination 3.2 Practical demonstration 3.3 Interview
4 Context of assessment	<p>4.1 Competency may be assessed in the work place or in a simulated work place setting.</p>

UNIT OF COMPETENCY : MAINTAIN ENVIRONMENTAL HEALTH AND AWARENESS IN THE WORKPLACE

UNIT CODE : UTL9611203

UNIT DESCRIPTOR : This unit of competency deals with the knowledge, skills and attitudes in maintaining environmental health and awareness in the workplace. It includes dealing with environmental risks and hazards, emergency situations and maintaining self-personal living standards.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify environmental risks and hazards in the work place	1.1. Proper procedures are followed in line with company and enterprise procedures 1.2. Breaches of environmental safety and security procedures are identified and reported in line with enterprise procedure. 1.3. Suspicious workplace conditions or unusual occurrences that are potential environmental risks or hazards are reported in line with enterprise procedure.	1.1 Correct waste collection and hauling procedures to assure environmental health and safety 1.2 Identification of types of breaches of health, safety and operational procedures that endanger environmental health 1.3 Types of wastes and their characteristics and effects on the environment 1.4 Ways that different waste affect the environment 1.5 Reasons for correct/proper use of PPEs. 1.6 Verbal and written communication 1.7 Interaction with clients 1.8 Personal Safety Equipment 1.9 Work hazards 1.10 Occupational safety and health standards 1.11 RA 9003 1.12 RA 6969 1.13 Clean Air Act 1.14 Clean Water Act 1.15 Other Laws 1.16 Local ordinances 1.17 Safety- and -health consciousness 1.18 Resourcefulness 1.19 Diligence 1.20 Time-consciousness	1.1 Identifying environmental risks and hazards in the work place 1.2 Understanding and following the proper procedures 1.3 Identifying and reporting breaches of environmental safety and security procedures 1.4 Reporting suspicious workplace conditions or unusual occurrences that are potential risks of hazards 1.5 Practicing communication skills 1.6 Writing report

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		1.21 Cost -consciousness 1.22 Perseverance 1.23 Ability to work with others harmoniously	
2. Formulate mitigation measures to eliminate the environmental risks and hazards in the work place	2.1. Existing and potential environmental risks and hazards are identified from trends through inspections and records according to job requirements 2.2. Assessment and treatment of risks are confirmed according to workplace procedures 2.3. Procedures and practices relevant for the application of the environmental health and awareness are developed and documented 2.4. Information sources and expert advice required to support environmental health and awareness measures are identified, obtained and maintained according to job requirements	2.1 Correct waste collection and hauling procedures to assure environmental health and safety 2.2 Identify types of breaches of health, safety and operational procedures that endanger environmental health 2.3 Types of wastes and their characteristics and effects on the environment 2.4 Ways that different waste affects the environment. 2.5 Reasons for correct/proper use of PPEs. 2.6 Verbal and written communication 2.7 Interaction with clients 2.8 Personal Safety Equipment 2.9 Work hazards 2.10 Occupational safety and health standards 2.11 RA 9003 2.12 RA 6969 2.13 Clean Air Act 2.14 Clean Water Act 2.15 Other Laws 2.16 Local ordinances 2.17 Safety- and -health consciousness 2.18 Resourcefulness 2.19 Diligence 2.20 Time-consciousness 2.21 Cost -consciousness 2.22 Perseverance 2.23 Ability to work with others harmoniously	2.1 Formulating mitigation measures to eliminate environmental risks and hazards in the work place 2.2 Understanding and following the proper procedures 2.3 Identifying and reporting breaches of environmental safety and security procedures 2.4 Reporting suspicious workplace conditions or unusual occurrences that are potential risks or hazards 2.5 Practicing communication skills 2.6 Writing reports 2.7 Documentation skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Implement mitigation measures to eliminate the environmental risks and hazards in the work place	<p>3.1. Resources for the operation of the environmental health and awareness are identified, seek and provided, in a timely and consistent manner according to workplace procedures</p> <p>3.2. Environmental health and awareness measures are communicated to relevant personnel as required</p> <p>3.3. Appropriate development and training on the environmental health and awareness are provided or arranged for relevant personnel as required</p> <p>3.4. Known and intended process changes and enhancements to the environmental health management plan are communicated to relevant personnel</p> <p>3.5. All environmental health and awareness records are confirmed and reports are produced, processed and maintained</p>	<p>3.1 Correct waste collection and hauling procedures to assure environmental health and safety</p> <p>3.2 Identify types of breaches of health, safety and operational procedures that endanger environmental health</p> <p>3.3 Types of wastes and their characteristics and effects on the environment</p> <p>3.4 Ways that different waste affects the environment.</p> <p>3.5 Reasons for correct/proper use of PPEs.</p> <p>3.6 Verbal and written communication</p> <p>3.7 Interaction with clients</p> <p>3.8 Personal Safety Equipment</p> <p>3.9 Work hazards</p> <p>3.10 Occupational safety and health standards</p> <p>3.11 RA 9003</p> <p>3.12 RA 6969</p> <p>3.13 Clean Air Act</p> <p>3.14 Clean Water Act</p> <p>3.15 Other Laws</p> <p>3.16 Local ordinances</p> <p>3.17 Safety- and -health consciousness</p> <p>3.18 Resourcefulness</p> <p>3.19 Diligence</p> <p>3.20 Time-consciousness</p> <p>3.21 Cost -consciousness</p> <p>3.22 Perseverance</p> <p>3.23 Ability to work with others harmoniously</p>	<p>3.1 Implementing mitigation measures to eliminate environmental risks and hazards in the work place</p> <p>3.2 Understanding and following the proper procedures</p> <p>3.3 Identifying and reporting breaches of environmental safety and security procedures</p> <p>3.4 Reporting suspicious workplace conditions or unusual occurrences that are potential risks of hazards</p> <p>3.5 Practicing communication skills</p> <p>3.6 Writing reports</p> <p>3.7 Documentation skills</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1. Environmental risks and hazards	May include but are not limited to: <ul style="list-style-type: none"> 1.1 Physical hazards – impact, illumination, pressure, noise, vibration, temperature, radiation 1.2 Biological hazards- bacteria, viruses, plants, parasites, mites, molds, fungi, insects 1.3 Chemical hazards – dusts, fibers, mists, fumes, smoke, gases, vapors 1.4 Ergonomics <ul style="list-style-type: none"> 1.4.1 Psychological factors – over exertion/ excessive force, awkward/static positions, fatigue, direct pressure, varying metabolic cycles 1.4.2 Physiological factors – monotony, personal relationship, work out cycle 1.5 Presence of un-qualified and/or untrained persons in the workplace
2. Proper procedures	May include but are not limited to: <ul style="list-style-type: none"> 2.1 The operational activity flows used in the job. 2.2. Use of personal protective clothing and equipment 2.3 The proper checking of equipment and tools before use 2.4 Safe posture including sitting, standing, bending 2.5 Manual handling of waste including lifting, transferring and stowing the waste in proper order 2.6 Emergency fire and accident 2.7 Hazard identification and control 2.8 Proper procedures in handling waste accidents and/or spillage
3. Breaches	May include but is not limited to: <ul style="list-style-type: none"> 3.1 Continued use and/or operation of wrong and/or malfunctioning tools and equipment 3.2 Presence of un-qualified and/or untrained persons within the work area 3.3 Unsafe containment of waste. 3.4 Improper system of operations in collection and hauling of waste 3.5 Lack of suitable signage when required 3.6 Lack of training on health and safety issues 3.7 Unsafe work practices

EVIDENCE GUIDE

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Complied with industry and company practices and procedures 1.2. Used interactive communication with others 1.3. Complied with workplace safety, security and hygiene practices 1.4. Identified faults and problems and the necessary corrective action 1.5. Maintained environmental health in the workplace
2. Resource Implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Procedures manual on safety, security, health and emergency 2.2 Availability of tools, equipment, supplies and materials 2.3 Availability of PPEs
3. Methods of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 7.3 Written examination 7.4 Practical demonstration 7.5 Interview
4. Context of assessment	<p>4.1 Competency may be assessed in the work place or in a simulated work place setting.</p>

CORE COMPETENCIES

UNIT OF COMPETENCY : SUPERVISE IN-COMING WASTE IN THE ACTIVE CELL

UNIT CODE : UTL325301

UNIT DESCRIPTOR : This unit involves the overseeing of in-coming wastes at the active cell of the Sanitary Landfill Facility (SLF)

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Confirm road access to active cell	1.1 Road condition for incoming trucks is inspected in accordance with established procedures 1.2 Readiness of the active cell is inspected in accordance with established procedures 1.3 The assigned equipment is checked in accordance with established procedures and road condition.	1.1 Adopted SLF operational systems and procedures 1.2 Manual on Establishment and Operations for SLF 1.3 Types and Uses of equipment 1.4 Work schedule 1.5 Protocol in area 1.6 Verbal and written communication 1.7 Interaction with clients 1.8 Personal Safety Equipment 1.9 Work hazards 1.10 Occupational safety and health standards 1.11 RA 9003 1.12 Safety- and -health consciousness 1.13 Resourcefulness 1.14 Diligence 1.15 Time-consciousness 1.16 Cost -consciousness 1.17 Perseverance 1.18 Ability to work with others harmoniously	1.1 Inspecting road conditions, cleanliness and passability of the road 1.2 Following the operations SLF manual
2. Monitor waste disposal in cell	2.1 Disposal procedures are followed based on established procedures. 2.2 Truck position is monitored	2.1 Disposal procedures in accordance with SLF Manual 2.2 OHS procedures and guidelines 2.3 Protocol in area 2.4 Verbal and written communication	2.1 Following verbal and written communications 2.2 Giving and following instructions 2.3 Observation skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	according to dumping or unloading of waste procedure.	2.5 Personal Safety Equipment 2.6 Work hazards 2.7 Occupational safety and health standards 2.8 RA 9003 2.9 RA 6969 2.10 Local ordinances 2.11 Safety- and- health consciousness 2.12 Resourcefulness 2.13 Diligence 2.14 Time-consciousness 2.15 Cost -consciousness 2.16 Perseverance 2.17 Ability to work with others harmoniously	
3. Check dumped waste	3.1 Actual wastes dumped are compared with <i>data manifests</i> 3.2 <i>Corrective actions</i> are done if the actual wastes are not in accordance with manifests entry. 3.3 Actual waste dumped is reported to immediate supervisor and gatekeeper based on procedure.	3.1 Dump truck Data manifests 3.2 Different Corrective actions 3.3 Types of wastes dumped 3.4 Protocol in area 3.5 Incident reporting 3.6 Verbal and written communication 3.7 Interaction with clients 3.8 Personal Safety Equipment 3.9 Work hazards 3.10 Occupational safety and health standards 3.11 RA 9003 3.12 RA 6969 3.13 Safety- and -health consciousness 3.14 Resourcefulness 3.15 Diligence 3.16 Time-consciousness 3.17 Cost -consciousness 3.18 Perseverance 3.19 Ability to work with others harmoniously	3.1 Following written and verbal instructions 3.2 Interpreting the data manifests 3.3 Knowing corrective actions if the wastes are not in accordance with manifests entry

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
4. Oversee spreading and re-profiling of slope	<p>4.1 Spreading and compactions of dumped wastes and re-profiling of slopes are checked and ensured based on site requirements.</p> <p>4.2 Application of daily soil covering is monitored according to SLF procedures.</p> <p>4.3 Dumping area is checked for cleanliness and readiness for the next day operations in accordance with established SLF procedures</p>	<p>4.1 Procedures in Spreading and compaction of dump waste</p> <p>4.2 Compaction requirement</p> <p>4.3 Re-profiling of slope</p> <p>4.4 Characteristics of damped waste</p> <p>4.5 Protocol in area</p> <p>4.6 Verbal and written communication</p> <p>4.7 Personal Safety Equipment</p> <p>4.8 Work hazards</p> <p>4.9 OHS procedures and guidelines</p> <p>4.10 Occupational safety and health standards</p> <p>4.11 RA 9003</p> <p>4.12 RA 6969</p> <p>4.13 Local environmental ordinances</p> <p>4.14 Safety- and-health consciousness</p> <p>4.15 Resourcefulness</p> <p>4.16 Diligence</p> <p>4.17 Time-consciousness</p> <p>4.18 Cost- consciousness</p> <p>4.19 Perseverance</p> <p>4.20 Ability to work with others harmoniously</p>	<p>4.1 Practicing verbal and written communications</p> <p>4.2 Following instructions</p> <p>4.3 Observation skills</p>
5. Monitor parking and cleaning of equipment	<p>5.1 Corrective actions are undertaken based on equipment breakdown</p> <p>5.2 Equipment operator is instructed to check if the equipment is cleaned properly and parked in the</p>	<p>5.1 Procedure and guidelines in parking of equipment</p> <p>5.2 OHS procedures and guidelines</p> <p>5.3 Types and uses of equipment</p> <p>5.4 Protocol in area</p> <p>5.5 Incidence reporting</p> <p>5.6 Monitoring forms</p> <p>5.7 Verbal and written communication</p> <p>5.8 Personal Safety Equipment</p>	<p>5.1 Practicing verbal and written communications</p> <p>5.2 Giving instructions</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	designated area. 5.3 Inspection report is prepared based on equipment status 5.4 Daily equipment and site report is accomplished in accordance with enterprise requirements.	5.9 Work hazards 5.10 Occupational safety and health standards 5.11 RA 9003 5.12 Safety- and- health consciousness 5.13 Resourcefulness 5.14 Diligence 5.15 Time-consciousness 5.16 Cost -consciousness 5.17 Perseverance 5.18 Ability to work with others harmoniously	
6. Monitor leachate production	6.1 Leachate production is monitored in accordance with established procedures of Sanitary Landfill (SLF) manual of operations. 6.2 Water and leachate sampling is done in accordance with established procedures of Sanitary Landfill (SLF) manual of operations 6.3 Corrective measures for controlling seepage and spread of harmful leachate are undertaken	6.1 SLF Operations Manual 6.2 NSWMC Manual on Establishment and Operations for Sanitary Landfill 6.3 Monitoring form 6.4 Water and leachate sampling form and procedures 6.5 Leachete types, composition and hazards 6.6 Protocol in area 6.7 Verbal and written communication 6.8 Personal Safety Equipment 6.9 Work hazards 6.10 Occupational safety and health standards 6.11 RA 9003 6.12 Safety-and- health consciousness 6.13 Resourcefulness 6.14 Diligence 6.15 Time-consciousness 6.16 Cost- consciousness 6.17 Perseverance 6.18 Ability to work with others harmoniously	6.1 Practicing verbal and written communications 6.2 Giving instructions

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
7. Oversee clean-up of litter on site	<p>7.1 Litters on landfill cell are cleaned-up based on SLF procedures</p> <p>7.2 Litter nets are installed in accordance with established procedures of Sanitary Landfill (SLF) manual of operations.</p>	<p>7.1 Cleaning procedure</p> <p>7.2 SLF Operations Manual</p> <p>7.3 Uses of Litter Nets</p> <p>7.4 Work schedule</p> <p>7.5 Protocol in area</p> <p>7.6 Verbal and written communication</p> <p>7.7 Personal Safety Equipment</p> <p>7.8 Work hazards</p> <p>7.9 Occupational safety and health standards</p> <p>7.10 RA 9003</p> <p>7.11 Safety- and- health consciousness</p> <p>7.12 Resourcefulness</p> <p>7.13 Diligence</p> <p>7.14 Time-consciousness</p> <p>7.15 Cost -consciousness</p> <p>7.16 Perseverance</p> <p>7.17 Ability to work with others harmoniously</p>	<p>7.1 Cleaning litters on landfill</p> <p>7.2 Installing litter nets</p> <p>7.3 Practicing verbal and written communications</p> <p>7.4 Giving instructions</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1. Established procedures	May include: 1.1 National Solid Waste Management Commission Guidelines 1.2 Sanitary Landfill Facility (SLF) Manual of Operations 1.3 Local Ordinances
2. Assigned Equipment	May include: 2.1 Bulldozer 2.2 Compactor 2.3 Backhoe/excavator 2.4 Loader 2.5 Service vehicle 2.6 Power Sprayers and Water Truck with pumps 2.7 Fire Truck
3. Road Condition	May include: 3.1 Passable 3.2 Cleanliness 3.3 Clear from Obstructions 3.4 No loose soil
4. Personnel	May include: 4.1 Spotter 4.2 Equipment operators 4.2.1 Bulldozer 4.2.2 Backhoe 4.2.3 Compactor 4.2.4 Sprayer 4.2.5 Payloader 4.2.6 Water truck 4.2.7 Dump truck 4.2.8 Fire Truck 4.3 Fumigation Sprayer 4.4 Palero 4.5 Security Personnel 4.6 Laborers
5. Data manifest	May include: 5.1 Date and time 5.2 Name of contractor, carrier or owner of the vehicle 5.3 Registration number and type of vehicle 5.4 Volume or weight of wastes 5.5 Source of waste 5.6 Characteristics of waste 5.7 Load receipt number 5.8 Name of Driver 5.9 Name of Palero
6. Corrective actions	May include: 6.1 Return garbage to source

VARIABLE	RANGE
	6.2 Make immediate report to supervisor 6.3 If recurrent, black list the truck and the hauler
7. Pests and vermin	May include: 7.1 Birds (e.g. egrets, maya, pigeons, etc) 7.2 Flies 7.3 Rats 7.4 Feral cats 7.5 Dogs
8. Corrective Measures for controlling leachate	May include: 8.1 Liners 8.2 Filters 8.3 Pumps 8.4 Sumps 8.5 Leachate Ponds

EVIDENCE GUIDE

1. Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 Complied with workplace safety, security and hygiene practices 1.2 Identified faults and problems and recommended/initiated necessary corrective action 1.3 Ensured compliance SLF environmental and quality standards 1.4 Responded to emergency situations in line with operations manual of the facility
2. Resource implications	The following resources should be provided: 2.1 Workplace or assessment location 2.2 Personal Protective Equipment 2.3 Appropriate Materials and Equipment for the activity.
3. Methods of assessment	Competency in this unit must be assessed using any or combination of the following: 3.1 Direct Observation with questioning 3.2 Demonstration with questioning 3.3 Interview
4. Context of assessment	4.1 Competency may be assessed in the workplace or TESDA accredited assessment center or in a simulated work setting.

UNIT OF COMPETENCY : SUPERVISE AND MAINTAIN CLOSED SANITARY LANDFILL FACILITY (SLF)

UNIT CODE : UTL325302

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to supervise and maintain closed Sanitary Landfill Facility (SLF).

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Oversee the greening of the slopes	1.1 Site workers are instructed to plant appropriate vegetation on the slopes. 1.2 Site workers are instructed to grow and maintain the vegetation in accordance with site requirements. 1.3 Status report on vegetation is submitted to site engineer using checklist or standard form.	1.1 SLF Operations Manual particularly site greening procedures 1.2 OHS procedures and guidelines 1.3 Work schedule 1.4 Protocol in area 1.5 Report on vegetation 1.6 Monitoring forms 1.7 Verbal and written communication 1.8 Interaction with clients 1.9 Personal Safety Equipment 1.10 Work hazards 1.11 Safety- and – health consciousness 1.12 Resourcefulness 1.13 Diligence 1.14 Time – consciousness 1.15 Cost – consciousness 1.16 Perseverance 1.17 Ability to work with others harmoniously	1.1 Using verbal and written communications 1.2 Following instructions 1.3 Overseeing planting and growing of different vegetation
2. Monitor conditions of utilities	2.1 Gas vents are checked in accordance with established procedures of Sanitary Landfill	2.1 SLF Manual of Operations 2.2 OHS procedures and guidelines 2.3 Leachate production	2.1 Using verbal and written communications 2.2 Giving instructions 2.3 Handling of SLF equipment

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	(SLF). 2.2 Leachate piping systems are checked in accordance with established procedures of Sanitary Landfill (SLF). 2.3 Leachate production and recirculation is monitored and managed in accordance with established procedures of Sanitary Landfill (SLF). 2.4 Report is submitted to site engineer using checklist	process 2.4 Work schedule 2.5 Protocol in area 2.6 Incidence reporting 2.7 Monitoring forms 2.8 Incident reporting 2.9 Verbal and written communication 2.10 Interaction with clients 2.11 Personal Safety Equipment 2.12 Work hazards 2.13 Occupational safety and health standards 2.14 RA 9003 2.15 Safety-and – health consciousness 2.16 Resourcefulness 2.17 Diligence 2.18 Time-consciousness 2.19 Cost-consciousness 2.20 Perseverance 2.21 Ability to work with others harmoniously	
3. Monitor security of the closed sanitary landfill facility (SLF)	3.1 Perimeter fence and surroundings are checked in accordance with the SLF manual of operations 3.2 Problems of Illegal entry, scavenging and squatting are monitored and responded to in accordance with	3.1 SLF Manual of Operations 3.2 OHS procedures and guidelines 3.3 Work schedule 3.4 Protocol in area 3.5 Incidence reporting 3.6 Monitoring forms 3.7 Verbal and written communication	3.1 Using verbal and written communications 3.2 Following instructions 3.3 Handling of SLF equipment

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	enterprise procedures	3.8 Personal Safety Equipment 3.9 Work hazards 3.10 Occupational safety and health standards 3.11 RA 9003 3.12 Safety- and-health consciousness 3.13 Resourcefulness 3.14 Diligence 3.15 Time – consciousness 3.16 Cost – consciousness 3.17 Perseverance 3.18 Ability to work with others harmoniously	
4. Monitor fire hazards and stability of slope	4.1 Conditions and areas which are probable causes of fires are determined in accordance with SLF Manual of Operations 4.2 Appropriate action is taken if there are fires or unusual movement in the slope in the SLF in accordance with established procedures. 4.3 Fires and unusual movement in the slope and near-misses are documented in the daily report in accordance with established procedures.	4.1 Fire Hazards in SLF 4.2 Different Types and Classifications of Fire Extinguisher 4.3 SLF Manual of Operations 4.4 OHS procedures and guidelines 4.5 Work schedule 4.6 Protocol in area 4.7 Monitoring forms 4.8 Verbal and written communication 4.9 Personal Safety Equipment 4.10 Work hazards 4.11 Occupational safety and health standards 4.12 RA 9003 4.13 Safety- and-health consciousness 4.14 Resourceful-	4.1 Handling of Fire Extinguisher 4.2 Using verbal and written communications 4.3 Following instructions

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		ness 4.15 Diligence 4.16 Time – consciousness 4.17 Cost-consciousness 4.18 Perseverance 4.19 Ability to work with others harmoniously	
5. Prepare reports and documentation	5.1 Monthly report is submitted to the Supervisor on all aspects of the Environmental Management Plan, including complaints and monitoring results. 5.2 Landfill complaints are reported and submitted to Supervisor in accordance with established procedures. 5.3 Incident reports are submitted immediately to Supervisor in accordance with established procedures.	5.1 Environmental Management Plan/Report 5.2 SLF Manual of Operations 5.3 OHS procedures and guidelines 5.4 Incidence / complaints reporting 5.5 Monitoring forms 5.6 Verbal and written communication 5.7 Personal Safety Equipment 5.8 Work hazards 5.9 Occupational safety and health standards 5.10 RA 9003 5.11 Safety- and-health consciousness 5.12 Resourcefulness 5.13 Diligence 5.14 Time-consciousness 5.15 Cost – consciousness 5.16 Perseverance 5.17 Ability to work with others harmoniously	5.1 Using verbal and written communications 5.2 Following instructions 5.3 Filling up of monitoring forms 5.4 Writing reports

RANGE OF VARIABLES

VARIABLE	RANGE
1. Vegetation	May include: 1.1 Grasses 1.2 Small shrubs 1.3 Small Trees

EVIDENCE GUIDE

1. Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 Implemented the greening of the slopes 1.2 Monitored conditions of utilities 1.3 Monitored fire and security hazards 1.4 Submitted regular report
2. Resource implications	The following resources should be provided: 2.1 Personal Protective Equipment 2.2 Relevant documentation such as SLF operations manual 2.3 Equipment for carrying out the maintenance procedure
3. Methods of assessment	Competency in this unit may be assessed using any or combination of the following: 3.1 Direct Observation with questioning 3.2 Oral questioning /interview 3.3 Third Party Report from a Supervisor
4. Context of Assessment	4.1 Assessment may be performed in the workplace or TESDA accredited assessment center

SECTION 3 TRAINING ARRANGEMENTS

This set of standards provides Technical and Vocational Education and Training (TVET) providers with information and other important requirements to consider when designing training programs for SANITARY LANDFILL OPERATIONS NC III.

This includes information on curriculum design; training delivery; trainee entry requirements, tools and equipment; training facilities; and trainer's qualification and institutional assessment.

3.1 CURRICULUM DESIGN

Course Title: SANITARY LANDFILL OPERATIONS

NC Level: NC III

**Nominal Training Duration: 28 hrs – Basic Competencies
16 hrs – Common Competencies
116 hrs – Core Competencies
160 hrs – Total**

Course Description:

This course is designed to enhance the knowledge, skills and attitude of Sanitary Landfill Operations in accordance to industry standards. It covers the basic, common, and core competencies in managing in-coming waste in active cell and managing and maintaining a closed sanitary landfill facility (SLF).

The training center has the option to partner with an operational SLF in providing facilities and equipment in the conduct of training and assessment.

To obtain this, all units prescribed for this qualification must be achieved.

BASIC COMPETENCIES
(28 Hours)

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
1. Lead workplace communication	1.1. Communicate information about workplace processes. 1.2. Lead workplace discussions. 1.3. Identify and communicate issues arising in the workplace	1.1. Communication s both in the formal and informal methods 1.1.1. Verbal 1.1.2. Written 1.1.3. Wireless 1.1.4. Non-verbal (standard signs and symbols of the industry) 1.2. Basic Orientation on Safety and Health 1.2.1. Safety around equipment and machinery 1.2.2. Safety in handling waste 1.2.3. Safety of the environment 1.2.4. Safety with volatile fluids and gases 1.2.5. Health and	1.1 Translation of ideas and concepts into implementable activities in the pharmacy services 1.2 Interpersonal relationship skills in implementing activities 1.7. Instructional strategies and methodologies 1.8. Facilitation skills 1.9. Presentation skills 1.10. Creation of presentation materials 1.7 Oral and written communication 1.8 Report writing 1.9 Creation of agenda for meeting 1.10 Creation of daily plan 1.11 Practical Psychology	<ul style="list-style-type: none"> • Group discussion • Role Play 	<ul style="list-style-type: none"> • Observation • Written and Oral examinations 	4 hrs

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
		Hygiene 1.2.6. others 1.3. Inter-personal relationships 1.3.1. Dealing with superiors 1.3.2. Dealing with subordinates 1.3.3. Friendliness inside the workplace 1.4. Pleasing but assertive attitude 1.4.1. People management 1.4.2. Facilitating 1.5. Basics of project management 1.5.1. Managing people 1.5.2. Managing resources 1.6. Managing Time	1.12 Team -building skills 1.13 Motivational skills			

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
2. Lead small teams	2.1 Provide team leadership.	2.1.1 Communication skills required for leading small team 2.1.2 Skills and techniques in promoting team building 2.1.3 Negotiating skills 2.1.4 Up to date dissemination of instruction and requirements to	2.1.1 Evaluate the success factors in the contribution of the personnel in the implementation of the safety, quality and environmental objectives of the company 2.1.2 Practice leadership activities	<ul style="list-style-type: none"> • Demonstration • Self-paced (modular) 	<ul style="list-style-type: none"> • Written and Oral examinations 	4 hrs

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
		members 2.1.5 Art of listening and treating individual team members concern	2.1.3 Teambuilding activities 2.1.4 Write simple negotiation strategy on workplace issues 2.1.5 Role play on communication model and the art of listening			
	2.2 Assign responsibilities among	2.2.1 Duties and responsibilities of each team member 2.2.2 Skills in identifying individual skills, knowledge and attitude as basis for allocating responsibilities 2.2.3 Knowledge in identifying each team member duties and responsibilities	2.2.1 Planning session regarding duties and responsibilities of each team member 2.2.2 Writeshop of interpersonal abilities, attitude and knowledge 2.2.3 Identification of team members responsibilities thru simulation	<ul style="list-style-type: none"> • Role Play • Workshop • Demonstration 	<ul style="list-style-type: none"> • Case studies • Interview • Demonstration 	
	2.3 Set performance expectation for team members.	2.1.1 Knowledge and skills in setting individual performance target/expectation 2.1.2 Team members duties and responsibilities	2.3.1 Develop /implement an appraisal document for the technician 2.3.2 Workshop on setting individual performance	<ul style="list-style-type: none"> • Group discussion • Writeshop • Multimedia presentation 	<ul style="list-style-type: none"> • Written exam • Demonstration • Written Exam 	

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
		2.1.3 Employee policies and procedures 2.1.4 Defining performance expectations criteria	target 2.3.3 Writeshop on team members duties and responsibilities 2.3.4 Video presentation regarding employees performance role and expectation towards work			
	2.4 Supervise team performance	2.4.1 Knowledge and skills in monitoring team member performance 2.4.2 Monitoring team operation to ensure client needs and satisfaction 2.4.3 Methods of monitoring performance 2.4.4 Informal/formal counseling skills	2.4.1 Practice monitoring skills 2.4.2 Design monitoring scheme for team operation as well as client satisfaction and needs 2.4.3 Evaluate performance of technicians	<ul style="list-style-type: none"> • Role Play • Writeshop • Discussions • Self-paced handout/ module • Group Dynamics 	<ul style="list-style-type: none"> • Written Test • Demonstration • Written Test • Demonstration 	

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
3. Develop and practice negotiation skills	3.1 Identify relevant information in planning negotiations 3.2 Participate in negotiations 3.3 Document areas for agreement	3 Background information on other parties to the negotiation 4 Observing differences between content and process 5 Identifying bargaining information 6 Applying strategies to manage process	7 Perform Data gathering regarding relevant information related to negotiation 8 Designing a negotiation process 9 Practice negotiation strategies and manage the process	<ul style="list-style-type: none"> • Direct observation • Simulation/role playing 	<ul style="list-style-type: none"> • Written test • Practical/performance test 	4 hrs
4. Solve workplace problem related to work activities	4.1 Explain the analytical techniques. 4.2 Identify the problem. 4.3 Determine the possible cause/s of the problem.	4.1 Basics of project management 4.1.1. Managing people 4.1.2. Managing resources 4.1.3 Managing Time 4.2 Problem solving analysis and techniques 4.2.1 Problem solving analysis and problem solving techniques 4.2.2 Root cause analysis models	4.1 Problem analysis and problem solving techniques 4.2 Supervisory and management skills 4.3 Priority setting skills	<ul style="list-style-type: none"> • Lecture • Simulation/role playing 	<ul style="list-style-type: none"> • Written test • Practical/performance test 	
5. Use mathematical concepts and	5.1 Identify mathematical tools and techniques to	5.1 Basic mathematics 5.1.1 Addition	5.1 Application of the basic mathematic principles	<ul style="list-style-type: none"> • Lecture • Simulation/role playing 	<ul style="list-style-type: none"> • Written test • Practical/ 	• 4 hrs

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
techniques	5.2 solve problem Apply mathematical procedures/solution 5.3 Analyze results	5.1.2 Subtraction 5.1.3 Multiplication 5.1.4 Division 5.2 Simple Algebra	5.2 Computation of volumes and weights	<ul style="list-style-type: none"> Case studies 	performance test	
6. Use relevant technologies	6.1 Identify appropriate technology	6.1.1 Awareness on technology and its function 6.1.2 Communication techniques	6.1 Reading	<ul style="list-style-type: none"> Lecture Simulation/role playing 	<ul style="list-style-type: none"> Written test Practical/performance test 	<ul style="list-style-type: none"> 2 hrs
	6.2 Apply relevant technology	6.2.1 Study different relevant technology in the workplace 6.2.2 Relate 5s to technology	6.2 Internet surfing			
	6.3 Maintain/enhance relevant technology	6.3.1 Corrective and preventive maintenance 6.3.2 Upgrading of technology 6.3.3 Communication Skills 6.3.4 Organizational set-up / work flow	6.3 And others			

**COMMON COMPETENCIES
(16 Hours)**

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
1. Develop and update industry knowledge	1.1 Identify and access key sources	1.1.1 Sources of information on industry and job requirements 1.1.2 Information on improvement of job performance 1.1.3 Company policies	1.1.1 Identifying and accessing sources of information on industry and job requirement 1.1.2 Identifying and accessing information to improve job performance	<ul style="list-style-type: none"> • Lecture • Group discussion 	<ul style="list-style-type: none"> • Inter-views/ • Questioning 	2 hours
	1.2 Access, apply and share industry information	1.2.1 Apply relevant updated general knowledge of the industry in the job 1.2.2 Share updated knowledge with co-workers and whenever possible with customers	1.2.1 Updating general knowledge of the industry through interview or research 1.2.2 Applying updated knowledge to improve job performance 1.2.3 Sharing updated knowledge with colleagues during their day-to-day activities	<ul style="list-style-type: none"> • Group discussion • Individual/group assignment 	<ul style="list-style-type: none"> • Interviews/ • Questioning 	2 hours

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
	1.3 Update continuously relevant industry knowledge	1.3.1 Update regularly the general knowledge of the industry	1.3.1 Updating general knowledge of the industry through interview or research	<ul style="list-style-type: none"> • Lecture • Group discussion 	<ul style="list-style-type: none"> • Interviews/ • Questioning 	2 hours
2. Perform workplace security and safety procedures	2.1 Perform workplace health, safety and security practices	2.1.1 Company policies 2.1.2 Proper health, safety and security procedures 2.1.3 Breaches of health, safety and security procedures 2.1.4 Types of suspicious procedures	2.1.1 Applying health, safety and security procedures 2.1.2 Avoiding committing breaches 2.1.3 Identifying suspicious procedures	<ul style="list-style-type: none"> • Lecture • Group discussion • Role-play 	<ul style="list-style-type: none"> • Written examination • Interview/ Questioning 	3 hours
	2.2 Deal with emergency situations	2.2.1 Company policies 2.2.2 Emergency situations 2.2.3 Emergency procedures	2.2.1 Identifying emergency situations specially in workplace 2.2.2 Responding to emergency situations	<ul style="list-style-type: none"> • Group discussion • Role-play 	<ul style="list-style-type: none"> • Interviews/ • Questioning • Written Exam 	3 hours

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
3. Maintain environmental health and awareness	3.1 Identifying environmental risks and hazards in the work place	3.1.1 List of environmental risks and hazards in the work place 3.1.2 Correct waste collection and hauling procedures 3.1.3 Types of breaches of health, safety and operational procedures 3.1.4 Types of wastes, their characteristics and their effect on the environment 3.1.5 Reasons for the correct/proper use of PPEs 3.1.6 List of environmental risks and hazards in the work place	3.1.1 Identifying environmental risks and hazards in the work place 3.1.2 Following correct waste collection and hauling procedures 3.1.3 Identifying and reporting breaches of health, safety and operational procedures 3.1.4 Identifying types of waste, their characteristics and their effect on the environment 3.1.5 Correct/Proper use of PPEs	<ul style="list-style-type: none"> • Lecture • Group discussion 	<ul style="list-style-type: none"> • Written exams • Interview/questioning 	2 hours

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
		3.1.7 List of environmental risks and hazards in the work place				
	3.2 Formulate mitigation measures to eliminate environmental risks and hazards in the work place	3.2.1 List of environmental risks and hazards in the work place	3.2.1 Formulating mitigation measures to eliminate environmental risks and hazards in the work place	<ul style="list-style-type: none"> • Lecture • Role playing 	<ul style="list-style-type: none"> • Written exams • Interview/questioning 	1 hour
	3.3 Implement mitigation measures to eliminate environmental risks and hazards in the work place	3.3.1 List of environmental risks and hazards in the work place	3.3.1 Implementing mitigation measures to eliminate environmental risks and hazards in the work place	<ul style="list-style-type: none"> • Lecture • Role playing 	<ul style="list-style-type: none"> • Written exams • Interview/questioning 	1 hour

**CORE COMPETENCIES
(116 Hours)**

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
1. Supervise incoming waste in the active cell	1.1 Confirm road access to active cell	1.1.1 Manual of Operations of the Sanitary Landfill Facility 1.1.2 Environmental laws and ordinances 1.1.3 Government and other control-regulating agency policies and restrictions 1.1.4 Risk reduction and SLF accident management	1.1.1 Practical application of knowledge in the workplace 1.1.2 Coordination skills of the different activities in the workplace 1.1.3 Operate SLF based on manuals and guidelines	<ul style="list-style-type: none"> • Lecture • Brain Storming 	<ul style="list-style-type: none"> • Written exam • Interviews/questioning 	24hrs
	1.2 Monitor waste disposal in cell	1.2.1 Reporting Disposal Procedures and strategy 1.2.2 Different types of Disposal procedures and strategy in accordance with SLF Manual 1.2.3 OSH in Waste Disposal 1.2.4 Different local ordinances in relation to Disposal of Waste to Cell	1.2.1 Plan and practice different Disposal Procedures 1.2.2 Practice OSH in relation to waste disposal 1.2.3 Monitor Waste disposal 1.2.4 Practice protocol in waste disposal area	<ul style="list-style-type: none"> • Lecture • Group discussion 	<ul style="list-style-type: none"> • Written exam • Observation in workplace • Interviews/questioning 	<ul style="list-style-type: none"> • 20 hrs

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
	1.3 Check dumped waste	1.3.1 Reading and Interpreting Data Manifest 1.3.2 Identifying Corrective Actions 1.3.3 Reporting Procedures and strategy 1.3.4 Different Codes and regulations pertaining solid waste	1.3.1 Coordination skills of the different activities in the workplace 1.3.2 Develop Data Manifest 1.3.3 Perform Corrective Actions of actual waste	<ul style="list-style-type: none"> • Group discussion • Demonstration 	<ul style="list-style-type: none"> • Written exam • Interviews/ questioning 	4 hrs.
	1.4 Oversee spreading and re-profiling of slope	1.4.1 Different strategy in pushing, spreading, compacting waste 1.4.2 Different strategy in profiling of the slope 1.4.3 Inspection and monitoring dump sites and slope 1.4.4 The role of equipment operator in the dump site 1.4.5 Procedures in checking dump site	1.4.1 Perform pushing, spreading and compacting procedures of waste in dump site 1.4.2 Perform profiling of the slope 1.4.3 Practice the role of equipment operator in the dump site 1.4.4 Checked , inspect and monitor dump site	<ul style="list-style-type: none"> • Lecture/ group discussion • Demonstration 	<ul style="list-style-type: none"> • Written exam • Performance Exam 	• 24 hrs

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
	1.5 Monitor parking and cleaning of equipment	1.5.1 Identification of different equipment used in dump site 1.5.2 Procedures in parking ,inspecting/checking equipment used in dump site 1.5.3 Equipment Maintenance system 1.5.4 Theory of 5S, Equipment Maintenance System 1.5.5 Different Monitoring Forms	1.5.1 Check, segregate different equipment for used in the dump site 1.5.2 Check segregate equipment intended for maintenance 1.5.3 Practice equipment maintenance system	<ul style="list-style-type: none"> • Demonstration • Video • Presentation 	<ul style="list-style-type: none"> • Written exam • Interviews/ questioning 	<ul style="list-style-type: none"> • 8 hrs.
	1.6 Monitor leachate production	1.6.1 Theory and principles involved in Leachate Production 1.6.2 Procedures in performing water and leachate sampling 1.6.3 Corrective measures for controlling seepage 1.6.4 Manuals of operation of water sampling and Leachate	1.6.1 Perform and practice proper procedures in Leachate 1.6.2 Practice water sampling 1.6.3 Read and interpret drawings, plan and procedures involved in manual of operation of a Sanitary Landfill	<ul style="list-style-type: none"> • Lecture/ group discussion • Video presentation 	<ul style="list-style-type: none"> • Written exam • Interviews/ questioning 	8 hrs.

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
	1.7 Oversee clean-up of litter on site	1.7.1 Maintenance of landfill cell 1.7.2 Identify the operation involved in using the litter net 1.7.3 Procedures in installing the litter net 1.7.4 Manuals of operations in using the litter net	1.7.1 Cleaning litters on landfill cell 1.7.2 Installing litter net 1.7.3 Reading and interpreting manuals in using the litter net	<ul style="list-style-type: none"> • Lecture/ group discussion • Demonstration 	<ul style="list-style-type: none"> • Written exam • Interviews/ questioning 	4 hrs.
2. Supervise and maintain closed SLF	2.1. Oversee the greening of the slopes	2.1.1 Identify procedures in greening slopes 2.1.2 Different greeneries applicable for SLF 2.1.3 Different documents involved while performing greening of the slope	2.1.1 Perform different procedures, style and techniques in greening of slope 2.1.2 Prepare different documents and record involved in performing greening of slope	<ul style="list-style-type: none"> • Video presentation • Demonstration 	<ul style="list-style-type: none"> • Written exam • Interviews/ questioning 	12 hrs.

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
	2.2. Monitor conditions of utilities	2.2.1 SLF Manual of Operations 2.2.2 OHS procedures and guidelines 2.2.3 Leachate production process and Recirculation 2.2.4 Leachate Piping System 2.2.5 Municipal/City Ordinances	2.2.1 Checking Gas vents 2.2.2 Installing Leachate piping systems 2.2.3 Monitoring Leachate production and recirculation 2.2.4 Preparing report and documentation	<ul style="list-style-type: none"> • Lecture • Video presentation 	<ul style="list-style-type: none"> • Written exam • Observation in workplace • Interviews/questioning 	
	2.3. Monitor security of the closed sanitary landfill facility (SLF)	2.3.1 SLF Manual of Operations on Perimeter fence and Surroundings 2.3.2 OHS procedures and guidelines 2.3.3 Problems encountered in 2.3.4 Closed Sanitary Landfill Facility	2.3.1 Monitoring Security of Closed Sanitary Landfill Facility 2.3.2 Dealing and Negotiating with Illegal entry, scavenging and squatting	<ul style="list-style-type: none"> • Group discussion • Video presentation 	<ul style="list-style-type: none"> • Written exam • Observation in workplace • Interviews/questioning 	
	2.4. Monitor fire hazards and stability of slope	2.4.1 Identification of different fire hazards in SLF 2.4.2 Identification of different sources of fire hazards in SLF 2.4.3 Identification of different ways in	2.4.1 Perform and practice different procedures in controlling fire in SLF 2.4.2 Use different type of fire	<ul style="list-style-type: none"> • Group discussion • Demonstration 	<ul style="list-style-type: none"> • Written exam • Interviews/questioning 	8 hrs.

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
		extinguishing fire in SLF 2.4.4 Classification of Fire extinguisher based on types of fire	extinguisher based on types of fire 2.4.3 Practice fire drill occasionally on site			
	2.5 Prepare reports and documentation	2.5.1 Types of documentation and reports 2.5.2 Different style of monitoring reports involved in SLF 2.5.3 Different style of incidence/ complaints 2.5.4 Different design of maintenance report involved in SLF	2.5.1 Preparing regular status report of SLF 2.5.2 Designing maintenance report involved in SLF 2.5.3 Preparing incidence/ complaints report	<ul style="list-style-type: none"> • Lecture • Case Study 	<ul style="list-style-type: none"> • Written exam • Interviews/ questioning 	4 hrs.

3.2 TRAINING DELIVERY

1. The delivery of training shall adhere to the design of the curriculum. Delivery shall be guided by the principles of competency-based TVET.
 - a. Course design is based on competency standards set by the industry or recognized industry sector; (Learning system is driven by competencies written to industry standards)
 - b. Training delivery is learner-centered and should accommodate individualized and self-paced learning strategies;
 - c. Training can be done on an actual workplace setting, simulation of a workplace and/or through adoption of modern technology.
 - d. Assessment is based in the collection of evidence of the performance of work to the industry required standards;
 - e. Assessment of competency takes the trainee's knowledge and attitude into account but requires evidence of actual performance of the competency as the primary source of evidence.
 - f. Training program allows for recognition of prior learning (RPL) or current competencies;
 - g. Training completion is based on satisfactory performance of all specified competencies.

2. The competency-based TVET system recognizes various types of delivery modes, both on-and off-the-job as long as the learning is driven by the competency standards specified by the industry. The following training modalities and their variations/components may be adopted singly or in combination with other modalities when designing and delivering training programs:
 - 2.1. Institution- Based:
 - The traditional classroom-based or in-center instruction may be enhanced through use of learner-centered methods as well as laboratory or field-work components.

3.3 TRAINEE ENTRY REQUIREMENTS

Trainees or students wishing to gain entry into these qualifications should possess the following requirements:

- Can communicate in both oral and written form
- Must be at least ten (10) years of basic education and/or;
- Must have a 1 year work experience in a sanitary landfill operations

This list does not include specific institutional requirements such as educational attainment, appropriate work experience, and others that may be required of the trainees by the school or training center delivering the TVET program

3.4 LIST OF TOOL, EQUIPMENT AND MATERIALS SANITARY LANDFILL OPERATIONS NC III

Recommended list of tools, equipment and materials for the training of a maximum of 25 trainees for **SANITARY LANDFILL OPERATIONS NC III** are as follows:

TOOLS		EQUIPMENT		MATERIALS	
QTY.	ITEM	QTY.	ITEM	QTY.	ITEM
25	Mask (surgical)				
1	Safety shoes (steel-toe/sole)	1 unit	Fire Extinguishers	5	Marking Pens
25	Hardhats			2	White Boards/Blackboard
25	Clothe Gloves with rubber linings			3	Whiteboard Markers/Chalk
1	PPE Mask	1	Laptop	2	Whiteboard / Blackboard Erasers
		1	Projector Screen		
		1	LCD Projector		
		1	Sound System (microphone, amplifier, speaker system)		
				1 set	Waste classification gallery
				1 set	Scale model/cross-section SLF in 4 categories
				Training Materials:	
				<ul style="list-style-type: none"> • Republic Act 9003 – Ecological Solid Waste Management Act of 2000 • Republic Act 6969 – Toxic and Hazardous Waste • Technical Guidebook on Solid Wastes Disposal Design Operation & Management • Guidebook for Safe Closure of Disposal Sites 	
				<ul style="list-style-type: none"> • SLF Operations Manual 	
				<ul style="list-style-type: none"> • Handouts/ Pop sheets 	

3.5 TRAINING FACILITIES

The areas indicated here are indicative for a class size of 25 students/trainees. For a smaller class size, they may be reduced, provided that there should be at least 1.0 sq. m. or more space per trainee.

Space Requirement	Size in Meters	Area in Sq. Meters	Total Area in Sq. Meters
Lecture Area	8 x 5 m	40 sq. meter	40 sq. meter
Learning Resource Area	8x5 m	40 sq. meter	40 sq. meter
Facilities/Equipment/Circulation Area			30 sq. meter
SLF(own or access to)	Category 3 (min)	(per DENR approved design)	(per DENR approved design)
Wash Area			30 sq. meter
		Total workshop area	140 ++sq. meter

3.6 TRAINER’S QUALIFICATIONS FOR SANITARY LANDFILL OPERATIONS NC III

TRAINER QUALIFICATION

- Must be a holder of NTTC Level I in Sanitary Landfill Operations NC III
- Must be able to communicate in English and Filipino/vernacular;
- Must have at least 3-5 years relevant SLF industry experience; and
- Must have attended relevant training and seminars on SLF operations.

3.7 INSTITUTIONAL ASSESSMENT

Institutional assessment is undertaken by trainees to determine their achievement of units of competency. A certificate of achievement is issued for all units of competency.

The result of the institutional assessment may be considered as evidence for the assessment for national certification. As a matter of policy, graduates of programs registered with TESDA under these training regulations are required to undergo mandatory national competency assessment upon completion of the program.

SECTION 4 ASSESSMENT AND CERTIFICATION ARRANGEMENT

Competency Assessment is the process of collecting evidence and making judgments whether competency has been achieved. The purpose of assessment is to confirm that an individual can perform to the standards expected at the workplace as expressed in relevant competency standards.

The assessment process is based on evidence or information gathered to prove achievement of competencies. The process may be applied to an employable unit(s) of competency in partial fulfillment of the requirements of the national qualification.

4.1 NATIONAL ASSESSMENT AND CERTIFICATION ARRANGEMENTS

- 4.1.1 To attain the National Qualification of **SANITARY LANDFILL OPERATIONS NC III**, the candidate must demonstrate competence in all the units of competency listed in Section 1. Successful candidates shall be awarded a National Certificate signed by the Director General.
- 4.1.2 Assessment shall focus on the core units of competency. The basic and common units shall be integrated or assessed concurrently with the core units.
- 4.1.3 The following are qualified to apply for assessment and certification:
- Graduates of training programs related to waste management
 - Experienced workers in sanitary landfill facilities and operations
- 4.1.4 Reassessment is allowed only after one month from the date of assessment. Reassessment for a National Certificate shall be done only on the task/s that the candidate did not successfully achieve.
- 4.1.5 A candidate who fails the assessment for two (2) consecutive times will be required to go through a refresher course before taking another assessment.
- 4.1.6 Only certified individuals in this Qualification may be nominated by the industry sector for accreditation as competency assessor.

4.2 COMPETENCY ASSESSMENT REQUISITE

- 4.2.1 Self-Assessment Guide. The self-assessment guide (SAG) is accomplished by the candidate prior to actual competency assessment. SAG is a pre-assessment tool to help the candidate and the assessor determine what evidence is available, where gaps exist, including readiness for assessment.

This document can:

- a. Identify the candidate's skills and knowledge
- b. Highlight gaps in candidate's skills and knowledge

- c. Provide critical guidance to the assessor and candidate on the evidence that need to be presented
 - d. Assist the candidate to identify key areas in which practice is needed or additional information or skills that should be gained prior
- 4.2.2 Accredited Assessment Center. Only Assessment Center accredited by TESDA is authorized to conduct competency assessment. Assessment centers undergo a quality assured procedure for accreditation before they are authorized by TESDA to manage the assessment for National Certification.
- 4.2.3 Accredited Competency Assessor. Only accredited competency assessor is authorized to conduct assessment of competence. Competency assessors undergo a quality assured system of accreditation procedure before they are authorized by TESDA to assess the competencies of candidates for National Certification.

**ANNEX A - COMPETENCY MAP
SANITARY LANDFILL OPERATIONS NC III**

BASIC COMPETENCIES

Receive and respond to workplace communication	Work with Others	Demonstrate work values	Practice basic housekeeping procedures	Participate in workplace communication
Work in a team environment	Practice career professionalism	Practice occupational health and safety procedures	Lead workplace communication	Lead small team
Develop and practice negotiation skills	Solve problems related to work activities	Use mathematical concepts and techniques	Use relevant technologies	Utilize specialist communication skills
Develop team and Individuals	Apply problem solving techniques in the workplace	Collect, analyze and organize information	Plan and organize Work	Promote environmental protection

COMMON COMPETENCIES

Maintain an effective relationship with clients and customers	Manage own performance	Develop and update industry knowledge	Perform workplace security and safety practices	Maintain environmental health and awareness in the work place
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CORE COMPETENCIES

Supervise in-coming waste in the active cell	Supervise and maintain closed SLF
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DEFINITION OF COMMON TERMS

1. **Agricultural waste** shall refer to waste generated from planting or harvesting of crops, trimming or pruning of plants and wastes or run-off materials from farms or fields;
2. **Bulky wastes** shall refer to waste materials which cannot be appropriately placed in separate containers because of either its bulky size, shape or other physical attributes. These include large worn-out or broken household, commercial, and industrial items such as furniture, lamps, bookcases, filing cabinets, and other similar items;
3. **Buy-back center** shall refer to a recycling center that purchases or otherwise accepts recyclable materials from the public for the purpose of recycling such materials;
4. **Collection** shall refer to the act of removing solid waste from the source or from a communal storage point;
5. **Composting** shall refer to the controlled decomposition of organic matter by micro-organisms, mainly bacteria and fungi, into a humus-like product;
6. **Consumer electronics** shall refer to special waste that includes worn-out, broken, and other discarded items such as radios, stereos, and TV sets;
7. **Controlled dump** shall refer to a disposal site at which solid waste is deposited in accordance with the minimum prescribed standards of site operation;
8. **Department** shall refer to the Department of Environment and Natural Resources;
9. **Disposal** shall refer to the discharge, deposit, dumping, spilling, leaking or placing of any solid waste into or in a land;
10. **Disposal site** shall refer to a site where solid waste is finally discharged and deposited;
11. **Ecological solid waste management** shall refer to the systematic administration of activities which provide for segregation at source, segregated transportation, storage, transfer, processing, treatment, and disposal of solid waste and all other waste management activities which do not harm the environment;
12. **Environmentally acceptable** shall refer to the quality of being re-usable, biodegradable or compostable, recyclable and not toxic or hazardous to the environment;
13. **Generation** shall refer to the act or process of producing solid waste;
14. **Generator** shall refer to a person, natural or juridical, who last uses a material and makes it available for disposal or recycling;
15. **Hazardous waste** shall refer to solid waste management or combination of solid waste which because of its quantity, concentration or physical, chemical or infectious characteristics may:
 - (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
 - (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed;
16. **Leachate** shall refer to the liquid produced when waste undergo decomposition, and when water percolate through solid waste undergoing decomposition. It is contaminated liquid that contains dissolved and suspended materials;
17. **Materials recovery facility** - includes a solid waste transfer station or sorting station, drop-off center, a composting facility, and a recycling facility;
18. **Municipal waste** shall refer to wastes produced from activities within local government units which include a combination of domestic, commercial, institutional and industrial wastes and street litters;
19. **Open dump** shall refer to a disposal area wherein the solid wastes are indiscriminately thrown or disposed of without due planning and consideration for environmental and Health standards;

20. **Opportunity to recycle** shall refer to the act of providing a place for collecting source-separated recyclable material, located either at a disposal site or at another location more convenient to the population being served, and collection at least once a month of source-separated recyclable material from collection service customers and to providing a public education and promotion program that gives notice to each person of the opportunity to recycle and encourage source separation of recyclable material;
21. **Person(s)** shall refer to any being, natural or judicial, susceptible of rights and obligations, or of being the subject of legal relations;
22. **Post-consumer material** shall refer only to those materials or products generated by a business or consumer which have served their intended end use, and which have been separated or diverted from solid waste for the purpose of being collected, processed and used as a raw material in the manufacturing of recycled product, excluding materials and by-products generated from, and by-products generated from, and commonly used within an original manufacturing process, such as mill scrap;
23. **Receptacles** shall refer to individual containers used for the source separation and the collection of recyclable materials;
24. **Recovered material** shall refer to material and by products that have been recovered or diverted from solid waste for the purpose of being collected, processed and used as a raw material in the manufacture of a recycled product;
25. **Recyclable material** shall refer to any waste material retrieved from the waste stream and free from contamination that can still be converted into suitable beneficial use or for other purposes, including, but not limited to, newspaper, ferrous scrap metal, non-ferrous scrap metal, used oil, corrugated cardboard, aluminum, glass, office paper, tin cans and other materials as may be determined by the Commission;
26. **Recycled material** shall refer to post-consumer material that has been recycled and returned to the economy;
27. **Recycling** shall refer to the treating of used or waste materials through a process of making them suitable for beneficial use and for other purposes, and includes any process by which solid waste materials are transformed into new products in such a manner that the original product may lose their identity, and which may be used as raw materials for the production of other goods or services: Provided, That the collection, segregation and re-use of previously used packaging material shall be deemed recycling under this Act;
28. **Resource conservation** shall refer to the reduction of the amount of solid waste that are generated or the reduction of overall resource consumption, and utilization of recovered resources;
29. **Resources recovery** shall refer to the collection, extraction or recovery of recyclable materials from the waste stream for the purpose of recycling, generating energy or producing a product suitable for beneficial use: Provided, that such resource recovery facilities exclude incineration;
30. **Re-use** shall refer to the process of recovering materials intended for the same or different purpose without the alteration of physical and chemical characteristics;
31. **Sanitary landfill** shall refer to a waste disposal site designed, constructed, operated and maintained in a manner that exerts engineering control over significant potential environment impacts arising from the development and operation of the facility;
32. **Schedule of Compliance** shall refer to an enforceable sequence of actions or operations to be accomplished within a stipulated time frame leading to compliance with a limitation, prohibition or standard set forth in this Act or any rule of regulation issued pursuant thereto;
33. **Secretary** landfill shall refer to the Secretary of the Department of Environment and Natural Resources;
34. **Segregation** shall refer to a solid waste management practice of separating different materials found in solid waste in order to promote recycling and re-use of resources and to reduce the volume of waste for collection and disposal;

35. **Segregation at source** shall refer to a solid waste management practice of separating, at the point of origin, different materials found in solid waste in order to promote recycling and re-use of resources and to reduce the volume of waste for collection and disposal;
36. **Solid waste** shall refer to all discarded household, commercial waste, non-hazardous institutional and industrial waste, street sweepings, construction debris, agricultural waste, and other non-hazardous/non-toxic solid waste.

Unless specifically noted otherwise, the term "solid waste" as used in this Act shall not include:

- (1) Waste identified or listed as hazardous waste of a solid, liquid, contained gaseous or semisolid form which may cause or contribute to an increase in mortality or in serious or incapacitating reversible illness, or acute/chronic effect on the health of persons and other organisms;
 - (2) Infectious waste from hospitals such as equipment, instruments, utensils, and fomites of a disposable nature from patients who are suspected to have or have been diagnosed as having communicable diseases and must therefore be isolated as required by public health agencies, laboratory wastes such as pathological specimens (i.e. all tissues, specimens of blood elements, excreta, and secretions obtained from patients or laboratory animals) and disposable fomites that may harbor or transmit pathogenic organisms, and surgical operating room pathologic materials from outpatient areas and emergency rooms; and
 - (3) Waste resulting from mining activities, including contaminated soil and debris.
37. **Solid waste management** shall refer to the discipline associated with the control of generation, storage, collection, transfer and transport, processing, and disposal of solid wastes in a manner that is in accord with the best principles of public health, economics, engineering, conservation, aesthetics, and other environmental considerations, and that is also responsive to public attitudes;
38. **Solid waste management facility** shall refer to any resource recovery system or component thereof; any system, program, or facility for resource conservation; any facility for the collection, source separation, storage, transportation, transfer, processing, treatment, or disposal of solid waste;
39. **Source reduction** shall refer to the reduction of solid waste before it enters the solid waste stream by methods such as product design, materials substitution, materials re-use and packaging restrictions;
40. **Source separation** shall refer to the sorting of solid waste into some or all of its component parts at the point of generation;
41. **Special wastes** shall refer to household hazardous wastes such as paints, thinners, household batteries, lead-acid batteries, spray canisters and the like. These include wastes from residential and commercial sources that comprise of bulky wastes, consumer electronics, white goods, yard wastes that are collected separately, batteries, oil, and tires. These wastes are usually handled separately from other residential and commercial wastes;
42. **Storage** shall refer to the interim containment of solid wastes after generation and prior to collection for ultimate recovery or disposal;
43. **Transfer stations** shall refer to those facilities utilized to receive solid wastes, temporarily store, separate, convert, or otherwise process the materials in the solid wastes, or to transfer the solid wastes directly from smaller to larger vehicles for transport. This term does not include any of the following:
- (1) a facility whose principal function is to receive, store, separate, convert or otherwise process in accordance with national minimum standards, manure;
 - (2) a facility, whose principal function is to receive, store, convert, or otherwise process wastes which have already been separated for re-use and are intended for disposals, and
 - (3) the operations premises of a duly licensed solid waste handling operator who receives, stores, transfers, or otherwise processes wastes as an activity incidental to the conduct of a refuse collection and disposal business.
44. **Waste diversion** shall refer to activities which reduce or eliminate the amount of solid waste from waste disposal facilities;

45. **White goods** shall refer to large worn-out or broken household, commercial, and industrial appliances such as stoves, refrigerators, dishwashers, and clothes washers and dryers collected separately. White goods are usually dismantled for the recovery of specific materials (e.g., copper, aluminum, etc.);
46. **Yard waste** shall refer to wood, small or chipped branches, leaves, grass clippings, garden debris, vegetable residue that is recognized as part of a plant or vegetable and other materials identified by the Commission.

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