

Short-Course

Solar PV System Installation and Maintenance

NTQF Level III

Learning Guide -25

Unit of Competence	Diagnose, Repair and Maintain PV System
Module Title	Diagnose, Repair and Maintaining PV System
LG Code	EIS PIM3 M15 0120 LO7-LG25
TTLM Code	EIS PIM3 TTLM 0120v1

LO 7: Complete the work -25

This learning guide is developed to provide you with the necessary information, knowledge, skills and attitude regarding the following content coverage and topics:

- Clearing of waste, cleaning, restoring and securing Work site environment from waste.
- Maintaining plant, tools, equipment.
- Finalising work completion details.

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to: -

- Clearing of waste, cleaning, restoring and securing Work site environment from waste.
- Maintaining plant, tools, equipment.
- Finalising work completion details.

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below:
3. Read the information written in the information Sheet 1 (page: 131), Sheet 2 (page: 134), Sheet 3 (page: 136)
4. Accomplish the Self-Check 1 (page: 133), Self-Check 2 (page: 135), Self-Check 3 (page: 137)

LO 7: Complete the work

Information Sheet 1	Clearing of waste, cleaning, restoring and securing Work site environment from waste
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1 Clearing of waste, cleaning, restoring and securing Work site environment from waste.

Always clean up after working on a site.

1.1 Clean and restore work site

- Leave the clients house as you found it, collect all waste: rests of cables, cable ties etc.
- Move everything back into place, furniture and the system.
- Make a good impression and be nice to the client.

1.2 Waste disposal

- Take home and/ or appropriately dispose of waste.
- Don't leave anything on site.
- Recycle waste if possible.
- Certain waste should be sent back to the suppliers who can deal with it appropriately.
- Take special care of hazardous waste like batteries, especially the lead and the acid inside. Avoid that those hazardous materials contaminate the environment, and especially drinking water.

1.3 Implement the 5S rule

- **Sort** (Separate, Scrap, Sift)
 - Discard items that are clearly no longer in use.
 - Evaluate items that are potentially unnecessary.
- **Straighten** (Set in order, Store, Simplify)
 - Arrange necessary items for a better work flow.
 - Create a visual order.
- **Shine** (Scrub, Sweep)
 - Determine target areas for cleaning and inspection.
 - Assign cleaning or inspection duties.
 - Establish a cleaning or an inspection method.
 - Carry out cleaning or inspection.
- **Standardise**
 - Create standards to make sort, straighten and shine habit.
- **Sustain**
 - Establish and implement a 5S internal audit system.

- Implement 5S initiatives for continued employee engagement.

Self-Check - 1	Written Test
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Instruction: Follow the below selected instruction

Answer all the questions listed below.

N°	Questions and answers
1	What should be done with the waste generated on site? (3)

Note: the satisfactory rating is as followed

Satisfactory	3 points
Unsatisfactory	Below 2 points

Answer Sheet

Score = _____
Rating: _____

Name

Date

Information Sheet 2

Maintaining plant, tools, equipment

2 Maintaining plant, tools, equipment

2.1 Maintaining the PV System

LO1-7 deals with maintaining the PV system. It is important to follow a specific maintenance procedure. Lessons learned from each maintenance incident should be used to update the procedures to improve overall efficiency and effectiveness.

2.2 Maintain your tools and equipment

- Make sure to collect all tools and equipment from site.
- Keep tools clean.
- Check batteries of meters etc. once in a while to make sure they don't spill and damage the meter.
- Make a list of all broken or damaged tools to be replaced.
- Make a list of consumables to be replaced.

Self-Check - 5	Written Test
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Instruction: Follow the below selected instruction

Answer all the questions listed below.

N°	Questions and answers
1	What should be done regarding tools when the job is done? (3)

Note: the satisfactory rating is as followed

Satisfactory	3 points
Unsatisfactory	Below 2 points

Answer Sheet

Score = _____
Rating: _____

Name

Date

3	Finalizing work completion details
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3 Finalizing work completion details

Once all the work is completed according to the previous LO's, it is important to ensure that:

- All drawings get updated to reflect changes and additions.
- If new equipment is installed, make sure warranty certificated are filed.
- File all site records for future reference.
- Ensure that lessons learned are incorporated in future processes.
- Contact client after a few days to confirm that everything is still working.

Self-Check - 3	Written Test
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Instruction: Follow the below selected instruction

Answer all the questions listed below.

N°	Questions and answers
1	What should be done once all the work has been completed? (3)

Note: the satisfactory rating is as followed

Satisfactory	3 points
Unsatisfactory	Below 2 points

Answer Sheet

Score = _____
Rating: _____

Name

Date

Works Cited

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